

**CONTROL ACTIVITIES AND FRAUD CONTROL IN MTN UGANDA MOBILE
MONEY SERVICES.**

BY

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DECLARATION

I, **Faith Ainomugisha**, hereby declare that this is my own original work and that it has never been presented to any other university or institution for any academic award.

Sign:.....

Date:.....

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APPROVAL

This work has been done under our supervision, met the research requirements of Kyambogo University and is now ready for submission.

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DEDICATION

This report is dedicated to my husband; Mr. Timothy Arinaitwe, my son Nathan Arinaitwe Aruho and my parents Rev.& Mrs. Twebaze.

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First and foremost, my sincere gratitude goes to my supervisors; Dr. Stephen Kasumba and Dr. Gerald Kasigwa for their enthusiastic and professional guidance which has helped me successfully complete this dissertation. May God give them more knowledge and wisdom.

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ABSTRACT

This study sought to establish the relationship between control activities and fraud control in MTN Uganda Mobile Money services using a correlation analysis for a sample of Sixty-six (66) respondents. The three specific objectives of this study were to: examine the relationship between segregation of duties and fraud control in MTN mobile money services in Uganda, establish the relationship between fraud awareness and training and fraud control in MTN mobile money services in Uganda and lastly establish the relationship between independent checks and fraud control in MTN mobile money services in Uganda. The researcher employed a case study research design. Purposive sampling method and simple random sampling methods of sampling were used to select respondents to the data collection instruments. The study used closed ended questionnaires which were administered by the researcher through drop and pick method. Sixty-six (66) respondents out of a population of eighty (80) were selected. Data was analyzed using descriptive statistics and correlation analysis. Details of the results from the test revealed that the control activities have a positive and significant relationship with fraud control apart from Segregation of duties whose relationship was found to be insignificant.

The findings of this study are of invaluable benefits to the management of MTN Uganda and other stakeholders since they are bound to enable them streamline the control systems to control fraud. Ultimately, the findings can ensure improved fraud control. It was recommended that management should fight by all means to improve organizational processes, policies and procedures to reduce or eliminate the causal factors of fraud is the single best defense against fraud. This will address the weakness within the organisation structure that normally exposes resources to risk of loss due to fraud.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Fraud is a crime of information manipulation with the aim of making the most profit ever. Usually the crime committed is to manipulate financial information. According to Stamler & et al (2014), Fraud can happen anywhere, even in organizations that already have a good control system. There is no guarantee that such organization is free from the possibility of fraud except rules become a responsibility to implement compliance not forgetting a periodic proof of the entities processes by examiners (ACFE, 2014). ACFE (2016), opined that fraud can bring financial loss, reputation damage, legal problems, until the bankruptcy of the company. It has been well-thought-out as a global phenomenon, as it has unanimously entered both the private and public sectors to the extent that no country is endangered from its stain although developing countries suffer the most (Okoye & Gbegi, 2013).

This chapter presents the background of the study, general objective of the study, specific objectives of the study, statement of the problem, significance of the study, limitations of the study the conceptual framework and the definition of the variables.

1.1 Background to the study

1.1.1 Historical perspective

According to Lauren (2017), the definition of internal control was presented for the first time in 1949 by the American Institute of Certificated Accountants (AICPA) and control activities is one of the components of internal control systems. However, the presented definition of control concept has been continuously improved, and today there is quite a widespread set of conceptions

that indicates the system of internal control as one of the means of leadership to ensure safety of enterprise assets and its regular development (COSO, 2017).

The internal control systems definition was later revised and updated by Turnbull Review Group established by Financial Reporting Council (FRC). According to Chambers & Rand (2010), internal control is defined as one that incorporates the policies, processes, tasks, behaviours and other aspects of a company that taken together; facilitate its effective and efficient operation by enabling it to answer appropriately to significant business, operational, financial, compliance and other risks to achieving the company's objectives. This includes the safeguarding of assets from inappropriate use of from loss and fraud, and ensuring that liabilities are identified and managed. (Lakis and Giurinas, 2008).

The National Commission on Fraudulent Reporting operated on and issued a report that identified "factors that allow fraudulent financial reporting" (Moeller, 2013), which factors are a reason behind enterprise failures, high inflation and high-interest rates that dominated US economy in the 1980's. The identical report gave commendations to "management, boards of directors, the public accounting profession, and others" on elements of internal control and they agreed to find the definition of internal controls. As result, in 1990 COSO released a draft of COSO Framework, which was adjusted and re-released as Internal Control-Integrated Framework in 1992 which became a documented standard for effective internal control (Moeller, 2013). The framework was reissued again in 2013, to embrace changes in business and operating environments (COSO, 2013).

According to Beattie (2009), the origin of fraud is traced as far back as 300 B.C when a Greek merchant named Hegestratos took up a loan known as bottomry and agreed to pay it back with interest when he received his goods. The moneylender could confiscate Hegestratos' boat and

goods if he failed to pay back the loan. Hecgestratos' plan was to sink his empty boat, pocket the loan, and sell the goods. The plan did not work out since he drowned while trying to escape from his crew when they caught him in the act. However, according to there has been a rise in globalization in the last decade that drove companies to grow in international markets and that took fraud to its height (ACFE, 2013). As correctly predicted in the first edition of the Fraud Examiners' Manual in 1989, the Association of Certified Fraud Examiners (ACFE) claimed that "fraud will be the crime of choice for the 21st century" (ACFE, 2013). Fraud has come to light as one of the most expensive crime in the whole corporate world. Estimated fraud loss to a typical firm is 5 per cent of its revenues which may result into global fraud loss of around \$6.3 billion (ACFE, 2016).

1.1.2 Theoretical Review

Agency theory

The agency theory was developed by Jensen and Meckling (1976) and advanced by Fama and Jensen (1983). The theory rotates around the issue of the agency problem and its solution (Jensen & Meckling, 1976). According to Letza & et al, (2008), the argument underlying the agency theory is that, managers will only act to maximize shareholder value if only it is not in conflict with their own personal self-interest. Agency theory suggests that Agents have more information than principal, and that such information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by agents (Jensen & Meckling, 1976). The agency theory explains the existence of instruments in resolving problems that exist in principal-agent relationships.

The researcher applied this theory because the MTN employees who deal with the mobile money services and the mobile money agents are faced with the agency problems which they incur in the attempt to monitor these services and the theory will explain exactly what they go through. These costs can be mitigated through putting in place strong and effective internal controls of which control activities are one of them.

1.1.3 Conceptual Perspective

Although most companies will not readily admit that their organizations may be vulnerable to fraud, it is estimated that the typical organization loses 5 percent of its revenue to fraud each year (ACFE, 2014). In 2015, the Communications Fraud Control Association (CFCA) projected that mobile network operators lost more than \$38 billion to fraud and revenue loss (Gent, 2017). Based on the fraud cases reported as part of the ACFE's study, the median loss caused by frauds was \$145,000, while more than one-fifth of the cases involved losses of at least \$1 million (ACFE, 2008). The ACFE (2008), Report to the Nation on Occupational Fraud and Abuse further classifies fraud into three categories that is; Corruption, Asset misappropriation and fraudulent statements.

According to the Report to the nation of 2016, fraud is a global issue, but the way it affects organizations varies and differs in different geographical regions (ACFE, 2016). The same report points out that fraud continues to prevail globally despite the anti-fraud controls put in place such as management reviews, surprise audits, fraud training for employees and managers, anti-fraud policy, among others (ACFE, 2014). It is omnipresent and resides in every type of organisation irrespective of its size, nature and location (PwC, 2016).

According to the 2018 Global Fraud and Identity Report, almost three-quarters of businesses (72 percent) cite fraud as a growing concern over the past 12 months and nearly two-thirds (63 percent)

report the same or higher levels of fraudulent losses over that same period globally (The 2018 Global Fraud and Identity Report, 2018).

Also, according to the Global Economic crime and fraud survey report 2018, Globally and in Africa, the prevalence of economic crime (fraud) seems to be at its peak compared to surveys conducted in previous years. Globally, the 2018 survey saw an increase in the percentage of respondents who reported having experienced economic crime in the last 24 months. The survey revealed that 49% of the global respondents, experienced economic crimes(fraud) up from 36% reported in 2016.

Basing on the above report, Africa had the highest prevalence of fraud with 62% of respondents having experienced economic crimes, up from 57% in 2016, but had the lowest percentage increase of crime from 2016. Similarly, in Zambia, reported incidence rates have steadily been on an increase since the first report issued in 2014, at which time the prevalence rate was 45% compared to the 65% in 2018 (PwC, 2018)

In Africa, Various fraud types have been noted in key Mobile financial services (MFS) markets, including consumer-facing fraud from agents and third parties, and fraud perpetrated against agents. Additionally, incidences of internal fraud have created significant economic loss for providers and affected a considerable number of mobile money users in these markets (Buku & Mazer, 2017). Despite its rapid growth, the mobile money industry faces some distinct challenges in Africa. Fraud remains a huge problem, one that is not often widely communicated and according to Kuiper, the levels of fraud are significant. (The Economist Intelligence Unit, 2016).

In East Africa fraud also remains huge problem. Agents and MFS providers are vulnerable to fraud. Helix Institute of Digital Finance's Agent Network Accelerator Surveys found that 53 percent and 42 percent of mobile money agents in Uganda and Tanzania, respectively, had experienced fraud in the 2015 (Khan and Bersudskaya, 2016).

In Uganda, according to the 2018 Global Economic Crime and Fraud Survey respondents reported a 66% incidence rate in occurrence of economic crimes (fraud). Whereas this rate is lower than the rates reported by organisations in countries such as South Africa and Kenya, it is however high when compared to the average prevalence rates in Africa (62%) and globally (49%). The high rates of economic crime incidence call for practical and strict measures to thwart the fraud. (PwC, 2018)

MTN Uganda, the largest mobile money provider in Uganda, lost an estimated US\$3.4 million through internal fraud perpetrated by staff in 2011 (Morawczynski , 2015). Fraud and crime rates recorded by Ugandan mobile money agents were the highest in the region according to Agent Network Accelerator Survey carried out in 2015 in the East African region (Bersudskaya & Kuijpers, 2016). According to General manager, mobile Financial services MTN (2017), Several subscribers of MTN have reported the increasing activity of fraudsters who steal monies from their accounts after giving out their account details to persons who call their lines purporting to be from the offices of MTN and requesting customer details. Maiteki (2015) in his study found out that in Mtn Uganda, 55.4% of the mobile money customers had ever lost mobile money from their accounts, with the majority (61.5%) losing the money through sms tricking, and fake sms to mobile money agents and customers, this showed a significant level of mobile money fraud. He also found out that a number of control activities being used by Mobile Network Operators particularly MTN Uganda, were not adequate to control the level of mobile money fraud.

Control activities

Many scholars have studied about the concept of control activities and have concluded that the presence of control activities help to mitigate the presence of frauds in organisations COSO, (2013); Cotton & et al, (2016); Wells (2004); ACFE, (2014); Gilman & Joyce,(2017); Etuk, (2011); Suny University, (2012); Mathew, (2011); Australian National Audit Office and KPMG (2012); ACFE, (2014); KPMG International, (2016); Knechel and Salterio, (2016); Lim & et al, (2017).

Control activities are the policies, procedures, techniques, and mechanisms that help ensure that management's response to reduce risks identified during the risk assessment process is carried out. In other words, control activities are movements taken to lessen risk (Office of Financial Management, 2017). Commission of Sponsoring Organization (COSO) explained control activities as actions, supported by policies and procedures that, when carried out properly and in a timely manner, manage or reduce risks (COSO, 2013). They are established to prevent or minimize risks of problems occurrence. Management should establish appropriate control activities and employees' expectations in performing these activities. Control activities are performed at all levels and at various stages of the business processes (Mathew, 2011).

Control activities include approvals, authorizations, verifications, reconciliations, reviews of performance, security of assets, segregation of duties, and controls over information systems (COSO, 2012). Implementation of control activities should be done, conscientiously, thoughtfully and consistently. Focus should be on conditions to which the policy is directed. It is also important that unusual conditions identified as a result of performing control activities be investigated and appropriate corrective action be taken (ACFE, 2014).

Control activities are generally classified as either preventive that is designed to avoid a fraudulent event or transaction at the time of initial occurrence or detective which are designed to discover a fraudulent event or transaction (Etuk, 2011).

Fraud prevention is a more viable strategy since it is often difficult to recover fraud losses once they are detected (Wells, 2004). According to the ACFE, the most effective manner to minimize the occurrence of fraud is to prevent it from the get-go (ACFE, 2014). Therefore, organizations are encouraged to implement certain anti-fraud internal controls (control activities), in order to lessen the opportunities to commit fraud (ACFE, 2014). The Better Practice Guide prepared by the Australian National Audit Office and KPMG (2012), identified fraud prevention approaches are the primary line of defense and provide the most cost-effective method of controlling fraud within an entity. These include ethical organizational culture, high awareness of fraud among staff, and customers, and efficient internal control framework that enable internal and external reporting mechanisms such as hotlines, and internal reporting channels.

Fraud prevention calls for measures to stop fraud from occurring in the first place. Fraud detection comes next once fraud prevention has failed as it involves identifying fraud as quickly as possible once it has been perpetrated. Bolton and Hand, (2002); Ghazali, Rahim, Ali, & Abidin , (2014) in there study on fraud prevention and detection at the state and local government entities in Malaysia, found out that the best ways to prevent and detect fraud in organisations, include: educating and creating awareness among the staff on integrity, focus on fraud prevention, establish a proper written policy and procedure, maintain the adequacy and effectiveness of control, reduce politics, Board of Directors should strongly support fraud prevention and continuous supervision.

As fraud prevention techniques cannot be 100% effective, organisations also need to engage in fraud detection. Fraud detection also allows for improvement of internal systems and controls, which can enhance fraud prevention. (Gilman & Joyce, 2017)

However according to (KPMG International, 2016), strong anti-fraud controls are important but they are not a cure-all and the potential for mitigating fraud is dented unless they are strictly followed and not over provoked. This agrees with Knechel and Salterio (2016), who argued that the consequences of weak control would not only distort performance and profitability targets but dent management reputation in the midst of scandals and should be a matter of concern (Lim et al. 2017). Therefore, companies should ensure that different forms of controls are working effectively.

1.1.4 Contextual perspective

MTN Uganda is a subsidiary of the MTN Group whose operations are in the following countries: Afghanistan, Benin, Botswana, Cameroon, Cote d'Ivoire, Cyprus, Ghana, Guinea Bissau, Guinea Republic, Iran, Liberia, Nigeria, Republic of Congo (Congo-Brazzaville), Rwanda, South Africa, Sudan, Swaziland, Syria, Uganda, Yemen and Zambia. MTN was launched in Uganda in 1998, and today it is the leading telecommunications company in the country, servicing over 7.5million subscribers. It covers over 95 percent of the local population, providing services in over 150 towns and villages and their immediate environments. MTN Uganda offers mobile money services to a wide population in Uganda. Mobile money is a service for moving money that is mobile phone-based. It uses IT tools and channels that are non-banking for outspreading financial services to subscribers who cannot be reached by banks (upadhyay & Jahanyan, 2016). MTN Uganda has

been persistently faced with mobile money fraud for the past years, in 2011, lost an estimated US\$3.4 million through internal fraud perpetrated by staff in 2011 (Morawczynski, 2015), in 2017 victims were conned of lots of money, one of which reported a loss up to a tune of 1.5m (Mpairwe, 2017). and recent scenario where Members of Parliament and ministers lost to a tune of UGX 400M (Uganda Police, 2018). Therefore, this persistent existence of frauds has prompted the researcher to carry out a study on control activities and fraud control in MTN Uganda mobile money services.

1.2 Problem statement

Given the increased mobile money usage in Uganda, fraudsters have also upgraded with the increased innovations and new ways to perform mobile money transactions (Mpairwe, 2018). According to Uganda v Sserunkuma & 8 Others (2015), a sum of shs 3,150,000,000/= was transferred from the MTN Dispute Account to MTN Agent lines on 25th January 2013, employing fraudulent means. In a report by the Helix institute of digital finance in 2015 indicates that mobile money agent's fraud cases stood at 53%. In 2017, Uganda police found out that over seven (7) victims were conned of their money through a mobile money scam, one of which reported to have been conned to a tune of 1.5m (Mpairwe, 2017). Recently, on the 12th of February 2018 many people including Government officials (two ministers and members of parliament) were reportedly conned of millions of shillings in a mobile money scam to a tune of UGX 400M as revealed by the Director, Uganda communications commission (UCC) and the Uganda police (Uganda Police, 2018). Such frauds account for huge loss to an organisation in both monetary as well non-monetary terms. (ACFE, 2016). This prompted the researcher to study the relationship between control activities and fraud control in MTN mobile money services.

1.3 Purpose of the Study

The aim of the study was to establish the relationship between control activities and fraud control in MTN Uganda mobile money services

1.4 Objectives of the Study

The study was guided by the following specific objectives;

- i. To examine the relationship between segregation of duties and fraud control in MTN mobile money services in Uganda
- ii. To establish the relationship between Fraud Awareness Training and fraud control in MTN mobile money services in Uganda
- iii. To establish the relationship between independent checks and fraud control in MTN mobile money services in Uganda

1.5 Research questions

- i. What is the relationship between segregation of duties and fraud control in MTN Uganda mobile money services in Uganda?
- ii. What is the relationship between Fraud Awareness Training and fraud control in mobile money services in MTN Uganda mobile money services?
- iii. What is the relationship between independent checks and fraud control in MTN Uganda mobile money services?

1.6 Scope of the Study

1.6.1 Subject Scope

The study aimed at establishing the relationship between control activities and fraud in MTN mobile money services in Uganda. The study specifically examined the relationship between segregation of duties and fraud control in MTN Uganda Mobile Money Services, established the relationship between fraud awareness and training and fraud control in MTN Uganda Mobile money services and established the relationship between independent checks/audits and fraud control in MTN Uganda mobile money services.

1.6.2 Geographical Scope

The study was carried out at the headquarter of MTN Uganda which is located in the Central Urban Council of Kampala capital city.

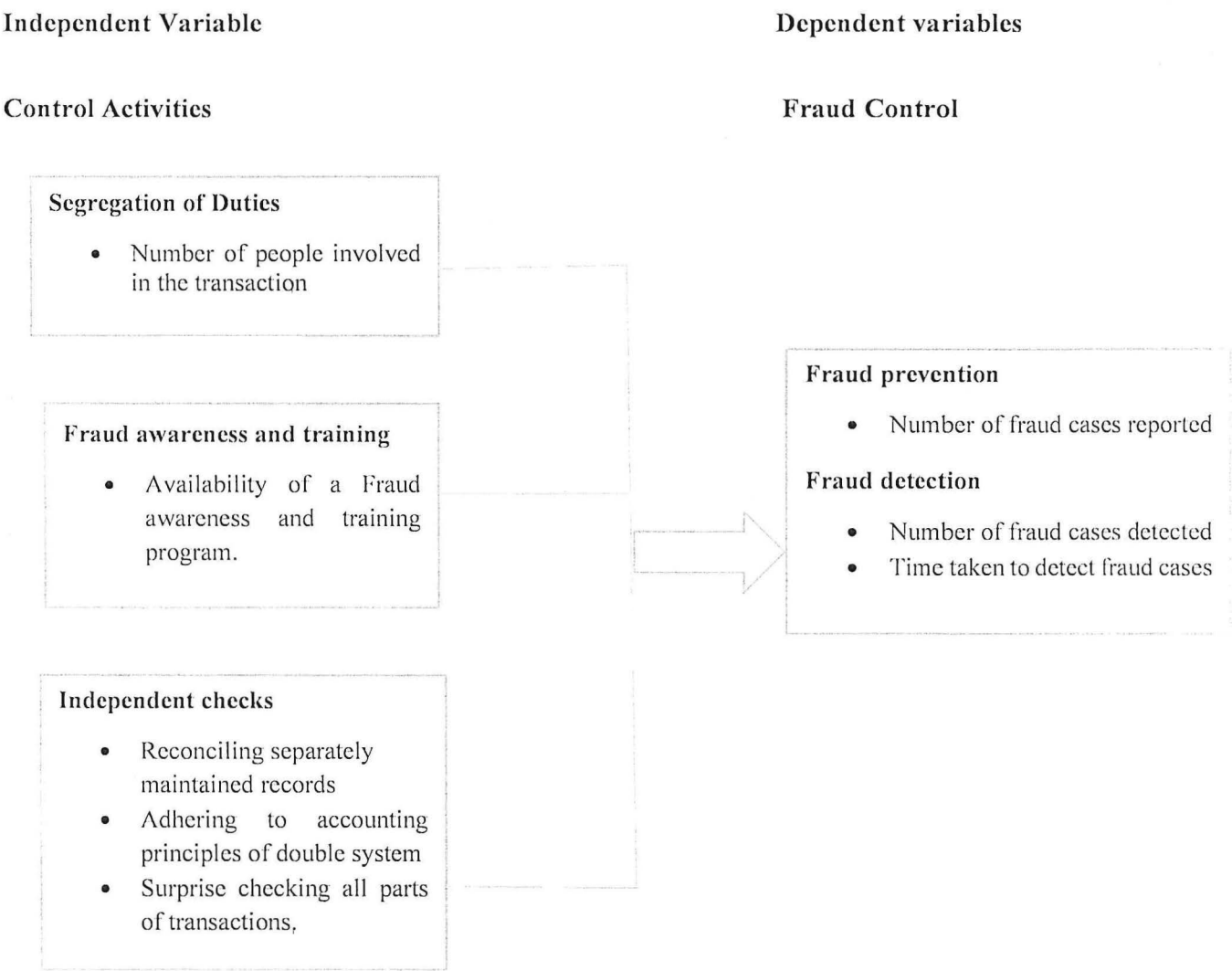
1.6.3 Time Scope

The study was carried out for the period of seven (8) months; from April– November, 2018. This time was long enough for getting the required information for the study.

1.7 Conceptual framework

The study focused on control activities to explain fraud control in MTN Uganda mobile money services. Control activities in the study was conceptualised along the dimensions of segregation of duties, independent checks and fraud awareness and training. Fraud control was explained with fraud prevention and fraud detection. Figure 1 below, gives the anticipated relationship between the different aspects of control activities of interest in the study and fraud control.

Figure 1: Conceptual frame work showing the link between control activities and fraud control.



Adapted from Nyakarimi & Karwirwa (2015) and improved by the researcher 2018

1.8 Significance of the Study

The findings of the study will help identify gaps within the control activities in MTN Uganda. Consequently, the research findings are important in addressing these gaps. The findings can also be of invaluable benefits to the management of MTN Uganda and those stakeholders since they

are bound to enable them streamline the systems of controls to control fraud. Ultimately, the findings will ensure improved fraud control and also attainment of the organizations' objectives.

The study can also add to the existing knowledge regarding control activities and fraud control particularly in MTN Uganda. The study will generate knowledge to link control activities and fraud control which may guide policy makers in the planning for the organisational resources. The findings of the study may also be helpful to all academicians in finance and accounting, management, legal, and other pertinent fields.

1.9 Definition of the variables

Control activities

Control activities are the policies, procedures, techniques, and mechanisms that help ensure that management's response to reduce risks identified during the risk assessment process is carried out. In other words, control activities are actions taken to minimize risk (COSO, 2013).

Segregation of duties

The definition of segregation or separation of duties is the same across all business whether for profit or not for profit. Simply put, it is the concept of having more than one person required to complete a task. The term most often applies to administrative or managerial activities where various tasks are distributed across multiple employees (Matan & Hartnett, 2011).

Fraud awareness and training.

Fraud awareness training is training to strengthen culture and help the organization be more resilient to the threat of fraud and corruption and some organizations have formal training to detect fraud and prevent deception from occurring (Carswell & et al, 2014).

Independent checks

According to the special committee on Terminology, American Institute of Accountants, 1949 "Independent check is a system under which the accounting methods and details of an establishment are so laid out that the accounts procedures are not under the absolute and independent control of any person that, on the contrary, the work of one employee is complementary of that of another, and that a continuous audit of the business is made by the employees."

Fraud control

Fraud control is generally classified as either preventive (designed to avoid a fraudulent event or transaction at the time of initial occurrence) or detective (designed to discover a fraudulent event or transaction (Cotton, Johnigan, & Givarz, 2016).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of literature related to the study concepts and the research objectives. The literature in this study has been reviewed putting into consideration works that have been done by other scholars regarding the variables in the study, that is, control activities and fraud control.

2.1 Theoretical review

In an attempt to understand the relationship between control activities and fraud control, the agency theory was employed.

The agency theory was developed by Jensen and Meckling (1976) and advanced by Fama and Jensen (1983). The theory rotates around the issue of the agency problem and its solution (Jensen & Meckling, 1976; Ross, 1973). According to Letza et al (2008), the argument underlying the agency theory is that, managers will only act to maximize shareholder value if only it is not in conflict with their own personal self-interest. The agency theory explains the existence of instruments in resolving problems that exist in principal-agent relationships. According to Zhukovskaya (2016), a simple agency model suggests that, as a result of information asymmetries and self-interest, principals have no reasons to trust their agents and will pursue ways to resolve these concerns by putting in place instruments to align the interests of agents with principals and to reduce the opportunity for information asymmetries and unprincipled behaviour.

Internal control systems are predominantly operational tools institutions deploy in addressing the principal-agency problem (Jensen and Payne, 2003). Examples of such instruments include writing duties into contracts and make them subject of implementation and consequences or an alternative

is to represent the duties of agents in law and introduce sanctions for those who do not conform. Another instrument is carrying out an audit which provides an independent check on the work of agents and of the information provided by an agent, which helps to maintain confidence and trust. (Zhukovskaya, 2016).

The present study suggests one way to reduce the agency problem which can be achieved by making improvement in fraud control activities. The improvement of control activities is considered a significant mechanism to reduce mobile money fraud cases (Gilman & Joyce, 2017). However, this requires greater emphasis on segregation of duties, fraud awareness training and independent checks (Saleh , 2016; Scott, 2015; Abiola and Oyewole, 2013). The greater control of mobile money frauds may increase the agency cost with regard to monitoring cost. The agency problems arising between the principal and the agent are associated with the theory of the firm, which includes managerial behaviour, agency cost and ownership structure (Jensen & Meckling, 1976). Jensen and Meckling (1976) also state that the agency relationship is a contract between these two parties that devolves some decision giving authority to the agent. In this case, the principal is supposed to establish relevant monitoring procedures for the agent to ensure the agent is performing within its power.

Therefore, the principal (MTN Uganda) and agents (employees and Mobile money agents) engage in contracting to achieve pareto-optimality, including the establishment of control activities such as segregation of duties, independent checks/ internal auditing (Adams, 1994). Nonetheless, studies have shown that agency costs can be reduced by effective internal controls (control activities inclusive) (Deumes & Knechel, 2008).

2.2 The relationship between Segregation of duties and fraud control.

Many researchers have concluded that segregation of duties is a very crucial component of control activities that helps organisations to combat fraud (Saleh, 2016; Zhang, 2016; Ferroni, 2016; ACFE, 2014; Ghosn, 2014; COSO, 2013; Matan & Hartnett, 2011; Hare, 2009; COSO, 2006; CPA Australia, 2005; Manassch, 2000)

Nyakarimi & Karwirwa (2015) in their study on “use of control activities in fraud control in financial institution” with a purpose to establish the relationship between control activities and fraud control in financial institutions (banks and microfinance institutions) established that there is a significant relationship between control activities and fraud control. Control activities analysed were internal checks and segregation of duties. The study used Pearson chi-square test found out that there was a significant relationship between segregation of duties and fraud control.

Similarly, Oguda et al (2015) in their study on effect of internal control on fraud detection and prevention in district treasuries of Kakamega county reveal a statistically significant positive relationship between internal control systems (which included segregation of duties under control activities) and fraud detection and prevention ($r=0.596$; $P<0.05$). Abiola & Oyewole, (2013) in their study on “Evaluation of the Effect of Monitoring and Control Activities on Fraud Detection in Selected Nigerian Commercial Banks” showed that there is significant relationship between control activities (which included segregation of duties) and fraud detection in Nigeria commercial banks ($R=0.792$, Adjusted $R=0.79021$; $P<0.05$).

Adetiloye et al (2016) who examined the issues of internal control viz., fraud prevention in the banking industry, adopting both primary and secondary data. The main primary variables were

separation of duties, monitoring, and staff qualifications while the main secondary variables are bank profit, regulation, technology and Money supply. In both cases regression techniques were adopted. The results show that internal control on its own is effective against fraud hence a strong relationship ($R= 0.7692$, Adjusted $R= 0.76021$; $P<0.05$) between internal controls and fraud control. Also, Barra (2010) investigated the effect of penalties and other internal controls on employees' propensity to be fraudulent. Data was collected from both managerial and non-managerial employees. The results showed that the presence of the control activities, separation of duties, increases the cost of committing fraud. Thus, the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further, it was established that segregation of duties is a "least-cost" fraud deterrent for non-managerial employees, but for managerial employees, maximum penalties are the "least-cost" fraud disincentives. The results suggest the effectiveness of preventive controls such as segregation of duties has a significant relationship with fraud detection. Saleh (2016), in his study on effect of internal control on fraud prevention of the listed manufacturing industries in Nigeria also found out that lack of segregation of duties has an effect on numbers of fraud in the manufacturing industries.

Ferroni (2016) identified that Segregation of duties can be at individual-level or at unit -level where different functions perform the separated duties. According to Olzak (2008), management should ask the following questions, implementing segregation of duties; Are sensitive transactions documented/mapped so that each step is clearly understood? Are key points in the transaction processes identified where one person's ability to perform tasks ends and another's begins? Are employees in sensitive positions properly vetted? Are processes in place to adjust system access when employees change roles within the organization? Are employees who handle sensitive

information required to take mandatory vacations, or are they required to change roles periodically (rotation of duties)?

Segregation of duties is implemented to the extent that it is possible, given the number of staff available in finance related functions. Compensating controls such as senior management oversight is used. For example, payments made through electronic payment systems may require a senior officer from outside the finance function to release the payment (CPA Australia, 2005).

Zhang (2016), points out that Segregation of duties (SOD) is a fundamental element of internal control. Internal controls including proper SOD help to prevent fraud. The duties which must be segregated are (ACFE, 2014).

The principle of SOD is to share responsibilities in a key process such that no one individual should perform two of the mentioned duties mentioned above (Stone, 2009). When the above responsibilities are properly segregated, fraud can be effectively prevented or detected (Zhang, 2016). A lack of segregation of duties can result in unauthorized purchases and payments (ACFE, 2014).

Gramling et al, (2010) opined that smaller companies are faced with segregation of duties weaknesses, typically stemming from having a limited number of staffs. While adding more staff is one obvious solution to the problem, it is not always feasible. Other possible solutions include rotation of duties (Wells,2004), management oversight (COSO, 2006), use of third parties to supplement in-house staff, and using a top-down, risk-based analysis to identify incompatible duties and then thinking about these issues with respect to important business risks and compensating controls. The bottom line is getting to effective internal controls, whether through

segregation of duties or other forms of control that can offset segregation of duties limitations. (Gramling et al, 2010)

According to COSO (2013), Organizations are required to address SOD. The American Institute of Certified Public Accountants (AICPA) recommends that external auditors consider SOD in a financial statement audit because inadequate segregation of duties may increase the fraud risks of misappropriation of assets. The lack of SOD is a common risk in many organizations because segregation of duties limits the probability of loss (Capodanno, 2012). Management should address SOD in internal controls because an effective internal control system requires appropriate separation of responsibilities (COSO 2013).

Manasseh (2000) noted that the term segregation of duties is used for internal duties. One of the prime means of control is the separation of duties which would, if combined, enable one individual to record and process complete transaction. Saleh (2016) opined that Segregation of duties reduces risks of internal manipulation of finances and increase the element of checking. Division of duties therefore makes frauds more difficult to be committed because one transaction is completed by more than two different employees (Kobelsky, 2014).

Manasseh (2000) indicated that any internal control system will only be strong if duties and responsibilities are segregated. The segregation of duties reduces the risk of frauds and errors and manipulation in the business accounting system and increases efficiency in company's operations due to specialization and facilitates supervision (Basu, 2018). However, Segregation of duties is not an end in itself, but rather a means of mitigating risk inherent in processing (COSO, 2006). It should be noted that segregation of duties does not work well with close friends, so consider the effect of relationships here.

Bhasin (2018), in his study found out that limited separation of duties, is one of the factors that account for a high percentage of the fraud cases and could make fraud detection difficult. According to Ernst&Young (2010), the key reasons for SOD breaches are complexity and variety of the systems to implement it, lack of ownership and accountability for controlling the processes, and lack of proper checks and balances. In some cases, segregation of duties may be impossible to achieve, for example when a recording operation creates an automatic payment (Hare,2009). This agrees with Ghosn's argument that in some cases separation of duties may not be required between control duties such as authorization and verification, which are often delegated to the same authority (Ghosn, 2014). Therefore, segregation of duties serves as a discouragement to commit fraud and concealment of error because of the fraudster will require to involve another individual concealing the act which is difficult (Stone, 2009).

2.3 The relationship between Fraud awareness and training and fraud control in MTN Uganda mobile money services.

Fraud awareness and training is an effective method of ensuring that all employees are aware of their responsibilities for fraud control (fraud prevention and detection) and therefore a number of authors have written about it. (The Akomea & Andoh, 2018; Buku & Mazer, 2017; Davidson & Leishman, 2016; Scott, 2015; Dimitrijevic, 2015; Delloitte, 2014; Deloitte, 2012; Australian National Audit Office and KPMG, 2011; Razaee & Riley, 2010; CPA Australia, 2008; Kovavich, 2008; Coderre, 2006)

Abiola & Oyewole (2013), in their study on "Internal control system on fraud detection: Nigeria experience" found out that there is a significant positive relationship ($r=0.524$; $P<0.05$) between employee training and fraud awareness and fraud detection. This agrees with Gibson (2018),

whose study on an analysis of fraud prevention and detection in not-for-profit organizations in the state of South Carolina found out that there is a significant relationship ($r=0.644$; $P<0.05$) between fraud awareness training and fraud prevention and detection. The study recommended that internal stakeholders should start with awareness and training because they may not be aware of what and how fraud occurs. This is again agreeing with Deloitte (2012), who opined that employees often find themselves confused between fraud and error. Therefore, organisations should develop a training and awareness program for internal stakeholders. Kelly et al (2015) observed that anti-corruption (ethics) training helped decrease fraud risks. They found fewer incidences of corruption when the workers had training. Saleh (2016) in his study on effect of internal control on fraud prevention of the listed manufacturing industries in Nigeria also found out that lack of training has an effect on numbers of fraud in the manufacturing industries.

Scott (2015) opined that employees are key resource for any organisation and act as important tool to control fraud. Therefore, Kovavich (2008) opined that the entity's policies, procedures and processes must be known by the fraudster so the immoral act can be called fraud. So, employees should be imparted proper training to make them aware about difference between fraud and related concepts, red flags and reporting of any suspicious element (Razaee & Riley, 2010). The organisations must make deliberate efforts to sensitise the employees about their role in making an organisation fraud free. Dimitrijevic (2015) noted that providing employee fraud awareness training on dangers from frauds is key to fraud prevention and its goal is for them to understand that preventing fraud is important for them as individuals as much as it is for the company as an entity (see also Deloitte, 2014). Scott (2015), in his study concluded that well-trained employees can identify suspicious activity, and, through the training, management can communicate its commitment to high ethical standards and fraud prevention. This agrees with Abiola (2013), who

concluded in his study on Internal Control System on Fraud Detection that employee training increases the chance to detect fraud.

Therefore, all staff members should have a general awareness of fraud, how they should respond and the organisation's processes if this type of activity is detected or suspected within their workplace (The Australian National Audit Office and KPMG 2011; Coderre, 2006)

There are a number of different approaches that can be used by organisations in delivering effective fraud awareness training according to the Australian National Audit Office and KPMG, (2011) and these include; distributing cards containing details of the fraud reporting channels, providing training on fraud control to all staff, including information on fraud matters in weekly communications, using guest speakers to deliver presentations to staff, establishing a fraud control officer network, and publicising information on fraud prosecutions and outcomes. ACFE (2012) also noted that the organization can use other informal means to reinforce its anti-fraud stance on a more constant basis in; periodic newsletters, posters in break rooms, and other casual reminders which help keep fraud prevention and detection in the front of employees' minds.

The Australian National Audit Office and KPMG (2011) further emphasizes that the use of the above approaches should be considered in the context of the individual organisation to ensure they are 'fit for purpose' and that measures are matched to the specific risks and available resources of the particular organisation and that Fraud awareness training provided to new staff members at induction, and periodic refresher courses provided to all staff including management, will assist in ensuring that employees are aware of their responsibilities in relation to fraud control. It is important that all the necessary fraud control information is provided to staff in these forums.

According to Buku & Mazer (2017), mobile money providers should offer comprehensive fraud awareness and prevention programs to sensitize consumers, staff, and agents on fraud trends and prevention measures. These can include training, media campaigns, and periodic bulletins sent as email or text, systemic safeguards to prevent the compromising of PINs, and liaison with law enforcement agencies in the investigation and prosecution of frauds. Buku & Mazer (2017) further emphasize that there should be continuous sensitization of consumers on the new types of fraud and scams appearing in the market. Herold (2005) in her study on “Training Employees to Identify Potential Fraud and How to Encourage Them to Come Forward” found out that employees must be helped to understand how to identify and report fraud in today's business climate and that they must be motivated to learn how to identify and report fraud by tangible and specific rewards and penalties to support an organization's fraud prevention efforts. Herold (2005), further emphasizes that fraud awareness training must become part of the job appraisal process to build a truly effective fraud prevention education program and that organizations cannot have a successful awareness and training program if personnel do not understand the impacts and consequences of noncompliance.

Bielgelman & Bartow (2006), emphasised that employees should receive training as total requirement in fraud prevention and in the construction of culture of compliance and it should be given to every member in the organisation (See also Akomea & Andoh, 2018). Bieligelman & Bartow, (2006), pointed out four main parts of effective fraud awareness training for employees and these include; the definition of fraud being simple for example fraud is dishonest, duplicitous and theft from the entity, talk about the negative impacts fraud creates on the organization's finances and reputation, show cases of various fraudulent acts that members might discover for

example cheque forgery, bribery or flash workers and finally give the members clear instructions on how to react to detected fraud.

Fraud prevention specialists constantly emphasise the need for 'fraud awareness', to the point that the term has almost become a formula. Such awareness is, possibly, the key requirement in building any effective fraud prevention approach, and is especially important at the supervisory level (CPA Australia, 2005). Specifically, supervisors must be alert to the possibility of fraud whenever an infrequent or extraordinary situation occurs, such as complaints from suppliers or customers, discrepancies that don't make sense, or accounting reconciliations that don't balance. If a manager's mind is closed to the possibility of fraud during an unusual or exceptional situation, the risk of the fraud continuing unabated increases greatly. Fraud awareness training is one of the preventive measures of combating fraud.

Therefore, preventing fraud from occurring or limiting the occurrences will enable an organization to maintain the sustainability path. Omar (2012), asserts that various organizations have emphasized on detecting fraudulent activities rather than preventing them from occurring. The author suggests that, organizations should rather focus on prevention and deterrence to eliminate or reduce the opportunity of fraud from occurring. Furthermore, Omar (2012) upholds that fraud prevention should be the responsibility of the entire organization.

2.4 The relationship between Independent checks/ internal checks and fraud control

Many authors have written about independent checks and have mentioned that the existence of this principle in organisations helps them to mitigate frauds (Natesh, 2016; Abiola & Oyewole, 2013; Mackey Advisors, 2011; CPA Australia, 2008).

Nyakarimi & Karwirwa (2015) in their study on “use of control activities in fraud control in financial institution” with a purpose to establish the relationship between control activities and fraud control in financial institutions (banks and microfinance institutions) established that there is a significant relationship between control activities and fraud control. Control activities analysed were internal checks and segregation of duties. The study used Pearson Chi-Square test found out that there was a significant relationship between internal checks and fraud control.

Ewa & Udoayang (2012) in their study to establish the relationship between internal control design and bank’s ability to investigate staff fraud and staff lifestyle and fraud detection in Nigeria, found that internal control design influences staff attitude towards fraud. It was further established that strong internal control mechanism such as these checks is a deterrence to staff fraud since all the necessary checks are in place and hence limiting staff from succeeding in any planned fraudulent activity. On the contrary, weak mechanism exposes the system to fraud and creates opportunity for staff to commit fraud due to the existing gaps. The study therefore emphasized on the need to have a strong internal control mechanism in order to curb fraud.

Mackey Advisors (2011) mentioned that independent checks on performance are recognised as formal as internal auditors or as informal as a supervisor checking a subordinate’s records. The essential elements of an internal check are; Instituting of checks on day-to-day transactions, these checks operate continuously as a part of routine system and Work of each person is made complementary to the work of another. Abiola and Oyewole (2013) emphasize the principle of internal checks holds that no single official controls two or more functional responsibilities and that each officer should serve to check the other.

According to Natesh (2016), arrangement of duties of various staffs of a business in such way that work is automatically checked by the next staff while performing their duties is a critical issue in fraud control and it is intended to prevent fraud and minimize errors. Frauds which are committed by a staff are automatically detected and corrected by another staff. See also (Kumar & Sharma , 2015) Fraud control demands a more thorough review, double-checking employees' work and re-doing some tasks may be necessary and should be approached diligently for example, assign supervisors the responsibility of double-checking important procedures (CPA Australia,2008).

According to Control Solutions International (2015), independent/internal checks are procedures such as the reconciliation of a bank account or the taking of a physical inventory. Timely reconciliations or other forms of checking should be done by another employee that is not responsible for the physical control of the asset or of the posting of transactions related to that asset. Zhang et al (2007), identified three major internal control weaknesses among which he pointed out lack of independence checks or monitoring process. Independence check is important in identifying risks and dealing with it. According to Naizak (2016), independent checks help to identify errors and misrepresentations and to also assess; the performance of individuals, integrity of the transaction processing systems and the correctness of data contained in accounting records.

2.5 Gaps in the literature

A lot of studies have been conducted on internal controls and fraud control (fraud prevention and fraud detection). For example; (Adetiloye et al, 2010; Omonyemen et al, 2017; Saleh, 2016; Cascarino, 2013; Abiola, 2013; Nyakarimi & Karwirwa, 2015).

Most of these studies were carried out on internal controls as a whole without looking at specific components of internal controls and most of them were carried out in banks and manufacturing

companies leaving out mobile money services in telecommunication companies. These studies have motivated the researcher to analyse specifically control activities as a component of internal controls. The review suggests the following gaps in the literature for instance the limited literature to date largely focuses on banks and manufacturing companies in developed economies. Therefore, the researcher calls for more research, which has some relation with the current study, on control activities particularly in telecommunication companies and MTN Uganda specifically since most of the previous studies are more concerned with internal controls as a whole. Thus, this study aims to establish the relationship between control activities and fraud control and will add important contribution to global conclusion.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used during the study. This includes the Research design, study population, sample size and selection, sampling techniques, data collection methods, Data collection instruments, procedure of data collection, Reliability and validity of instruments, Data analysis, measurement of variables, data presentation and analysis and the limitations to the study.

3.2 Research Design

The study adopted a case study design which focused on a single entity, MTN Uganda (Yin, 2009). According to Cooper and Schindler (2008), a case study research design bases on a practical, logical and structured manner of the organisation relating to the area of study. The research design chosen for this research work was a case study.

As case study can be used to explore, describe, or explain phenomena by an exhaustive study within its natural setting (Yin 2009), it gives researchers the chance to employ the chosen design. This kind of research studies and establishes the relationships between variables. It emphasizes studying the situation in order to explain the relationship between these variables (Saunders et al., 2008).

3.3 Research approach

There are two types of research approaches: qualitative and quantitative. Quantitative research is normally used for data collection techniques, such as questionnaire or analysis as graphs or statistics that generates numerical data. Qualitative research, on the other hand is concerned with subjective assessment of attitudes, opinions and behavior of a phenomena. This approach normally

generates results either in non-quantitative form or in the form which does not require rigorous quantitative analysis (Saunders et al., 2008). However, in this study only quantitative research was employed.

3.4 Study Population

The research participants included the staff of MTN Uganda who play a coordination and management role in mobile money activities that is employees in the Business Risk management division, Legal Affairs division, Mobile Money division and the Accounts division. These respondents have access to mobile money information.

3.5 Sampling Size and Design

The sample size of 66 respondents was selected from a population of 80 respondents using Krejcie (1970) sample size determination model. The results in the table below have been derived from Krejcie and Morgan Table (1970).

Table 1: Population and sample size

Category	Population	Sample size	Sampling technique
Employees in the Business Management Division	20	16	Purposive
Employees in the Legal and Regulatory affairs Division	20	16	Purposive
Employees in the mobile money Division	20	17	Random sampling
Employees in the Accounts division	20	17	Purposive
Total	80	66	

Source: primary data

3.6 Sources of Data

The study used primary and secondary data. Primary data was obtained from the respondents using questionnaires (Saunders et al., 2008) whereas secondary data consisted of data that has been written by other scholars in the field of control activities and fraud control. (Tran et.al, 2013).

3.7 Data collection instruments and procedure.

Research instruments simply mean devices for measuring the variables of interest (Bowling, 2002). They can be in the form of questionnaire forms comprising single items (questions), which can be scored. They could also be in the form of observational schedules, structured diaries or log books or standard forms for recording data from records (Bowling, 2002). In the current study, questionnaires were used as data collection instruments. The questionnaires were hand delivered to respondents and collected within a week and later analysed.

3.7 Validity and Reliability of the Instruments

Reliability is the measure of the degree to which a research instrument yields consistent results after repeat (Leedy & Ormrod, 2005). The researcher verified the reliability of instrument by use of reliability values (Alpha values) recommended by Cronbach who recommended analysis of each alpha value for each variable under study which should have a value of at least 0.7 (Mohsen and Reg, 2011). The validity of the data collection instrument was done with the help of an Expert in the area who reviewed the questionnaire. He offered advice which was used for redesigning and correction of the questionnaire to facilitated at a collection.

Table 2: Reliability Table

Constructs	Cronbach's Alpha
Segregation of duties	0.724
Fraud awareness and training	0.755
Independent checks	0.849

Table 2 shows the alpha values for segregation of duties, fraud awareness and training and independent checks and they show that all variables are reliable.

3.8 Data Presentation and Analysis

Quantitative Data Analysis

Questionnaires were used for the quantitative data collection. The data from closed-ended questionnaires relating to control activities and fraud control variables were checked for completeness and accuracy. The data collected was categorized, coded and then fed into SPSS and analysed to investigate whether control activities have a relationship with fraud control in MTN Uganda mobile money services. A chi squared test was carried out in SPSS to determine the relationship between control activities and fraud control. Descriptive statistics were used to summarize the data through percentages and frequencies as well as measures of central tendencies and dispersion. The data was further subjected to inferential analysis through Pearson's correlation analysis to show the direction and strength of association between control activities and fraud control.

3.9 Ethical Considerations

The researcher considered it essential to discuss ethical requirements within a research, since ethical concerns will emerge as early as when choosing research topic, formulating the research design and how to access the data needed to finalize the research (Saunders et al., 2012). Saunders et al, (2012) define ethics as: “the standards of behaviour that guide study conduct in relation to the right of those who become the subject of a work, or affected by it”. All respondents were informed that they can be anonymous if they prefer and that participation is voluntary. In order to overcome ethical issues, the author considered the code of ethics, along with the principles that follow such obligations as discussed in Saunders et al., (2012). Confidentiality and anonymity were adhered to.

3.10 Delimitations of the study

Like any other research, the researcher anticipates some limitations and these include;

The researcher might have encountered several challenges such as reluctance by the respondents in giving information fearing that the information sought would be used to intimidate them or print a negative image about their company. To counter this, the researcher carried out a pilot study to establish the possible cause of noncompliance in filling the questionnaires and then adjust the questionnaire accordingly. Also, the researcher encouraged the respondents to participate without holding back the information they had having as the research instrument did not bear their names.

CHAPTER FOUR

PRESENTATION OF DATA, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents data and analyses the findings obtained by the researcher analyzing and answering the objectives as stated in chapter one. The data was analyzed using descriptive statistics to generate frequencies of responses and inferential statistics to determine the influence of the variables under study.

4.1 Response rate

Sixty-six (66) respondents selected to participate in the study were issued with questionnaires out of which 47 were, fully filled and returned. The overall response rate was 47 out of 66 which is equivalent to 71.2%. According to Mugenda and Mugenda (2008), a response rate of 70 percent and above is acceptable as representative of the sampled population. In this regard, a response rate of 71.2% was adequate and excellent for the study results to be valid.

4.2 Background information

This section consists of information that describes basic characteristics such as gender, age, years of work experience and education level of the respondents.

4.2.1 Gender of the respondents at MTN Uganda

Table 3: Gender of the Respondents at MTN Uganda

Gender	Frequency	Percentage	Mean	Standard Deviation
Male	32	68.1	1.32	0.471
Female	15	31.9		
Total	47	100		

Source: Primary data

From table 4.1 above majority of the respondents in the study were male represented by 68.1%, as compared to the female respondents, represented by 31.9%. This implies that the male dominated most of the positions held in MTN Uganda and were more willing to respond to the questionnaires provided.

4.2.2 Age bracket of the Respondents at MTN Uganda

Table 4: Age Bracket of the Respondents at MTN Uganda

Age bracket (Years)	Frequency	Percentage	Mean	Standard deviation
20-25	5	10.6	2.98	1.359
26-30	17	36.2		
31-35	10	21.3		
36-39	4	8.5		
40 and above	11	23.4		
Total	47	100.0		

Source: Primary data

From the table 4.2 above, the majority of the respondents – 36.2% were within the age bracket of 26-30. This was followed by those in the age bracket of 40 and above, represented by 23.4%, those under the age bracket of 31-35 were represented by 21.3%, those under the age bracket of 20-25 were 10.6% and finally those in the age bracket of 36-39 were represented by 8.5%. This implies that the study involved different respondents with varying ages which provided the researcher with the current and longtime information about Control activities and Fraud control in MTN Mobile Money services.

4.2.3 Level of education of the respondents at MTN Uganda

Table 5: Level of Education of the Respondents at MTN Uganda

Level of Education	Frequency	Percentage	Mean	Standard Deviation
Certificate	-	-	3.21	.587
Diploma	4	8.5		
Bachelor's Degree	29	61.7		
Master's Degree	14	29.8		
Others	-	-		
Total	47	100		

Source: Primary data

Based on the table above, majority (61.7%) of the respondents are university graduates with a Bachelor's Degree. This explains the high level of competences in the academic path. 29.8% of the respondents have attained Master's Degree whereas 8.5% of the respondents are diploma

holders. The implication of the above is that majority of the respondents were elites and therefore more informed about the variables under investigation which helped to obtain reliable information.

4.2.4 Period of Service at MTN Uganda

Table 4. 4: Period of Service at MTN Uganda

Period of Service (Years)	Frequency	Percentage
5 and below	23	48.9
6-10	17	36.2
11-15	3	6.4
Above 15	4	8.5
Total	47	100

Source: Primary data

The above table shows that 48.9% of the respondents in the study had worked for 5 years and below, 36.2% have worked at the district between 6-10 years, 6.4% have worked at the district between 11-15 years and 8.5% have worked for more than 15 years. This is an indication that most respondents had worked a longer period of time based on 36.2% (6-10 years) in MTN Uganda and that they were well placed to respond accurately to the questions in relations to control activities and fraud prevention and detection in MTN Uganda Mobile Money Services.

4.2.5 Management Positions held at MTN Uganda

Table 4. 5: Management Positions held at MTN Uganda

Position Held	Frequency	Percentage
Senior Management Level	4	8.5
Middle management Level	24	51.1
Lower Management	9	19.1
Non-Managerial Staff	10	21.3
Total	47	100

Source: Primary data

Table 4.5 shows that 51.1% of the respondents are in the middle management position, 21.3 % are Non-managerial staff, 19.1% are in the lower management position and senior management is represented by 8.5%. This implies that information was obtained from all levels of managerial positions to improve on reliability and adequacy.

4.3 Segregation of Duties in MTN Uganda Mobile Money Services

In bid to establish the findings on the first objective, respondents provided their view in relation to the extent to which they; strongly disagree (SD), Disagree (D), Not sure (NS), Agree (A), strongly agree (SA) that segregation of duties is practiced in MTN Uganda Mobile Money services. This was presented and analyzed in the table below; the interpretation of the results is based on the mean and the Standard Deviation.

Table 6: Descriptive Analysis for Segregation of duties based on responses.

Segregation of Duties and fraud control	Mean	Standard Deviation (S.D)
In this organization, different members initiate and approve mobile approve mobile money transactions.	3.4	1.296
In MTN Uganda mobile money services, two or more passwords are needed to access the mobile money systems	3.43	1.379
There is no single person that completes a mobile money transaction in this organization.	3.45	1.316
The person who approves transactions or handles cash receipts is not the person who performs the reconciliation.	4.00	.808
In this organization, different individuals approve and make payments.	3.87	1.013
In this organization, there is ownership and accountability by employees dealing in mobile money services.	4.13	.741
In MTN Uganda, there is enough staff to carry out Segregation of duties.	3.85	1.021
In this organization, employees who handle sensitive information take mandatory vacations.	3.13	1.135
There are processes in place to adjust system access when employees change roles with in the organization.	4.17	.816
Average	3.714	1.058

Source: Primary Data 2018

The study results in Table 4.6, indicated that the respondents agreed that there is Segregation of Duties practiced in MTN Uganda regarding Mobile Money Services, as indicated by the average mean value of 3.714. Their responses indicated a reasonably high variation as shown by standard deviation of 1.058. This was attributed to high responses in the following: In this organization, different members initiate and approve mobile approve mobile money transactions. (mean =3.4, SD=1.296); In MTN Uganda mobile money services, two or more passwords are needed to access the mobile money systems (Mean=3.43, SD=1.379); There is no single person that completes a mobile money transaction in this organization. (mean =3.45, SD=1.316); The person who approves transactions or handles cash receipts is not the person who performs the reconciliation. (mean =4 SD=0.808), In this organization, different individuals approve and make payments (mean =3.37, SD=1.013); In this organization, there is ownership and accountability by employees dealing in mobile money services. (mean=4.13, SD=0.741); In MTN Uganda, there is enough staff to carry out segregation of duties. (mean=3.85 SD=1.021). In this organization, employees who handle sensitive information take mandatory vacations. (mean=3.13 SD=1.135); There are processes in place to adjust system access when employees change roles with in the organization. (mean=4.17, S. D=0.816)

4.4 Relationship between segregation of duties and fraud control in MTN Uganda

Mobile Money services.

Table 7: Relationship between segregation of duties and fraud control in MTN Uganda

Mobile Money services.

		Segregation of Duties	Fraud Control
Segregation of Duties	Pearson Correlation	1	.228
	Sig. (2-tailed)		.123
	N	47	47
Fraud Control	Pearson Correlation	.228	1
	Sig. (2-tailed)	.123	
	N	47	47

Source: primary data

Table 4.7 shows the relationship between segregation of duties and fraud control($r=0.288$) with probability value ($p=0.123$) which is greater than 0.01 level of significance. This shows that there is a very weak positive and insignificant relationship between Segregation of duties and fraud control in MTN Mobile Money Services. Therefore, the relationship between segregation of duties and fraud control is insignificant.

4.5 Fraud awareness and training and fraud control in MTN Uganda Mobile Money services.

To establish the findings on the second objective, respondents provided their view in relation to the extent to which they; strongly disagree (SD), Disagree (D), Not sure (NS), Agree (A), strongly agree (SA) that there is fraud awareness and training given to employees who deal with Mobile

money services in MTN Uganda. This was presented and analysed in the table below; the interpretation of the results is based on the mean and the Standard Deviation;

Table 8: Descriptive Analysis for Fraud awareness and training based on responses.

Statement	Mean	Standard Deviation
Fraud prevention and detection training is regularly given to the employees and mobile money agents.	3.91	1.100
Employees are regularly educated on mobile money fraud issues.	4.02	0.872
There is constant enlightenment of mobile money customers on how to secure their accounts.	3.91	0.803
The policy on fraud prevention and detection is fully communicated to all staff.	4.09	0.952
In MTN Uganda, fraud awareness training is part of the job appraisal process	3.47	1.139
The employees are aware of the tricks used by the fraudsters in MTN Uganda mobile money transactions.	3.83	0.916
Mobile money employees are helped to understand how to identify and report fraud during fraud awareness trainings.	4.23	0.520
The employees are aware of the frauds going on in MTN mobile money services.	3.89	0.814
Average	3.919	0.890

Source: Primary Data

The study results in Table 4.8, indicated that the respondents agreed that there is Fraud awareness and training carried out in MTN Uganda regarding Mobile Money Services and mobile money frauds. This is indicated by the average mean value of 3.919. Their responses did not show very diverse answers though there are variations as shown by standard deviation of 0.890. Fraud awareness and training is regularly given to the employees and mobile money agents (mean =3.91, SD=1.100); Employees are regularly educated on mobile money fraud issues (Mean=4.02, SD=0.872); There is constant enlightenment of mobile money customers on how to secure their accounts (mean =3.91, SD=0.803); The policy on fraud prevention and detection is fully communicated to all staff (mean =4.09 SD=0.952), In MTN Uganda, fraud awareness training is part of the job appraisal process (mean =3.47 SD=1.139), The employees are aware of the tricks used by the fraudsters in MTN Uganda mobile money transactions (mean =3.83, SD=0.916); Mobile money employees are helped to understand how to identify and report fraud during fraud awareness trainings (mean=4.23, SD=0.520); The employees are aware of the frauds going on in MTN mobile money services (mean=3.89 SD=0.814).

4.6 Independent checks and fraud control in MTN Uganda mobile money services

Table 9: Relationship between fraud awareness and training and fraud control in MTN Uganda Mobile Money services.

		Fraud awareness and training	Fraud Control
Fraud awareness and training	Pearson Correlation	1	.594**
	Sig. (2-tailed)		.000
	N	47	47
Fraud Control	Pearson Correlation	.594**	1
	Sig. (2-tailed)	.000	
	N	47	47

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.91 shows the relationship between fraud awareness and training and fraud control ($r=0.594^{**}$) with probability value ($p=0.000$) which is significant at the 0.01 level of significance. This shows that there is a strong, positive and significant relationship between fraud awareness and training and fraud control in MTN Mobile Money Services.

To establish the findings on the third objective, respondents provided their view in relation to the extent to which they; strongly disagree (SD), Disagree (D), Not sure (NS), Agree (A), strongly agree (SA), that there are independent checks carried out in MTN Uganda Mobile Money Services.

This was presented and analyzed in the table below; the interpretation of the results is based on the mean and the Standard Deviation.

Table 10: Descriptive analysis for Independent checks based on responses.

Statement	Mean	Standard Deviation (S.D)
Periodic surprise visits are always done by the MTN mobile money supervisors.	3.68	0.862
There is periodic rotation of staff dealing with mobile money services.	3.45	0.904
Independent checks are always done by an employee independent of the personnel responsible for the information.	3.66	0.700
A mobile money transaction done by one employee is automatically checked by the next employee.	3.49	0.804
Independent checks on mobile money transactions are made periodically.	3.6	0.798
In MTN Uganda, independent checks are used to assess the correctness of data contained in accounting records	3.85	0.807
In this organization, cancelled transactions are reviewed on a regular and timely basis by a person other than the person processing the mobile money transaction	3.89	0.866

In this organization, cancelled transactions are reviewed on a regular and timely basis by a person other than the person processing the mobile money transaction	3.68	0.837
Reconciliations occur monthly for all accounts and are independently reviewed by someone other than the person who authorizes the mobile money transactions.	3.70	1.041
Average	3.66	0.847

Source: Primary source 2018

The study results in Table 4.10, indicated that the respondents agreed that there are independent checks carried out in MTN Uganda Mobile Money Services, as indicated by the average mean value of 3.66. Their responses did not show very diverse answers though there are variations as shown by standard deviation of 0.847. This was attributed to high responses in the following: Periodic surprise visits are always done by the MTN mobile money supervisors (mean =3.68, SD=0.862); there is periodic rotation of staff dealing with mobile money services (Mean=3.45, SD=0.904); independent checks are always done by an employee independent of the personnel responsible for the information (mean =3.66, SD=0.700); independent checks are implemented on day-to-day transactions (mean =3.49 SD=0.804), a mobile money transaction done by one employee is automatically checked by the next employee (mean =3.6 SD=0.798); independent checks on mobile money transactions are made periodically (mean =3.85, SD=0.807); in MTN Uganda, independent checks are used to assess the correctness of data contained in accounting records (mean=3.89, SD=0.866); in this organization, cancelled transactions are reviewed on a regular and timely basis by a person other than the person processing the mobile money transaction

(mean=3.68 SD=0.837); reconciliations occur monthly for all accounts and are independently reviewed by someone other than the person who authorizes the mobile money transactions. (mean=3.70 SD=1.041).

Table 11: Relationship between independent checks and fraud control in MTN Uganda Mobile Money services.

		Independent checks	Fraud Control
Independent checks	Pearson Correlation	1	.323*
	Sig. (2-tailed)		.027
	N	47	47
Fraud Control	Pearson Correlation	.323*	1
	Sig. (2-tailed)	.027	

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.11 shows the Pearson correlation for independent checks and fraud control ($r=0.323^*$) with probability value ($p=0.027$) which is significant at the 0.05 level of significance. This shows that there is a weak, positive but significant relationship between independent checks and fraud control in MTN Mobile Money Services.

4.7 Fraud control in MTN mobile money services

Respondents provided their view in relation to the extent to which they; strongly disagree (SD), Disagree (D), Not sure (NS), Agree (A), strongly agree (SA) with the various statements on fraud control in MTN Uganda mobile money services. This was presented and analyzed in the table below; the interpretation of the results is based on the mean and the Standard Deviation.

Table 12 : Descriptive analysis for Fraud control based on responses.

Fraud prevention. Statement	Mean	Standard Deviation
There are fewer cases of mobile money fraud being reported by the mobile money customers.	3.21	1.178
There are minimal losses in mobile money transactions in MTN Uganda arising from mobile money frauds.	3.36	1.258
There is public trust in the MTN Uganda mobile money services.	4.04	0.955
There are reduced audit costs in MTN Uganda mobile services due to prevented mobile money frauds.	3.34	1.027
There is reduced collusion of employees to defraud the mobile money accounts in MTN Uganda.	3.57	1.098
In this organization, there are reduced opportunities for mobile money frauds.	3.6	1.056
MTN secures the personnel details of mobile money clients.	4.38	0.795
Fraud detection MTN Uganda Mobile Money services. Statement.		

New mobile scams are easily detected in mobile money transactions.	3.49	1.061
New mobile scams are easily detected in mobile money transactions.	3.57	0.827
There is little time taken on fraud detection by the employees carrying in mobile money transactions	2.85	1.083
There are reduced costs associated with investigating the mobile money fraud events, fines, legal and professional advisor fees.	2.94	1.092
The customer's name is shown before any approval of a mobile money transaction.	4.45	0.802
In MTN Uganda, Fraud messages are blocked from coming to our mobile money customers	2.81	1.096
Statements of customer account balances are sent regularly.	3.28	1.297
Average	3.492	1.045

Source: Primary data

Table 4.11, explores the element fraud control in MTN Mobile Money services. Findings showed that fraud control in MTN Mobile Money services was moderate with an average mean of 3.492. There was a significant variation in the answers of the respondents indicated by a standard deviation value of 1.045. This was attributed to the moderate level of responses in the following: There are fewer cases of mobile money fraud being reported by the mobile money customers (mean =3.21, S.D = 1.178); There are minimal losses in mobile money transactions in MTN Uganda arising from mobile money frauds (mean = 3.36, S.D = 1.258); there is public trust in the MTN Uganda mobile money services (mean =4.04, S.D = 0.955); there are reduced audit costs in MTN Uganda mobile services due to prevented mobile money frauds (mean =3.34, S.D = 1.027);

there is reduced collusion of employees to defraud the mobile money accounts in MTN Uganda (mean = 3.57, S.D = 1.098); in this organization, there are reduced opportunities for mobile money frauds. (mean = 3.6, S.D = 1.056); MTN secures the personnel details of mobile money clients (mean = 4.38, S.D = 0.795); new mobile scams are easily detected in mobile money transactions. (mean = 3.49, S.D = 1.061); there is little time taken on fraud detection by the employees carrying in mobile money transactions (mean = 2.85, S.D = 1.083); there are reduced costs associated with investigating the mobile money fraud events, fines, legal and professional advisor fees (mean = 2.94, S.D = 1.092); the customer's name is shown before any approval of a mobile money transaction (mean = 4.45, S.D = 0.802); in MTN Uganda, fraud messages are blocked from coming to our mobile money customers (mean = 2.81, S.D = 1.098); statements of customer account balances are sent regularly (mean = 3.28, S.D = 1.297).

Table 13: The Relationship between control activities and fraud control in MTN Uganda Mobile Money services.

		Independent variable	Fraud Control
Independent variable	Pearson Correlation	1	.510**
	Sig. (2-tailed)		.000
	N	47	47
Fraud Control	Pearson Correlation	.510**	1
	Sig. (2-tailed)	.000	
	N	47	47

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.12 shows the relationship between Control Activities and fraud control ($r=0.510^{**}$) with probability value ($p=0.000$) which is significant at the 0.01 level of significance. This shows that there is a relatively strong positive and significant relationship between control activities and fraud control in MTN Uganda Mobile Money Services.

CHAPTER FIVE

SUMMARY, DISCUSSION OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND AREAS FOR FUTHER STUDY.

5.0 Introduction

This chapter presents the discussions of findings, summary, conclusion and recommendations of the study that examined the relationship between segregation of duties, fraud awareness and training and independent checks on fraud control in MTN Uganda Mobile Money Services. A discussion of the findings is presented first, objective by objective.

5.1 Summary of Findings

The study established there is a positive significant relationship between Control Activities and fraud control ($r=0.510^{**}$; $p=0.000$). This implies that a single unit increase in any of the independent variables resulted in a corresponding increase in fraud control in MTN Uganda Mobile Money Services. The test was based on three control activities; segregation of duties, fraud awareness and training and internal checks. All the three constructs had positive coefficients (i.e. positive relationship with fraud control). And out of the three constructs, only two of them (fraud awareness and training and independent checks) had significant positive relationship with fraud control (i.e. p-values of less than 5%), while the other one (segregation of duties) showed insignificant relationship with fraud control. The relationships between these three control activities and fraud control were determined using a Pearson correlation test.

Details of the results from the test revealed that the control activities have a positive and significant relationship with fraud control apart from segregation of duties whose relationship was found to be insignificant. The test statistics were as follows ($r=0.288$; $p=0.123$), ($r=0.594^{**}$, $p=0.000$) and

($r=0.323^*$, $p=0.027$) for segregation of duties, fraud awareness and training and independent checks and respectively.

From the findings of the study, it can be concluded that the implementation of control activities has greatly improved fraud control in MTN Uganda Mobile money services. Results from the study further revealed that MTN Uganda Mobile money services face challenges such as; inability to block fraud messages from coming to their mobile money customers, a lot of time taken on fraud detection by the employees dealing with mobile money services and transactions, employees who handle sensitive information do not take mandatory vacations and inability of management to send Statements of customer account balances regularly. The study also revealed that fraud awareness and training and independent checks had a significant positive relationship with fraud control indicators. Similarly, the other variable for instance segregation of duties was also found to have a positive relationship with fraud control but insignificant.

5.2 Discussion of Major Findings

5.2.1 Relationship between Segregation of duties and Fraud control in MTN Uganda

Mobile Money services

Majority of respondents agreed that there was segregation of duties in MTN Uganda Mobile Money services. This was indicated by an average mean of 3.714 and S.D of 1.058. This was then correlated with Fraud control and it was revealed that, there is a weak positive and insignificant relationship ($r=0.288$; $p=0.123$). This implies that there is a weak and insignificant relationship between Segregation of Duties and Fraud control. This is in contrast with Adetiloye, Olokoyo and Taiwo (2016), who asserted that there is a strong relationship between separation of duties and

fraud prevention ($r=0.7692$; $P<0.05$) in his study on Internal control viz., fraud prevention in the banking industry. It also contrasts with Nyakarimi & Karwirwa (2015), who asserted that there was a significant relationship between Segregation of duties and fraud control ($\chi^2=177.393$, $P=0.0001$) which results were obtained using Pearson Chi-Square test. This was found out in their study on “use of control activities in fraud control in financial institution” with a purpose to establish the relationship between Control Activities and Fraud Control in Financial Institutions (Banks and Microfinance Institutions)

The findings also revealed that employees who handle sensitive information do not take mandatory vacations indicated by a low average mean of 3.13 and this impedes the success of segregation of duties in combating mobile money frauds in MTN Uganda. This too is in contrast with Olzak, (2008) who asserted that management should ask questions like whether employees who handle sensitive information take mandatory vacations while implementing segregation of duties;

5.2.2 Relationship between Fraud awareness and training and Fraud control in MTN Uganda Mobile Money services

Majority of the respondents agreed that Fraud awareness and training is given to employees who deal with mobile money services in MTN Uganda indicated by an average mean of 3.919 and a S.D of 0.890. This was then correlated with fraud control and it was revealed that there is a positive and significant relationship between fraud awareness and training and fraud control in MTN Mobile Money Services. ($r=0.594^{**}$, $p=0.000$). Therefore, fraud control is significantly influenced by fraud awareness and training. This is in agreement with Abiola & Oyewole, (2013) who asserted that there is a significant positive relationship ($r=0.524$; $P<0.05$) between employee training on

fraud awareness and fraud detection in their study on “Internal control system on fraud detection: Nigeria experience” This is also in line with Gibson, (2018) whose study on an analysis of fraud prevention and detection in not-for-profit organizations in the state of South Carolina found out that there is a significant relationship ($r=0.644$; $P<0.05$) between fraud awareness training and fraud prevention and detection. The study recommended that internal stakeholders should start with awareness and training because they may not be aware of what and how fraud occurs. Therefore, employees should be imparted proper training to make them aware about difference between fraud and related concepts, red flags and reporting of any suspicious element (Razacc & Riley, 2010)

The findings of the study revealed that majority of respondents agree that the policy on fraud prevention and detection is fully communicated to all staff which agrees with Kovavich (2008), who opined that the entity’s policies, procedures and processes must be known by the fraudster so that the immoral act can be called fraud.

The finding further revealed majority of the respondents agreed that Fraud prevention and detection training is regularly given to the employees and mobile money agents indicated by (mean=3.91, SD=1.100), Employees are regularly educated on mobile money fraud issues. (Mean=4.02, SD=0.872); Mobile money employees are helped to understand how to identify and report fraud during fraud awareness trainings. (mean=4.23, SD=0.520); The employees are aware of the frauds going on in MTN mobile money services. (mean=3.89 SD=0.814).

This agrees with Akomea & Andoh, (2018), who established that adequate training for mobile money agents should be encouraged coupled with a public awareness campaign to teach the tricks of the fraudsters to the subscribers, and the technological equipment. It was also asserted by Buku

& Mazer,(2017), that mobile money providers should offer comprehensive fraud awareness and prevention programs to sensitize consumers, staff, and agents on fraud trends and prevention measures.

5.2.3 Relationship between independent checks and Fraud control in MTN Uganda Mobile Money services

A high number of the respondents agreed that independent checks are carried out in MTN Uganda mobile money services which is indicated by an average mean of 3.66 and a S.D of 0.847. This was then correlated with fraud control and it was revealed that there is a weak, positive and significant relationship ($r=0.323^*$, $p=0.027$). Therefore, fraud control is significantly influenced by independent checks. This agrees with (Nyakarimi & Karwirwa, 2015) who asserted that there is a significant relationship between independent/internal checks and fraud ($\chi^2= 134.767$, $P = 0.0001$) which results were obtained using Pearson Chi-Square test. This was found out in their study on “use of control activities in fraud control in financial institution” with a purpose to establish the relationship between Control Activities and Fraud Control in Financial Institutions (Banks and Microfinance Institutions). It is also in line with Ewa and Udoayang (2012) who established that strong internal control mechanism such as internal checks is a deterrence to staff fraud hence limiting staff from succeeding in any planned fraudulent activity. This was asserted in their study to establish the relationship between Internal control design and bank’s ability to investigate staff fraud and staff lifestyle and fraud detection in Nigeria. The findings revealed a moderate response on periodic rotation of staff dealing with mobile money services indicated by a mean of 3.45, this implies that the respondents were not sure whether it is done or not. This disagrees with Olzak, (2008) who asserted that employees handling sensitive issues are required to change roles periodically (rotation of duties).

5.4 Recommendations

The researcher recommended that responsibilities should be shared in key processes such that no one individual should perform more than one of the duties of mentioned duties mentioned above recording, authorization, execution of duties, custody of company's assets and systems development for computer operations.

Adequate training for mobile money agents should be encouraged coupled with a public awareness campaign to teach the tricks of the fraudsters to the subscribers, and the technological equipment.

It is recommended that management should arrange duties of various staffs of a business in such way that work is automatically checked by the next staff while performing their duties to prevent fraud and minimize errors.

Generally, management should fight by all means to improve organizational processes, policies and procedures to reduce or eliminate the causal factors of fraud is the single best defense against fraud. This will address the weakness within the organisation structure that normally exposes resources to risk of loss due to fraud.

5.5 Suggestions for further research

The findings of this study offer several recommendations for future research.

First, it would be interesting to see this study replicated on a larger scale, for example, for the entire telecommunication industry. This would include other telecommunication companies that have mobile financial services operating in other states that have a challenge of combating mobile money frauds.

Further research can be undertaken on the relationship between control activities and fraud detection and prevention in other industries than the telecommunication industry and results

compared with those of this study. This will broaden our understanding of the extent to which control activities are related to detection and prevention of fraud depending on the governance structures.

Further still, the relationship between organizational culture (way of doing things) and fraud detection and prevention in telecommunication companies to be interrogated and explored. This is because culture is inbuilt in all systems in terms of value, attitudes and norms shared across members of the organization. Therefore, for fraud detection and prevention to succeed, organizational culture issues need to be looked into as predictors of success of such programs.

5.6 Conclusion

The findings of this study demonstrated evidence that Control Activities have positive relationship with fraud control. In an economy with seemingly endless economic crimes leading to higher levels of frauds, proper control activities can aid in combating frauds in MTN Uganda Mobile Money services. While changes cannot be affected overnight or for that matter weeks, with careful approach to combating fraud, through adequate control activities fraud can be prevented and detected. The findings revealed that control activities highly relate to fraud control in MTN Uganda Mobile Money Services, Segregation of duties weakly relates with fraud control, Fraud awareness and training has a moderately strong relationship with fraud control and lastly, independent checks moderately predict and has a moderate relationship with fraud control. In this regard, managers, decision makers and practitioners in MTN Uganda need to offer considerable attention to Control Activities in its entirety, in particular, ensure there is a combined effort on segregation of duties, fraud awareness and training and independent checks. This will help the entity achieve set targets.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Dear Respondent,

My name is Faith Ainomugisha, a master's student of Kyambogo University pursuing a Master's degree of Business administration. I am doing research on the topic "**Control activities and Fraud control in MTN Uganda Mobile Money Services.**" Therefore, I ask you for your assistance in form of filling this questionnaire and your information provided will be kept confidential. Thank you.

1 Gender

- i) Male ☐ ii) Female ☐

2 Age bracket

- i) 20-25 ☐ ii) 26-30 ☐ iii) 31-35 ☐
iv) 36-39 ☐ v) 40 and above ☐

3 Education Level

- i) Certificate ☐ ii) Diploma ☐ iii) Bachelor's Degree ☐
iv) Master's Degree ☐

Others please specify.....

4 Period of Services in the Organisation

- i) 5 Years and below ☐ ii) 6-10Years ☐ iii) 11-15 years ☐
iv) Above 15 years ☐

5 Position held at the organisation

- i) Senior management level ☐ ii) Middle Management level ☐
iii) Lower Management ☐ iv) Non-managerial Staff ☐

For sections B, C, D and E, the following statements relate to your opinion about the relationship between control activities and fraud control in MTN Uganda mobile money services. For each of the statements below, please indicate the extent of your agreement and disagreement by ticking (☐) in the space provided below:

KEY:

Strongly Disagree - SD	Disagree-D	Not sure - NS	Agree- A	Strongly Agree- SA
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Section B: Segregation of Duties in MTN Uganda mobile money services

To what extent do you agree with the following statements related to the relationship between segregation of duties and fraud control in MTN Uganda mobile money services?

S/N	Statement	SD	D	NS	A	SA
B1	In this organisation, different members initiate and approve mobile money transactions					
B2	In MTN Uganda mobile money services, two or more passwords are needed to access the mobile money system					
B3	There is no single person that completes a mobile money transaction in this organisation					
B4	The person who approves transactions or handles cash receipts is not the person who performs the reconciliation					
B5	In this organisation, different individuals approve and make payments					
B6	In this organisation, there is ownership and accountability by the employees dealing in mobile money services					
B7	In MTN Uganda, there is enough staff to carry out segregation of duties.					
B8	In this organisation, employees who handle sensitive information take mandatory vacations.					
B9	There are processes in place to adjust system access when employees change roles within the organization.					

Section C: Fraud awareness training in MTN Uganda mobile money services

To what extent do you agree with the following statements related to the relationship between fraud awareness training and fraud control in MTN Uganda mobile money services?

For each of the statements below, please indicate the extent of your agreement and disagreement by ticking (□) in the space provided below:

KEY:

Strongly Disagree- SD	Disagree-D	Not sure-NS	Agree-A	Strongly Agree- SA
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	Statement	SD	D	NS	A	SA
C1	Fraud prevention and detection training is regularly given to the employees and mobile money agents.					
C2	Employees and mobile money agents are regularly educated on mobile money fraud issues					
C3	There is constant enlightenment of mobile money customers on how to secure their accounts					
C4	The policy on fraud prevention and detection is fully communicated to all staff.					
C5	In MTN Uganda, fraud awareness training is part of the job appraisal process					

C6	The employees are aware of the tricks used by the fraudsters in MTN Uganda mobile money transactions.					
C7	Mobile money employees are helped to understand how to identify and report fraud during fraud awareness trainings.					
C8	The employees are aware of the frauds going on in MTN mobile money services.					

Section D: Independent checks in MTN Uganda mobile money services

To what extent do you agree with the following statements related to the relationship between independent checks and fraud control in MTN Uganda mobile money services?

For each of the statements below, please indicate the extent of your agreement and disagreement by ticking (□) in the space provided below:

KEY:

Strongly Disagree- SD	Disagree-D	Not sure-NS	Agree-A	Strongly Agree- SA
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S/N	Statement	SD	D	NS	A	SA
D1	Periodic surprise visits are always done by the MTN mobile money supervisors.					
D2	There is periodic rotation of staff dealing with mobile money services.					
D3	Independent checks are always done by an employee independent of the personnel responsible for the information.					
D4	Independent checks are implemented on day-to-day transactions					
D5	A mobile money transaction done by one employee is automatically checked by the next employee.					
D6	Independent checks on mobile money transactions are made periodically.					
D7	In MTN Uganda, independent checks are used to assess the correctness of data contained in accounting records					
D8	In this organisation, cancelled transactions are reviewed on a regular and timely basis by a person other than the person processing the mobile money transaction					
D9	Reconciliations occur monthly for all accounts and are independently reviewed by someone other than the person who authorises the mobile money transactions.					

Section E: Fraud control in MTN Uganda mobile money

This section focuses on the extent to which fraud control in terms of fraud prevention, fraud detection has been attained as a result of control activities in MTN Uganda mobile money services.

For each of the statements below, please indicate the extent of your agreement and disagreement by ticking (□) in the space provided below:

KEY:

Strongly Disagree – SD	Disagree-D	Not sure - NS	Agree- A	Strongly Agree- SA
------------------------	------------	---------------	----------	--------------------

Section E: Fraud control in MTN Uganda mobile money

This section focuses on the extent to which fraud control in terms of fraud prevention, fraud detection has been attained as a result of control activities in MTN Uganda mobile money services.

For each of the statements below, please indicate the extent of your agreement and disagreement by ticking (□) in the space provided below:

KEY:

Strongly Disagree – SD	Disagree-D	Not sure - NS	Agree- A	Strongly Agree- SA
------------------------	------------	---------------	----------	--------------------

S/N	Fraud Prevention	SD	D	NS	A	SA
E1	There are fewer cases of mobile money fraud being reported by the mobile money customers.					
E2	There are minimal losses in mobile money transactions in MTN Uganda arising from mobile money frauds.					
E3	There is public trust in the MTN Uganda mobile money services.					
E4	There are reduced audit costs in MTN Uganda mobile services due to prevented mobile money frauds.					
E5	There is reduced collusion of employees to defraud the mobile money accounts in MTN Uganda.					
E6	In this organisation, there are reduced opportunities for mobile money frauds.					
E7	MTN secures the personnel details of mobile money clients.					
	Fraud detection					
E8	New mobile scams are easily detected in mobile money					

	transactions.					
E9	The employees can easily detect errors in the mobile money transactions before approval and payment.					
E10	There is little time taken on fraud detection by the employees carrying in mobile money transactions					
E11	There are reduced costs associated with investigating the mobile money fraud events, fines, legal and professional advisor fees.					
E12	The customer's name is shown before any approval of a mobile money transaction.					
E13	In MTN Uganda, Fraud messages are blocked from coming to our mobile money customers					
E14	Statements of customer account balances are sent regularly.					

Thank you for your time.

KYAMBOGO UNIVERSITY

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Office of the Dean, Graduate School

25th October 2018

To Whom It May Concern

RE: LETTER OF INTRODUCTION

Dear Sir/Madam,

This is to introduce **Ms Faith Ainomugisha** Registration Number **16/U/13312/GMBA/PE** who is a student of Kyambogo University pursuing a Masters Degree.

She intends to carry out research on **"Control Activities and Fraud Control in MTN Uganda Mobile Money Services."** as partial fulfillment of the requirements for the award of the Masters in Business Administration.

We therefore kindly request you to grant her permission to carry out this study in your institution.

Any assistance accorded to her will be highly appreciated.

Yours sincerely,


Assoc. Prof. Muhamud N. Wambua
DEAN, GRADUATE SCHOOL

