

Computer Aided Audit Techniques and Fraud Detection

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Abstract

This study sought to identify the various types of fraud encountered during financial transactions, evaluate the adoption of Computer Aided Audit Tools (CAATs) in fraud detection in an organization, appraise the impact of CAATs on performance of an organization, and ascertain the problems of CAATs' application within an organization. Data for the study was collected using a well-structured questionnaire which was distributed to staff members of a large audit firm in Nigeria. Data obtained was statistically analyzed using statistical package for social sciences (SPSS). The hypothesis of the study was analyzed using regression analysis. The result of this 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. 58.1% of the respondents ascertained that CAAT helped to improve the auditors' performance. Furthermore, the cost of implementing CAAT, the required skills to be acquired for its usage and systems database requirements, are some of the problems found to be associated with the introduction and application of CAAT to organizations. Thus, it can be reasonably concluded that CAAT can help in the transparency of financial reports within organizations because it is a platform where fraudulent and misappropriated practices are easily detected.

Keywords: Fraud, CAAT, Audit software, Accounting Information

1. Introduction

Existence of fraud could be found in all cycles of life and it is evident enough that if not checked, it could be on the increase day in day out. Albrecht, Albrecht and Dunn (2001), stated that fraud comprises a large variety of activities and includes bribery, political corruption, business and employee fraud, consumer theft; network hacking, bankruptcy and divorce fraud, and identity theft. Hence, in financial establishment, it is an intentional act by one or more individuals among management, employees or third parties, resulting into misrepresentation of financial statements. This could be intentionally misrepresenting, concealing, or omission of truth so as to deceive and manipulate leading to financial loss. Fraud could likewise be in form embezzlement, theft or any attempt to steal or unlawfully obtain, misuse or harm the asset of an organization (Adeniji, 2004).

In 1982, Brink and Witt opined that fraud serves as set back to utilization of resources in an effective way and this is of serious concern to management science in general. Inefficiency in appropriately ascertaining whether fraud has taken place or not should be of paramount importance to auditors rather the auditor's interest specifically relates to acts that result in a material misstatement of financial statements. However, there exist difference between fraud and error. The important factor that differentiates the fraud from error is whether misstatement of the financial statements is intentional or not. Although there are different types of fraud, yet corporate fraud continues to be a pervasive problem and is seen to be most costly to tackle. A lot of fraud cases primarily occurred because of poor or lack of adequate internal controls and easy detection of fraud by assigned auditors. Increase in awareness fraud and the importance of transparent financial reporting have spurred the concern of regulatory bodies, as well as the accounting profession. The forensic and Investigative Service Division of the independent accounting firm of KPMG conducted an extensive survey of fraud detection from a wide array of businesses and industries. According to various respondents it was discovered that 62 percent of these entities had experienced at least one incident of fraud that year (KPMG, 2004). Among companies who responded to the KPMG survey in 2004, close to half had experienced a fraud costing them a total of \$457 million (KPMG, 2004). The vast majority of the fraud reported in the KPMG survey related to misappropriation of assets. According to the Association of Certified Fraud Examinations (ACFE), an estimated \$2.9

trillion worldwide were lost due to fraudulent financial statements, asset misappropriation, and corruption in 2009. Employee theft costs \$40 billion a year with an average of \$1,350 per employee, of which 75% of them are undetected. The total losses of shoplifting amount to \$13 billion a year with 800,000 incidents each day costing \$142 loss per incident. However, only 5,000 incidents were caught. Identity theft is also becoming very serious. In the past five years there were 27.5 million victims of identity theft. These losses are ever increasing today. The above losses prove a point that detecting fraud is a constant challenge for any business (Yang, 2006).

Computer aided audit techniques (CAATs) is a growing field within the financial audit profession in Nigeria. CAATs are computer tools and techniques that an auditor (external or internal) uses as part of their audit procedure to process data of audit significance contained in an entity's information systems (Singleton, Singleton, Bologna, and Lindquist, 2006). CAAT is the process of using computers to automate or simplify the audit process. Computer technology gives auditors a new set of techniques for examining the automated business environment. As early as 1982, CAATs was a powerful audit tool for detecting financial errors. It was in recent years, that analytical techniques became not only more powerful but also more widely used by auditors. Audit software allows its user to obtain a quick overview of operations of a business and to drill down into details of specific area of interest; it highlights individual transactions that contain features associated with fraudulent activities. CAAT is the practice of analyzing large volumes of data looking for anomalies. Using CAATs, the auditor will extract every transaction a business unit performed during the period reviewed. The auditor will then test that data to determine if there are any problems in the data. With audit software, millions of files can be examined, data's collected can be used to identify, analyze and comparisons can be made between different locations. Computerized techniques and interactive software can help auditors focus their efforts on areas of greatest risk. Auditors can choose to exclude low risk transactions from their review and focus on those transactions that contain a higher probability of fraud. Audit software also provides auditors with the ability to extract information from several data's files with different database management systems, in order to search for underlying patterns or relationships among data (Coderre, 1999). Examples of CAATs include generalized audit software, custom audit software, test data, parallel simulation, and integrated test facility.

The objectives of this study are to identify the various types of fraud encountered during financial transaction, to evaluate the adoption of CAATs in organizations, to appraise the impact of CAATs on performance of organization and to ascertain the problem of CAATs' application in organizations. It should be noted that before the advent of computers, there had been occurrences of fraud within organizations. There is a marked difference between traditional frauds and the modern-day computer frauds, as some of the traditional frauds require violence or a threat of violence. In addition, the perpetrators of traditional frauds were more visible and detection of such frauds was relatively easy. Inasmuch as the characteristics of these crimes are different, the motivations of the criminals are much the same; people still commit fraud within organizations. The advent of the CAATs has thus been advocated for in some firms/organization. This study thus seeks to find out if CAATs can aid in the detection of frauds for better audit processes and reports.

2. LITERATURE REVIEW

Fraud detection, unlike a financial statement audit, requires a unique skill set and forensic techniques developed for the sole purpose of detecting the evidence of fraud (Davia, 2001). Specifically, it requires individuals who are skilled in the application of investigative and analytical tools related to the areas of accounting records, gathering and evaluating financial statement evidence, interviewing all parties related to an alleged fraud situation, and serving as an expert witness in a fraud case (Singleton, 2006). According to the Association of Certified Fraud Examiners (ACFE), a survey carried out on fraud detection as applied to the United State economy, it was shown that lack of adequate internal controls was most commonly cited as the factor that allowed fraud to occur (Keller and Owens, 2008). The conclusion was that the implementation of anti-fraud controls appears to have a measureable impact on the organization's exposure to loss.

Additionally, two studies have explored the determinants of CAATs usage by generalist auditors (Curtis and Payne, 2008). These studies find that auditor willingness to employ CAATs in the financial statement audit is impacted by auditor perceptions of the usefulness of those procedures and concerns regarding the budget impact of CAATs usage. Firms play a significant role in these perceptions through training and other resources they provide, as well as through their communication of support for CAATs usage (Curtis, Jenkins, Bedard, and Deis, 2009).

In Ireland, the Institute of Internal Auditors (IIA, 2003) conducted a survey touching on CAAT's usage. This survey revealed hesitation amongst those overseeing internal audit departments as relating to automation. The key reason cited for this was that they perceived there was a lack of software available in the market that met the needs of internal auditors. More than 40% of respondents suggested that they would be willing to adopt an amended audit approach if they could find a package(s), that otherwise met their needs; this actually led to an increased usage of CAATs. Debreceeny, Lee, Neo, and Shuling (2004) carried out a research on the usage of CAAT and Generalized Audit Software (GAS) in the banking industry in Singapore. GAS is a class of CAATs that allows auditors to undertake data extraction, querying, manipulation, summarization and analytical tasks (Boritz, 2003). It was discovered that the common uses of GAS in bank audits includes extraction of samples, identification of reactivated dormant accounts and verification of the completeness and accuracy of data. This study also found that GAS was frequently being used in special investigation audits and exceptional instances. From their findings, it was concluded that bank auditors do use GAS, but only to a limited extent because GAS was perceived as an interrogation tool to perform fraud investigations rather than as a general audit tool. A study was carried out by Mahzan and Lymer (2006) on the adoption of computer assisted audit techniques (CAATs) by internal auditors in the United Kingdom by Birmingham Business School. It was discovered that three top factors that influenced the respondents' decision whether to continue or not to continue using CAATs are the ability to train employees on the software usage, compatibility of the software with other departments' systems, and the ability of software to meet the data manipulation needs of the audit department. Fraud attempts have seen a drastic increase in recent years, making fraud detection more important than ever. Fraud prevention and detection are related but not the same concepts. Prevention encompasses policies, procedures, training, and communication that stop fraud from occurring, whereas, detection focuses on activities and techniques that promptly recognize timely whether fraud has occurred or is occurring. While prevention techniques do not ensure that fraud will not be committed, they are the first line of defence in minimising fraud risk. Meanwhile, one of the strongest fraud deterrents is the awareness that effective detective controls are in place. Combined with preventive controls, detective controls enhance the effectiveness of a fraud risk management program by demonstrating that preventive controls are working as intended and by identifying fraud if it does occur. Although detective controls may provide evidence that fraud has occurred or is occurring, they are not intended to prevent fraud. Every organization is susceptible to fraud, but not all fraud can be prevented, nor is it cost-effective to try. It is thus important that organizations consider both fraud prevention and fraud detection (ACFE, 2006).

2.1 Computer Assisted Audit Techniques

During the course of an audit, the auditor is to obtain sufficient, relevant, and useful evidence to evidence. In many instances, the computer can be used as an aid in obtaining audit evidence.

CAATs are 'techniques that use the computer as an audit tool' which are utilized in application of auditing procedures (Braun and Davis, 2003; IAASB, 2003; ISACA, 1998). CAATs include tools that range from basic word processing to expert systems. Computerized audit techniques range from procedures as simple as listing the data in a given file to the use of Artificial Intelligence tools to predict financial failure or financial statement structures (Debreceeny, Lee, Neo, and Shuling, 2004). Arguably the most widely deployed class of CAATs is Generalized Audit Software (GAS). These packages are computer programs that contain general modules to read existing computer files and perform sophisticated manipulations of data contained in the files to accomplish audit tasks. They have a user-friendly interface that captures users' audit requirements and translates those user instructions or queries into program code. This is undertaken by interrogating the client's file systems or database and performing the necessary program steps (Debreceeny *et al.*, 2004).

CAATs are important tools for the auditor in gathering information from the organizational environment. They are referred to all techniques that make use of computer and computer programs. It consists primarily of test data packs and computer programs. CAATs are computer tools that extract and analyze data from computer applications (Braun and Davis, 2003). They enable auditors to test 100 percent of the population rather than a sample, thereby increasing the reliability of conclusions based on that test (AICPA, 2001). Recent audit standards encourage auditors to adopt CAATs to improve audit efficiency and effectiveness (AICPA, 2006).

2.2 Fraud Detection and Prevention

Fraud detection is a topic applicable to many industries including banking and financial sectors, insurance, government agencies and law enforcement, and more. Fraud attempts have seen a drastic increase in recent years, making fraud detection more important than ever. Despite efforts on the part of the affected institutions, hundreds of millions of money are lost to fraud every year in different countries. In banking, fraud can involve using stolen credit cards, forging checks, misleading accounting practices, etc. In insurance, 25% of claims contain some form of fraud, resulting in approximately 10% of insurance payout dollars. Fraud can range from exaggerated losses to deliberately causing an accident for the payout. With all the different methods of fraud, finding it becomes a problem.

While the primary responsibility for fraud prevention and detection remains with the board and management of any organisation, the auditors can be a significant part of the organization's anti-fraud team. In a 2003 Fraud Survey published by KPMG, an international accounting and consulting firm, it was found that "almost two thirds of organizations surveyed reported discovery of fraud". The results of this and similar studies suggest that while an internal audit process doesn't prevent misappropriation of assets or misrepresentation of financial statements from happening, it does increase the probability of detecting fraud, thus resulting in smaller losses (KPMG, 2004). Fraud prevention and detection are related but not the same concepts. Prevention encompasses policies, procedures, training, and communication that stop fraud from occurring, whereas, detection focuses on activities and techniques that promptly recognize timely whether fraud has occurred or is occurring. While prevention techniques do not ensure that fraud will not be committed, they are the first line of defence in minimising fraud risks. Meanwhile, one of the strongest fraud deterrents is the awareness that effective detective controls are in place. Combined with preventive controls, detective controls enhance the effectiveness of a fraud risk management program by demonstrating that preventive controls are working as intended and by identifying fraud if it does occur. Although detective controls may provide evidence that fraud has occurred or is occurring, they are not intended to prevent fraud. Every organization is susceptible to fraud, thus it is important that organizations consider both fraud prevention and fraud detection (ACFE, 2006).

3. HYPOTHESIS OF STUDY

H_0 : CAATs have no role to play in the detection of fraud in an organization.

4. METHODOLOGY

This research work is on the role of computer aided audit technique in the detection of fraud in an organization using KPMG, Lagos, Nigeria, which is an independent legal entity and is a member of KPMG International Co-operative, a Swiss entity. KPMG Nigeria is an industry which provides services which include include Audit, Tax, and Advisory services. KPMG was established in Nigeria in the year 1978. It has 23 partners, over 700 professionals and 5 office locations. It provides multidisciplinary professional services to both local and international organizations within the Nigeria business community. KPMG professionals are committed to delivering reliable, independent audit reports and in fulfilling this there has to be vigilance in making sure audit complies with changing regulations and the professional standards on the side of the auditor.

4.1 Data Collection

Data collection was accomplished using primary sources through the administration of questionnaire. The questionnaire was distributed to 250 randomly selected staff of KPMG Nigeria ranging from both junior and senior staff in the audit department. The variables of this study are CAATs and fraud. CAATs will be measured using eAudit software program to capture entire audit process such as scheduling, planning, review, committee reporting, and report generation while fraud will be measured using the existence of duplicate transactions, missing transactions, anomalies, negative entries in inventory received fields, voided transactions, etc.

4.2 Data Analysis Techniques

Data for this study was analyzed using descriptive statistics of frequency tables and simple percentages of the SPSS statistical package. Regression analysis was used to measure the relationship between the dependent and independent variables, and also to analyze the hypothesis of the study. In order to test the significance of the relationship between the dependent and independent variables of this study, the study was subjected to the Student t-test, Standard error test, and regression analysis, in which the Coefficient of Determinant (R^2) and P-value were determined.

5. DATA PRESENTATION AND INTERPRETATION

Out of the 250 questionnaires that were distributed for this research, 200 were retrieved back, giving a percentage of 66.7% return. Hence, the analysis will be based on the 200 retrieved questionnaires.

A. Ages, Qualification and Experience of Respondents

The table below shows that majority of the respondents are youths and a dynamic work force, who are well learned and fit to put in opinion on the role of computer aided audit technique in fraud detection. This table also indicates that the respondents are well grounded in the process of auditing and hence, a reasonable result can be established from the responses based on their experience on the job.

B. CAATs' Adoption, Fraud Detection and Employees' Performance

From Table 2, it could be seen that most of the respondents believed that fraud was a major concern for business. From the responses gathered, management's reaction to the adoption of CAATs was positive. Thus, there would be a great advancement in record keeping and recording of various transactions and this will in turn reduce malicious practices of fraudster due to record keeping which will aid tracing of various transactions which is a large contrast to tradition or manual audit. Furthermore, a large percentage of the respondents believed that CAATs could be used to check and manage fraud thus reducing its occurrence in organizations. The respondents also agreed that computer audit was credible. This implies that computer aided audit technique is a step worth taking in fighting fraud. This shows advancement from the crude and traditional way of auditing. Due to the responses gathered, it could be implied that the adoption of CAATs is positive. It is evident that majority of the respondents claimed that there is large economies of scale in the adoption of CAATs. It was also affirmed that the validity of the truth and fairness of financial statement could be established through the use of computer audit. Respondents agreed that fraud had been in existence and on the high side before the introduction of CAATs and that CAATs have been used to curb the occurrence of fraud in organizations. Respondents opined that auditors could use CAATs to help detect material misstatements in the financial statements, particularly in substantive tests of details of transactions and balances as part of meeting the general audit objectives of validity, completeness, ownership, valuation, accuracy, classification and disclosure of the data produced by the accounting system to support financial assertions. Respondents also opined that computer aided audit techniques had positive effects on organization in terms of employee performance. They affirmed that CAATs reduced their audit risks as compared to traditional audit and the effects of litigation from different organizations were drastically reduced. It was further confirmed that CAATs brought a promising future to organizations in terms of the validity and fairness of record keeping. The respondents also believe that it could be used to place reliance on the internal control system as compared to others method so auditing. Therefore, with CAATs, auditors could perform

substantive tests within a shorter time frame resulting in overall efficiency, yet not compromising on the quality of audit efforts.

Table 1: Distribution of Respondents by Age, Qualification, and Experience on the Job

		Frequency	Percentage (%)	Total
Ages of Respondents	21-30 years	85	42.5	
	31-40 years	82	41.0	
	41-50 years	32	16	
	51-60 years	1	0.5	
	Above 60 years	0	0	
				200
Qualification	NCE/OND	30	15.0	
	B.Sc./HND	111	55.5	
	PhD/M.Sc.	54	27.0	
	Others	5	2.5	
				200
Experience on the Job	Less than a year	45	22.5	
	1 – 5 years	98	49.0	
	6 – 10 years	38	19.0	
	11 – 15 years	18	9.0	
	16 and above	1	0.5	
				200

Table 2: Adoption of CAATs, Fraud Detection and Employees' Performance

Description of Variable Items	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly Disagree (%)
Fraud is a major concern for business	52.5	36.5	6.0	5.0	0.0
Management has a positive attitude to CAATs adoption	38.5	46.0	1.5	11.0	3.0
CAATs can be meaningfully used to check fraud occurrences	23.0	59.0	5.5	7.5	5.0
Computer audit is credible than traditional audit	35.5	44.0	17.0	1.0	2.5
Fraud is highly prevalent before the introduction of CAATs	50.0	40.5	0.5	5.5	3.5
CAATs has played an improved role in fraud detection	28.5	44.0	6.5	11.0	9.5
CAATs has improved employees' performance	20.0	35.5	22.0	11.0	7.0

C. Types of Fraud Encountered during Financial Transactions

From Table 3, different respondents selected more than one option. However, top on the list of fraud in financial transactions are falsification of records, diversification of securities, duplicating invoice numbers/dates, and terminated employees continuing to be paid.

Table 3: Types of Fraud in Financial Transactions

Variables	Percentage (%)	Rank
Falsification of records	96.7	1 st
Diversification of securities	87.1	2 nd
Duplicating invoice numbers/dates	84.3	3 rd
Terminated employees continuing to be paid	82.1	4 th
Producing reports of debit balances	74.5	5 th
Pay date precedes employment date	67.3	6 th
Money laundering	57.5	7 th
Theft of cash receipts	55.7	8 th
Falsification of employees size	55.2	9 th
Misuse of cash funds	45.8	10 th
Unrecorded or understated sales or receivables	34.3	11 th
Internet fraud	32.7	12 th
Disbursement to false vendor	12.4	13 th
Theft of inventory	11.6	14 th

D. Problems Encountered in the Adoption of CAATs

From Table 4, it is seen that majority of the respondent see the cost, competency in using software, and technical expertise of the system database as problems that will reduce the adoption of CAATs in organizations. Respondents claim that potentially expensive maintenance contracts are needed to make CAATs work efficiently. This is also supported by Coderre (1999). Moreover, CAATs will be limited depending on how well the computer system is integrate; the more integrated the system, the better the use of CAATs. Another problem is lack of technical expertise. It is believed that CAATs are too technical and complex for non-IT auditors, even if training is provided. This is also in accordance with the findings of Coderre (1999). CAATs are only useful methods of auditing only if the system can be relied on, so the auditor would have to assess the reliability first before adopting CAATs. Furthermore, respondents claim that clients are afraid that their systems and data will be compromised with the use of CAATs (100.0%). This is strictly as a result of lack of trust on the part of the clients with their external auditors. In other to overcome the problem of cost in the adoption of CAATs, the respondents opined that a cost-benefit analysis from the audit point of view should be carried out prior to deciding to use the audit software. Majority of the respondents (92.0%) however do not support the fact that lack of suitable computer facilities is a major problem to the adoption of CAATs.

Table 4: Respondents' view on the problems encountered in the adoption of CAATs

Variables	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	PERCENTAGES (%)				
Cost	102	61	5	29	Nil	51.0	30.5	0.25	14.5	Nil
Software Competency	34	112	19	20	13	17.0	56.0	09.5	10.0	6.5
Technical Expertise	45	98	38	18	1	22.5	49.0	19.0	9.0	0.5
Lack of suitable Computer Facilities	4	12	Nil	45	139	2.0	6.0	Nil	22.5	69.5
Clients are afraid that their systems and data will be compromised with the use of CAATs	151	49	Nil	Nil	Nil	75.5	24.5	Nil	Nil	Nil

6. In order to test the hypothesis, an econometric model showing the relationship between the fraud prevalence (FRAUD) and Computer Aided Audit Technique (CAAT) was adopted and it was stated thus;

$$\text{FRAUD} = f(\text{CAAT}) \text{ [Functional Relationship]}$$

$$\text{FRAUD} = b_0 + b_1\text{CAAT} + U$$

Where FRAUD = Fraud detection and CAAT = Computer Aided Audit Technique

The expectation concerning the sign of the coefficients is: $b_0 > 0$ and $b_1 > 0$.

6.1 Result

Variable	Coefficient	Standard Error	t-Statistics	Probability
C (Constant)	0.106	0.090	1.176	0.241
Effect of CAATs on fraud detection	0.670	0.035	19.375	0.000
R-squared	0.657			
R-value	0.811			
Sum squared residual	58.513			
Sum squared regression	112.073			
F-statistic	375.406			
Probability (F-statistic)	0.000			

From the regression analysis, the R-squared shows the extent to which the independent variable explains the variation in the dependent variable, while the R-value shows the correlation value. The above R-value is 0.811 which implies that there is a strong positive relationship between fraud detection and CAATs. More so, the R-squared value explains that computer aided audit technique explains exactly 65.7% of the variation of fraud. Thus, CAATs have a significant role to play in fraud detection in organizations. The Student t-test, which is at 5% level of significance, is equivalent to the standard error and was used to test the significance of the parameter estimates. According to the results, $b_1: 19.375 > 1.96$. From this result, we can therefore conclude that $T_{\text{calculated}} > T_{\text{tabulated}}$, which leads to the acceptance of the alternative hypothesis (H_1), that is, computer aided audit techniques have a role to play in the detection of fraud in organizations. Furthermore, the p-value is 0.000 and the standard p-value is 0.05 which indicates 95% assurance of the research leaving 5% for uncertainty. Since the p-value is less than 0.05, we reject the null hypothesis and accept the alternative hypothesis and conclude that there is a significant relationship between CAATs and Fraud. Moreover, the Standard Error Test states that for an estimate to be statistically meaningful, the standard error (S.E.) of its coefficient must be less than half the value of the coefficient, (i.e. $S.E. b_2 < b_2/2$). From the regression result, $S.E.(b_2) = 0.035$ while $b/2 = 0.335$. We therefore accept the Alternative hypothesis (H_1) and reject the Null Hypothesis (H_0). To further buttress on the primary data obtained, it can be depicted from the analysis that information technology is now a way of life and for organizations to operate well in this computer age and reduce the existence of fraud, computer aided audit techniques enables auditors or investigators an on the spot overview of business operations, gain in-depth understanding of the relationship among various data elements and easily drill down to specific areas of interest; therefore computer aided audit techniques do have significant roles to play in fraud detection.

6.2 Summary of Findings

In the analysis above we can extract that in auditing, an auditor presenting reliable audited financial reports to shareholders and customers must have an important use of computers to carry out such audit work in other to achieve speed, accuracy, credibility and reliability of every information which aids management and auditors in quick decision making relating to financial policies. From the result of the data collected and analyzed, the standard error was $S.E = (0.090), (0.035)$ of which the decision rule was if $SE(b) < b/2$ Accept H_1 and if $SE(b) > b/2$ Accept H_0 . The SE for $b_2 = 0.035$ and $B_2/2 = 0.670/2 = 0.335$ which gave the value of $0.035 < 0.335$, so H_1 was accepted. The t-test was (1.176),

(19.375); $T_{\text{calculated}}: b_1 = 19.375$ and $T_{\text{tabulated}} = 1.96$, so H_1 was accepted. The $p\text{-value} = 0.000$ and since the standard one is 0.05, the null hypothesis was rejected. The use of computer aided audit techniques can thus be seen as very effective in the detection of fraud in organizations from the result obtained through the tests. The coefficient of determinant R^2 showed a positive significant relationship of 65.7%. This implies that the changes in fraud are explained by the introduction of the use of computer aided audit techniques (CAAT) and the remaining variation of 34.3% would be explained by other factors which have effect on fraud detection.

7. CONCLUSION

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 organisations. This result is supported by Mehra (2011), who carried out a research on how CAATs can be used to detect fraud in journal entries and other areas of auditing which included the review of unusual transactions, payroll cycle, and procurement cycle. He concluded that CAATs could be used to address the risk of fraud in all these areas and also detect potentially fraudulent activities. It was also discovered that CAAT helped to improve the auditors' performance as corroborated by 58.1% of the respondents. This impact of CAATs on employees' performance was supported by Setty (2008) in a study he conducted on detecting fraud using data analysis techniques. He summarized that CAATs increased personal performance and productivity of auditors by increasing the efficiency of audit processes and the market value of audit professionals. However, quite a handful of respondents (23.0%) were undecided in this respect as they claimed that the improved performance has been associated with much stress and pressure. This could however be explained by the fact that much is expected from employees to whom better technological facilities are provided for. Furthermore, the cost of implementing CAAT, the required skills to be acquired for its usage, and systems database requirements, are some of the problems found to be associated with the introduction and application of CAAT to organisations. Moreover, top on the list of fraud in financial transactions are falsification of records, diversification of securities, duplicating invoice numbers/dates, and terminated employees continuing to be paid. It is therefore concluded that the adoption of computer aided audit techniques in the preparation and presentation of financial transaction and reports has enhanced the quality of financial reports. This conclusion is also supported by Lanza (2007) and Kelly (2010). Thus, the right information and computer technique solutions, matched with intelligence, untiring crime detection and prevention, will undoubtedly make any organization a pride of all. In a bid for organizations to operate in a fraud free environment, it is thus recommended that the use of computer aided audit techniques be encouraged in the preparation of financial reports. The limitation offered in this study is that this research is restricted to one big organization, which is very proficient in auditing processes. Future studies are thus encouraged to sample a number of related organizations or smaller firms, for comprehensive and robust outcomes, in order to identify the prospects and challenges of CAATs in fraud detection, and to determine if the conclusions could be generalized or only limited to some specific software packages.

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