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INTERNAL CONTROLS, STAFF RED FLAGS AND COMPUTERIZED FINANCIAL FRAUD AMONG COMMERCIAL BANKS IN KENYA

Regina W. Kamande
Msc. Forensics and Security Management Student, Kenya
kamanderegina47@gmail.com

David Kiragu
School of Business Management & Economics,
Dedan Kimathi University of Technology, Kenya
drkiragu@gmail.com

George Musumba
School of Computer Science & IT,
Dedan Kimathi University of Technology, Kenya
musumbaggw@gmail.com

Abstract

The main objective of this study was to evaluate key predictors of computerized fraud among commercial banks in Kenya. The specific objectives of the study were; to examine role of internal controls and employee's red flags in predicting computerized computer frauds among commercial banks in Kenya. The study was anchored on mindset and fraud triangle theory. The study employed a descriptive research design and targeted a total of 90 staffs of commercial banks in Kenya; risk and compliance managers, bank operation managers, head of credit and branch managers. Primary data was collected using a self administered, semi-structured questionnaire. SPSS software version 21 was used in analysing the data. Both descriptive analysis and inferential analysis was done. Results of the study revealed that the influence of internal controls, employee's red flags as predictors for computerized financial fraud in commercial banks in Kenya were both positive and statistically significant. The study recommends that management of commercial banks in Kenya should ensure that there is an elaborate and effective IT controls. The study further recommends the management of Kenya

commercial banks to conduct frequent internal auditing to limit the possibilities of a fraud. Moreover, the study recommends that management of commercial banks in Kenya should take more interest in internal controls around computerized systems and monitor staff red flags associated with computerized frauds. The regulator should also continuously monitor to ensure there is a strong control environment within commercial banks.

Keywords: Internal Controls, Employee's Behavior Anomalies, computer financial fraud

INTRODUCTION

Today's way of doing business is much more supported by information and communication technology than ever before. Creech (2013) notes that we are living in a hyper-connected world where machines have taken over most of the mathematical queries the modern time has been at pain to resolve. Technological advances have revolutionized business associations making business transactions simpler, faster, easier, and comfortable than ever before in human history. Paradoxically, the same electronic or digital revolution is revealing some serious legal challenges in the sector of security, privacy and freedom of expression, especially in the emerging economies including Kenya, (Fatima 2011). Chartered Institute of Public Finance and Accountancy computer financial fraud is any intentional act meant to distort financial statement for financial gain while Auditing Guidelines define fraud as any irregularities involving use of deceit to obtain an illegal or unjust advantage that include manipulation, falsification or alteration of records, document or figures alteration, misappropriation of assets records, omitting transactions from records or document, misstatement of facts, recording without substance fact and misapplication of accounting policies (CIPFA 2016).

Fraud incidences are highest in financial institutions than any other globally; Owolabi (2010). Owabi (2010) noted that fraud in the banking industry is not limited to any economy, nation, continent or environment. A global economic survey conducted 2015/ 2016 revealed that all companies that exited investments in Africa, Brazil, China, and India cited fraud, bribery and corruption as a risk factor to financial market. Fraud is on the rise globally and much more in Emerging economies like Kenya. Cited frequently is the observation that fraud and corruption has worsened more in those developed and emerging markets characterized with less or no prosecutions. PWC (2011) reports that Africa has the highest prevalence and fast growing exposure to fraud due to weakness in governance structures and lack of integrity of employees with Kenya having the highest number of incidences of fraud. Price Water house Coopers (2016). Kenya is ranked third with 61% cases of fraud South Africa with 69% and France 68%,

Zambia tied with Kenya while Nigeria was ranked fourth. PWC (2016) also revealed that economic crime has risen by approximately 17% in just one year. ACFE (2016) reveal that perpetrators of banking sector fraud are employees of the bank who collude with the employees especially the owners and executives.

Problem Statement

Kenya envisions an average economic growth rate of 10% per annum by the year 2030 and beyond. Commercial banks are and will play a key role in the achievement of Vision 2030 through the intermediation role, risk mitigation, mobilization and allocation of financial resources for investment and wealth; enhancing and financial stability among others. However financial fraud pose a great threat to banking industry, it erodes investor and customers confidence and trust toward bank. The effect of this is leading to low productive economic activities and also affect it position in competitive market. The banking sector in Kenya is ranked as one of fastest growing sector in East Africa. However, financial frauds remain the serious problem to the sector limiting availability of s reliable and efficient payment system in Kenya. Fraud ranks as the top most risk in commercial banks in Kenya. The effect of fraud is eroding the investor confidence and reversing the gains of commercial banks in transferring resources from surplus sector to deficit sectors to spur investments. COSO model for internal controls could be a feasible recipe for frauds affecting commercial banks in Kenya. Fraud Triangle theory on the other hand view that weak controls can be an exploitable opportunity by staffs as perpetrators. Empirical research indicates that computerized environments are likely to be more vulnerable than manual systems. Local literature on predictors of computer financial fraud in commercial banks in Kenya is thinly available. With existing regulatory framework by the Central Bank of Kenya, fraud still persists, especially computerized fraud in commercial Banks. Fraud Theory indicates that perpetrators can be identified or predicted by behavioral characteristics. This study sought to examine the possibility that computerized frauds in commercial banks could be a function of notable weak IT controls and if staff red flags could predict computerized frauds in commercial banks.

Research Objectives

i. To investigate influence of internal controls on computerised financial fraud in commercial banks in Kenya.
ii. To examine employee red flags as a predictor of computer driven financial fraud in commercial banks in Kenya.

THEORETICAL LITERATURE REVIEW

Theory of Mindset and Problem Representation

Mindset is a general cognitive orientation with distinct features that guide individuals in the collection and interpretation of information (Gollwitzer, 1996). It influences how individuals process information and shapes their thought production and way of thinking. Mindset impacts decision making through its effects on the way in which individuals process task–related information (Beckmann and Gollwitzer, 1987).

Preliminary individuals with a particular way of thinking can cognitively evoke in them a focus on information consistent with the mindset and subsequently lead them to search for pertinent information (Gollwitzer, 1990). It is believed that the mindset of an audit specialist has a direct influence on fraud related task performance. Given that fraud specialists (Forensic Accountants) are more likely than auditors to suspect wrongdoings in the company's reported financial statements, it is anticipated that they will tend to evaluate these statements as less reliable and at a higher risk level. The contention that mindset guides and influences the creation of a problem representation because individuals are likely to focus on, remember, and even seek out an information that conforms to their mindset (Pichart and Anderson, 1977). Prior accounting literature has provided empirical evidence to support the relationship between mindset and problem representation as well as the problem representation's influence on task performance (Armor & Taylor, 2003).

Therefore, fraud specialists were expected to have a higher propensity than auditors to take further investigative actions into company's financial statements to determine the occurrence of fraud. Armor and Taylor (2003) manipulated participants into different mindset groups by varying the manner in which they were to consider a particular performance task. The authors found out that differing mindsets led to different performance outcome which was consistent with their theoretical predictions.

Fraud Triangle Theory

American criminologist Donald Cressey developed a theory – known as the Fraud Triangle (1953-1973) – that explains the factors that lead to fraud and other unethical behavior. When businesses and organizations understand the Fraud Triangle, they can more effectively combat criminal behavior that negatively impacts their operations. Elements of Cressey's Fraud Triangle are: perceived need/pressure, perceived opportunity and rationalization. In order for there to be fraud all three elements must be present. According to Albrecht, "nearly every fraud involves the element of rationalization. This study is premised on The Fraud Triangle Theory. Cressey (1971) described classical fraud theory and designated the propensities for fraud as a triangle of

perceived opportunity, perceived pressure and perceived rationalization as shown in figure below.

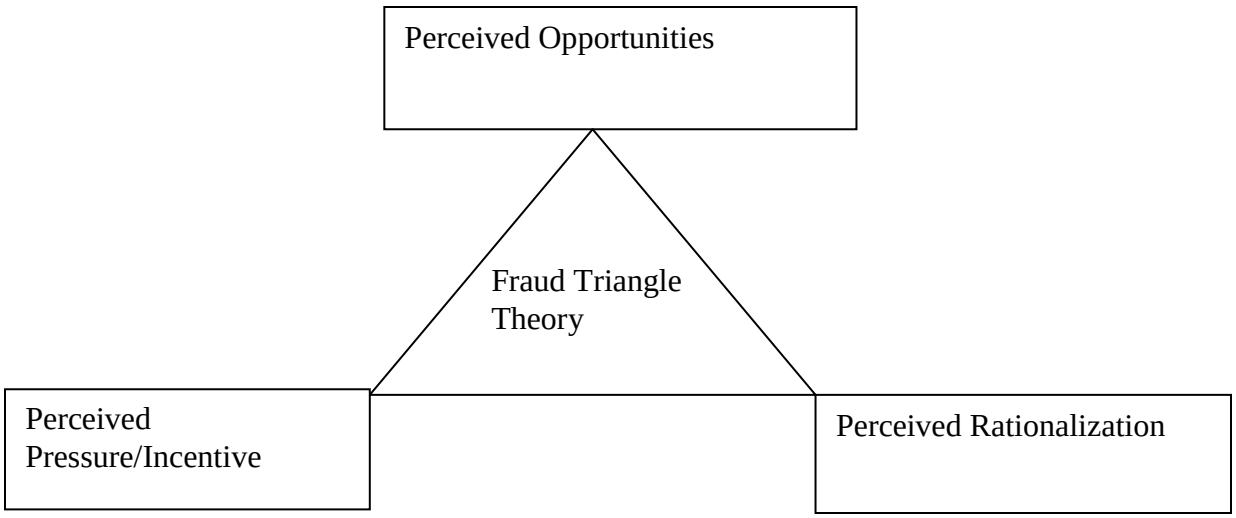

Figure 1: Classical Fraud Motivational Model

According to Chiezey (2013), every fraud executor is confronted with some kind of pressure or need that motivate individuals to commit fraud. Financial pressures due to poor performance or frustration with the nature of work or even challenge to beat the system. Opportunities are provided by weak internal environment, control includes procedures, failures, other factors such as apathy, ignorance, lack of punishment and inadequate infrastructure. Access to systems, information and assets must therefore be limited to only those who are required by firm policies. Rationalization is the manner in which people think about theory work, performance, and contribution within workplace. In every organization there should be limitation or processes that test the integrity of the financial information or processes. The absence of the integrity process includes an absence or ineffective role of internal auditors, external auditors, and board of directors and reporting requirement – banks, regulators and appropriate management review. The study adopted the Fraud triangle theory as its framework because it explains the factors that cause individuals to commit fraud and best describe fraud in the context of the banking industry. However the theory does not demonstrate how fraud can be assessed, detected and resolved.

EMPIRICAL LITERATURE REVIEW

Internal Controls and Computerized Financial Fraud

Burnaby, Howe, & Muehlmann(2011) sought to ascertain whether effective fraud management rely on internal audit and efficient internal controls. The findings of the study indicated that banking sector, operation are integrated with IT had significant higher cases of fraud for appropriateness of reserves for sales returns/ discounts with a mean of 4.3 and 4.2. The study also confirm internal controls that do not mitigate the potential fraud may lead to asset misappropriation hence financial material losses. Auditors are limited to look beyond manual of internal controls and find lope holes in information system as an internal control. The study confirm that assessment of IT risk areas is of concern to all banks, where such security include security over employees access to the system or data, security of systems and data in terms of inappropriateness, physical security of hardware and security over employees access to system or data.

Tunji (2013) in his study on effective internal controls system revealed that effective internal controls can reduce or totally eliminate distress in the banking sector. This calls for upgrading of internal control system to more effective controls. The finding of their study was with aid of efficient and effective internal controls system has positive effect on fraud reduction in banking sector since fraud cannot fully be eliminated and also it has greater impact on accuracy and reliability of financial statements. Sitienei, (2012) in a study on factors influencing credit card fraud in the banking sector established that the risk assessment factors that were considered important in influencing credit card fraud risk management in the banking sector included credit card skimming, system security, proper card management and systems integration.

Employees Behaviors and Computerized Financial Fraud

Global Fraud Report (2015/2016) revealed that fraud has continued to increase with three quarters of companies falling victim to fraud. There is an increase of 14% cases of fraud with number of businesses suffering financial loss has also increased from 64% in previous survey to 69% last year per the Global fraud report. The report revealed that companies and business biggest fraud threats are perpetrated by employees of that company where four in five 81% suffer fraud from employee, 36% of victims suffer fraud from senior and middle level management and 23% result from conducts of an agent or intermediary.

Balogun, Selemogwe, & Akinfala (2013) indicate that fraud committed within corporations is usually contrary to the usual assumption of societal pressures for consumption, as many if not most of the actors are paid well enough to meet their personal and societal-

induced demands for consumption. Factors such as industry culture, investment horizons and payback periods, industry concentration, and environmental factors are likely to influence internal fraud (Wells, 2017). Wanjohi (2014) found out that employee related frauds were the most common in banks indicating weak risk assessment practices and that employee fraud was perpetrated through the use of forged documents, card fraud, computer fraud and diversion of funds to suspense accounts, misappropriation of assets and claiming of unearned benefits.

Njenga and Osiemo (2013) concluded that in the process of making the operation and realization of the goals to be effective, organization are prone to risk leading to stagnant achievement of the targeted objective. This enhanced attention of the manager on the ways of controlling fraud risk within their organization in all level of the organization by formulating and implementing fraud risk management strategies.

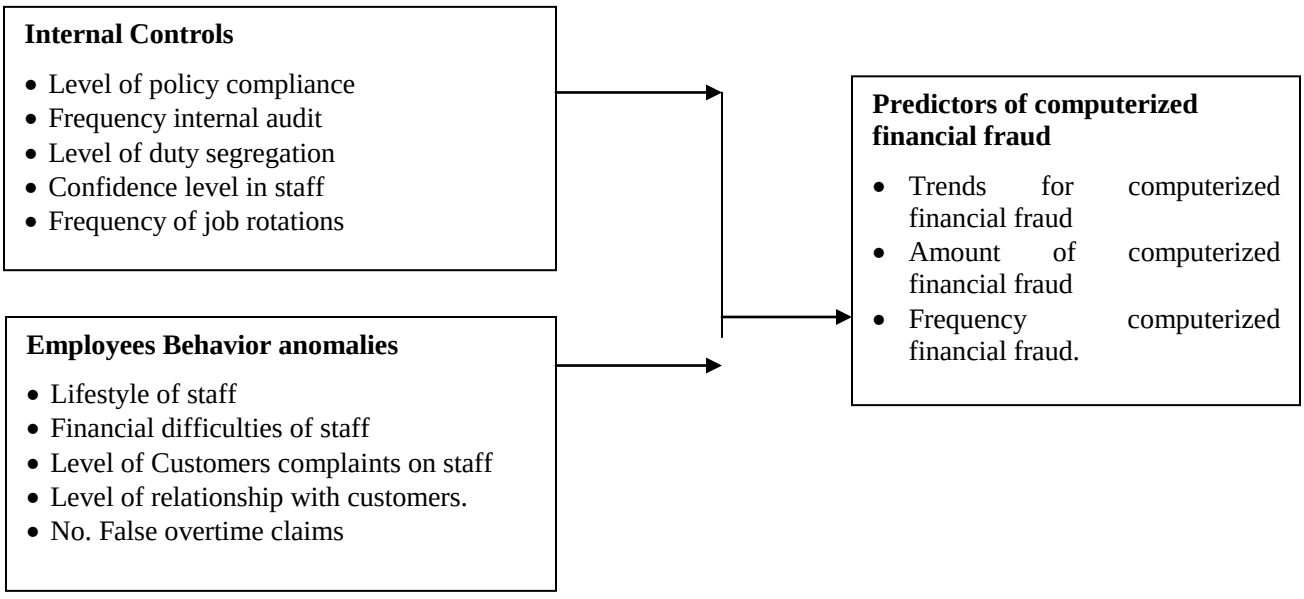

Figure 2: Operational framework

RESEARCH METHODOLOGY

This study adopted a descriptive survey design. The target population for this study comprised of 43 commercial banks classified by Central Bank of Kenya using Market Share Index (MSI). The banks consisted of 7 large banks with 546 branches, 15 medium banks with 310 branches and 21 small banks with 199 branches. The study focused on head offices of selected bank located within Nairobi capital city which reflect computerized financial fraud in all commercial banks. The study used a stratified sample of 30 commercial banks and management staffs as respondents. Primary data was collected using semi structured questionnaire. Pilot study was

conducted on three commercial banks with 9 respondents. Data was analyzed through a systematic process; data coding, data entry, data cleaning and data analysis. Sekaran (2010) argued that data is mostly analyzed to obtain its feeling, test its goodness and test the hypothesized hypothesis. Since the data collected was purely quantitative, descriptive measures such as frequencies, percentages, mean and standard deviation was used. Multiple Linear Regression (MLR) analysis was used in generating inferential statistics. Model fitness statistics (R^2), F values and associated p-values were generated and interpreted. For modeling the relationship between the independent variables and the dependent variables, first bi-variate linear model was used for each pair of independent and dependent variables, and then a multiple linear regression models was used. The multiple linear regression equation for this study was of the form; $\mathbf{Comp}_{fraud} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ **, where;** Y=Computerized Financial fraud, α =Constant, X_1= Internal Controls, X_2=Employees Red Flags, β=Coefficients of each of the predictors, **ε** = Error term

ANALYSIS AND FINDINGS

Response Rate

Out of the 90 questionnaires administered to risk and compliance managers, bank operation managers, head of credit and branch managers a total of 77 questionnaires were filled and returned representing 85% response rate. This response rate was considered adequate for a descriptive study.

Descriptive Analysis for Computerized Fraud in Commercial Banks

Respondents were asked to indicate the extent to which they agreed or disagreed with the statements measuring the level of on computerized financial fraud in their commercial Bank. The results of the study are presented in Table 1. The Table reveal that majority of the respondents indicated that the level of fraud was on the rise between the year 2012 and the year 2016.

Table 1. Descriptive Analysis for Computerized Fraud in Commercial Banks

Statement	Mean	Std Dev
Computerized financial fraud in your bank has been on the rise from 2012 to 216	3.84	1.13
The amount of computerized financial fraud in your bank has been on the decrease from the year 2012 to 2016	2.17	0.89
The frequency for computerized financial fraud cases has been rising from the year 2012 to 2016	3.92	1.14

Tests of Regression Assumptions

Test of Normality

Since the sample size was below 100, Shapiro-Wilk test was used. The results are presented in Table 2. The findings of the study shows that the Kolmogorov-Smirnov and Shapiro-Wilk statistics were 0.487 and 0.498 respectively whereas the associated p-values were 0.200 and 0.582 for Kolmogorov-Smirnov and Shapiro-Wilk statistics respectively. These statistics show that the computerized financial fraud assumed a Gaussian distribution. Based on this distribution of the response variable, the study concluded that the parametric test was more appropriate for the study to examine the relationship between the variables.

Table 2. Test for Normality for Computerized Financial Fraud

Dependent Variable	**Kolmogorov-Smirnova**			**Shapiro-Wilk**		
	Statistic	df	Sig.	Statistic	df	Sig.
Computerized Financial Fraud	0.487	77	0.200*	0.498	77	0.582

a Lilliefors Significance Correction

Multicollinearity Test

Variance Inflation Factor (VIF) was used to test for multicollinearity of between the two regressor variables. The result presented in **Table 3** show that there was no multicollinearity since all the values of VIF were less than 10. This means that the use of ordinary least squares in investigating key predictors of computer financial fraud in commercial banks in Kenya will yield valid results.

Table 3. Results of Multicollinearity Test

Variable	**Tolerance**	**VIF**
Internal controls	0.754	1.326
Employees Red Flags	0.78	1.282

Test of Independence

Durbin-Watson *d* statistic was used to assess the variables for auto-correlation. A value of 2 shows that autocorrelation is absent, a value less than 2 indicates a positive autocorrelation while a value greater than 2 reveals presence of negative autocorrelation Results of this test are presented in Table 4. The findings in Table 4 revealed that there was no autocorrelation among variables

Table 4. Results of Auto Correction Test

Variable Test	Durbin –Watson *d* Statistic
Internal Controls	1.914
Employee Red Flags	2.238

Linearity Tests for the Study Variables

Correlation coefficient (r) was used to assess linearity between the regressors and the Endogenous variable.. The results are presented in Table 5. Pearson correlation value indicates a positive correlation. The strength of the association increases as the value approaches either -1 or +1. The correlation findings are presented in Table 5. The results show that both Internal Controls and Employee red flags had a correlation with computerised fraud at a coefficient of .646 and .501 respectively. The findings of the study showed that both regressors are linear to the dependent variable.

Table 5. Linearity Test for predictors

Regressor(s)		Internal controls	Employees Red Flags
Computerized Financial Fraud	Pearson Correlation	.646**	.501**
	Sig. (2-tailed)	0.000	0.000

Internal Controls and Computerized Fraud

The study sought to explore the extent to which internal controls predicts computerized financial fraud in commercial banks in Kenya. The findings of the study revealed that there is a higher level of policy compliance in Kenyan commercial banks to a very high extent (mean=4.58). The results of the study further indicated that infrequent internal auditing raises the possibility of a fraud to a very high extent (mean=5.00). Moreover, results indicated that weak segregation of duties makes staff vulnerable to commit fraud to a moderate extent (mean=3.42). Further, the results revealed that lack of job rotation increases the possibility of a computer fraud to a moderate extent. On average, internal control practices can predict computerized financial fraud to a high extent as indicated by a mean of 3.94.

Table 6. Descriptive Analysis for Internal Control

Statements	Mean	Std Dev
There is a higher level of policy compliance in Kenyan commercial banks	4.58	0.82
In frequent internal auditing raises the possibility of a fraud	5.00	0.00
There is adequate duty segregation makes staff vulnerable to commit fraud	3.42	1.08
Staff has impeccable integrity levels within the commercial banks	3.27	1.18
Job rotation is satisfactorily practiced within the bank	3.42	1.08
Average	**3.94**	**0.83**

Influence of Internal Control and Computerized Financial Fraud

The Model fitness for the bi-variate Linear Regression is presented in Table 7. The results are as presented in Table 7. The results of the study showed that Internal Controls account for 41.7% of the variation in computerized financial fraud in commercial banks in Kenya. This is indicated by an R-square value of 0.417.

Table 7. Model Summary for Internal Control

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646	0.417	0.409	0.628

a Predictors: (Constant), Internal controls

The bivariate linear model significance was evaluated using ANOVA. The findings of the study are presented in Table 8. Regression results revealed that the linear relationship between internal controls and computerized financial fraud has an F value of F= 53.605 with associated p-value of .000 which was less than the level of significance , meaning that the overall model is significant in predicting the influence of internal controls on computerized financial fraud in commercial banks in Kenya.

Table 8. ANOVA Results for Internal Control

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.133	1	21.133	53.605	.000
	Residual	29.568	75	0.394		
	Total	50.701	76			

a Dependent Variable: Computerized financial Fraud

b Predictors: (Constant), Internal controls

The regression coefficients for the model are presented in Table 9. The test results showed that the beta coefficient of the resulting regression model. The coefficient $\beta_1 = 0.615$, has a p value of.000 which is less than p= 0.05. This implies that internal control is significant in predicting computerized financial fraud in commercial banks in Kenya in the regression model. The findings agree with those of Tunji (2013) which revealed that effective internal controls can reduce or totally eliminate revenue loss and consequent financial distress in the banking sector. Similarly, Burnaby, Howe & Muehlmann (2011) indicated that banking sector, operations that are integrated with IT (with weak controls) had significant higher cases of revenue frauds. The study also confirm internal controls that do not mitigate the potential fraud may lead to asset misappropriation hence financial material losses. Similarly, Sitienei, (2012) agreed that the risk assessment red flags that were considered important with influence on credit card fraud among commercial banks.

Table 9. Regression Coefficients for Internal Control

Model		B	Std. Error	Beta	**T**	**Sig.**
1	(Constant)	2.155	0.34		6.346	0.000
	Internal controls	0.615	0.084	0.646	7.322	0.000

a Dependent Variable: Computerized financial Fraud

Relationship between Employees Behavioural Red Flags and Computerized Fraud

The study sought to assess the extent to which employee behavior anomalies can predict computer financial fraud occurrence in commercial banks in Kenya. The findings of the study revealed in Table 10 show that the respondents indicated that they agree that staff with financial difficulties were often associated with frauds to a high extent (mean=3.86). The results of the study further indicated that the respondents agreed that there is a possibility that high customer complaints was associated with higher fraud levels to a high extent (mean=3.97). Moreover, results indicated that the respondents agreed that high level of customer /employees relationship, staff lifestyles could be an indicator of financial fraud to a moderate extent (mean=4.12). In addition, the findings of the study showed that lifestyle of staff should be audited often to monitor fraud to a high extent (mean=4.05).

Table 10. Descriptive Analysis for Employee's Behavioural Red Flags

Statements	Mean	Std Dev
Financial difficulties of employees predisposes them to commit fraud	3.86	1.12
Fraudsters had rising level of customer complaint on staff	3.97	0.73
Staff had close and questionable level of customer /employees relationship	4.12	0.95
Employees lifestyle of could be used to predict fraudsters	4.05	0.74
There is a rising number of false overtime claims in the bank	4.21	0.85
Average	**4.04**	**0.88**

Bi-variate linear regression model of employee behavioral red flags and computerized financial fraud is presented in Table 11. The results of the study showed that employee's behaviour anomalies account for 25.1% of the variation in computerized financial fraud in commercial banks in Kenya.. The regression results show that R was 0.501 which means that the association linking the independent variables and the dependent variable is high.

Table 11. Model Summary for Employees Behaviour Anomalies

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.501	0.251	0.241	0.712

a Predictors: (Constant), Employees Behaviour anomalies

The ANOVA statistics are presented in Table 12. Regression results revealed that the linear relationship linking employees behaviour anomalies and computerized financial fraud in commercial banks has an F value of F= 25.124 with associated p-value of .000 which is lower than the significant level of 0.05. These values imply that the bivariate linear model is significant in predicting computerized financial fraud in commercial banks in Kenya.

Table 12. ANOVA Results for Employees Behavioural Red Flags

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.722	1	12.722	25.124	.000
	Residual	37.979	75	0.506		
	Total	50.701	76			

a Dependent Variable: Computerized financial Fraud

b Predictors: (Constant), Employees Behavior Red Flags

The regression coefficients for the model are presented in Table 13. The test results show that the beta coefficient of the resulting regression model; $\beta_1 = 0.608$ with an associated p value of .000 which is less than p= 0.05. This implies that Employees Behaviour Anomalies are significant in predicting computerized financial fraud in commercial banks in Kenya. The findings agree with the findings of a study by Balogun, Selemogwe, and Akinfala (2013) who found that fraud committed within corporations is usually contrary to the usual assumption of societal pressures for consumption, as many if not most of the actors are paid well enough to meet their personal and societal-induced demands for consumption. In agreement, Wells (2017) concluded that organizational and individual personal factors are likely to influence internal fraud in many proportions.

Table 13. Regression Coefficients for Employees Behaviour Anomalies

Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.095	0.503		4.164	0.000
	Employees Behavior Red Flags	0.608	0.121	0.501	5.012	0.000

a Dependent Variable: Computerized financial Fraud

Combined Influence on Computerized Financial fraud

The study used a multiple linear regression model to investigate key predictors of computer financial fraud in commercial banks in Kenya. The overall regression model of the study was **$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ was used where, X_1 and X_2 are** Internal Controls and employees Behaviour reflags respectively**.** The model summary results for the study variables are presented in Table 14. The results of the study showed that Internal Controls and Employees Behavioral red flags jointly account for 58.7% of the variation in computerized financial fraud in commercial banks in Kenya.

Table 14. Model Summary for the Study Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.766	0.587	0.57	0.535

a Predictors: (Constant), Employees Behavior Anomalies, Internal controls

The results of the Analysis of Variance (ANOVA) for the study variables are presented in Table 15 and showed that the overall regression model relating to Internal Controls, Employees Behaviour red flags and their influence on computerized financial fraud in commercial banks in

Kenya was significant as shown by F- value of 34.622 and associated p-value of .000, both implying that that the overall model was statistically significant at 5% significance level.

Table 15. Analysis of Variance for the Study Variables

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	29.775	3	9.925	34.622	0.000
	Residual	20.926	73	0.287		
	Total	50.701	76			

a Dependent Variable: Computerized Financial Fraud

b Predictors: (Constant), Employees Behavior Anomalies, Internal controls

Table 16. Regression Coefficients for the Study Variables

Model	Coefficients	B	Std. Error	Beta	T	Sig.
1	(Constant)	0.939	0.408		2.3	0.024
	Internal controls	0.399	0.083	0.419	4.838	0.000
	Employees Behavior Red Flags	0.235	0.103	0.194	2.275	0.026

a Dependent Variable: Computerized financial Fraud

Thus, optimal multivariate Regression Model for the study is as presented below

Computerized Financial Fraud = **0.939 + 0.399** Internal Controls **+ 0.235** Employees Behaviour Red flags The regression coefficients indicated that internal controls and Employees Behavior Reflags had a positive and significant impact as a predictor for computerized financial fraud in commercial fraud. This means that an increase in employee behaviour red flags such as financial difficulties of employees' increases possibility of computerized fraud by .235 while a unit increase in laxity in internal controls by a unit increases the possibility of computerized fraud by .399. The findings agree with the findings of Balogun, Selemogwe, and Akinfala (2013) which indicated that fraud committed within corporations is usually contrary to the usual assumption of societal pressures for consumption, as many if not most of the actors are paid well enough to meet their personal and societal-induced demands for consumption. Also in agreement, Wanjohi (2014) found out that employee related frauds were the most common in banks indicating weak risk assessment practices and that employee fraud was perpetrated in a weakened internal control environment.

CONCLUSION

The study concluded that the influence of internal controls as a predictor for computerized financial fraud in commercial banks in Kenya was positive and significant. Further, this study

established that Employees Behavioral Red flags as a predictor for computerized financial fraud in commercial banks in Kenya was also positive and statistically significant at 5% level of significance. The study concluded that financial difficulties of employees, the need to monitor the levels of customer complaints on staff, level of customer-employees relationship, staff lifestyles, among others positively and significantly contributes to the computerized financial fraud in commercial banks in Kenya.

RECOMMENDATIONS

The study recommends that the management of commercial banks in Kenya and the regulator should take more interest in the subject of computerized financial frauds and ensure there is a higher level of law enforcement and policy compliance. The study further recommends the management of Kenya commercial banks to conduct frequent internal auditing and include risk assessment on internal controls and staff red flags to reduce the level of computerized fraud. Further the bank should strengthen and continuously to abate computerized frauds. Similarly commercial banks should consider deep compliance with established fraud control models like the COSO Model. Staff vetting before hiring and promotion will be useful to ensure that the banks can monitor lifestyle changes associated with the staff red flags associated with frauds.

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