INSURANCE FRAUD RISK MANAGEMENT PRACTICES AND PERFORMANCE OF MOTOR VEHICLE UNDERWRITING COMPANIES IN KENYA

By

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER 2018

DECLARATION

This research proposal is my original work and has not been submitted for a degree in this or any other University.

…….. …….

Nyanga Evans Were **Date**

D61/79076/2015

This research proposal has been submitted for Examination with my approval as the University Lecturer.

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ACKNOWLEDGEMENT

I would like to express my gratefulness to persons who have contributed towards successful accomplishment of this research project. First am thankful to the almighty God for giving me the strength and ability to complete this project successfully.

I am extremely obliged to my supervisor, Mr. Alex Jaleha for his exceptional skills, guidance critical comments, support and advice during this period. I also acknowledge Dr. Mercy Flora who moderated my project.

Lastly, I extend my gratitude to my brother, Bramwel Aduol for his encouragement and advice during the research process.

To all those who assisted me in one way or another. I am most thankful and may God bless you abundantly.

DEDICATION

I dedicate this project to my beloved parents, Willis Nyanga Aduol and Mary Juma Omondi for their support and encouragement during my entire academic life. The support, prayer and encouragement they gave me in my childhood played a significant role in my academic life.

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ABSTRACT

Insurance fraud is a challenge facing almost all insurance firms whether in the developing or developed world. Indeed, in most of Kenya's motor underwriting companies, fraud has evolved over time from fake windscreen and radio/music systems to more advanced total loss of vehicles and death claims. For the motor commercial segment, cases where the numbers of claimants surpass the carrying capacity of a vehicle or involving multiple insurances has been made. The objective of this study was to determine the effect of insurance fraud risk management practices on the performance of motor vehicle underwriting firms in Kenya. The study used fraud management life cycle theory and fraud triangle theory in defining the relationship between insurance fraud risk management practices and performance of motor vehicle underwriting companies in Kenya. Motor vehicle underwriting companies are faced with the task of managing fraud risk which has been a menace to their performance. A descriptive research design was used for the study with a target population of thirty five motor vehicle underwriting companies. The study found out that there was a significant relationship between preventive, detective & responsive fraud practices and performance of motor vehicle underwriting companies in Kenya. The study concluded that all the independent variables influence firms' performance in accordance to the regression results. From the findings and conclusions, the study recommends that motor vehicle underwriting companies should carefully deliberate the extent to which they adopt the various fraud risk management practices since the study established that they affect the firms' performance differently. The study therefore recommends that insurance fraud risk management practices should be made fundamental business practise by motor vehicle underwriting companies in Kenya. The R-squared was calculated at 72 percent on the four variables. The P value of 0.00 confirmed that the regression model significantly and statistically predict the dependent variable and this a good fit for the data. Preventive measure was practiced by majority of the firms and this was confirmed by the t of 2.605 and beta of 0.613. The study recommends that motor vehicle underwriting companies should carefully deliberate the extent to which they adopt the various fraud risk management practices since it has been proven from the study that they affects firms performance differently and the top management should fully support insurance fraud risk detective polices by allocating resources to the process to ensure that there is regular review.The researcher suggest that it would be worth a study if findings from this study are applicable to other industries for example manufacturing or banking in Kenya to identify how risk management practices affect them. The study further suggest for further research on the remaining 28 percent of factor that affect performance of motor vehicle under writing companies in Kenya

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

In the present day competitive business environment, organizations are faced with more risks as they endeavor to improve performance. The level of risk that an organization faces has a direct relationship with the level of return that it earns and an organization is successful only when it is capable of effectively managing a portfolio of risks and their associated rewards (Nazir, 2018). The challenge of managing incidences of fraud has become a high priority area for organization, in both developed and developing world. This change in focus to address the problem of fraud has been occasioned by the estimated huge cost that insurers incur to the vice (Thompson, 2005). According to Duffield and Grabosky (2001) it is important for insurance companies to make appropriate fraud risk management practices on questionable results, as it would, even from a pessimistic standpoint, reduce misfortunes because of catastrophe and thus improve firm performance.

This study will be guided by two theories that relate to insurance fraud namely; the fraud management lifecycle theory by Wesley (2004) and the fraud triangle theory (Cressey 1953). The fraud management lifecycle theory identifies eight stages that organizations need to put in place to effectively manage fraud, which are:-deterrence, prevention, detection, mitigation, analysis, policy, investigation and prosecution. The recommendation of this theory is that the final phase is the culmination of all failures and successes. Every act of fraud or that lead into fraud, irrespective of whether it is committed on the interest of the company or against the will of the company, is ever composed of the three factors that drive the act of fraud to be committed. In

a well presented fraud triangle, the three factors are interrelated in one way or another, for example, the more prominent the apparent opportunity is, or the more extraordinary the condition of pressure is, the less rationalization it takes for a person to confer fraud act (Albrecht, Turnbull, Zhang, and Skousen, 2010)

Motor insurance segment in Kenya comprises of private and commercial motor insurance. The segment has been growing in the last decade, such that in the year 2017, the total premiums collected was slightly above Kshs 31.74 Billion, which was a rise of 3.7% over the previous year (AKI, 2017). During the same period, the total insurance underwriting expenses was Kshs 28.06 billion which was an increase of 14.94% in the same period ended December 2016. According to the Association of Kenya Insurers annual report (2017), the net insurance claims has been increasing in the last five years with claims that can be considered fraudulent increasing from Kshs 904 Million in 2012 to Kshs 1.35 Billion in 2017. Indeed, in most of Kenya's motor underwriting companies, fraud has evolved over time from fake windscreen and radio/music systems to more advanced total loss of vehicles and death claims. For the motor commercial segment, cases where the numbers of claimants surpass the carrying capacity of a vehicle or involving multiple insurances has been made. Thus, the increasing cases of fraud in the motor sector in Kenya have been a cause of concern not only to the insurance firms but also to the government. (AKI, 2017) .Therefore, the need to understand the insurance fraud risk management practices will be important to the insurance industry in Kenya.

1.1.1 The Concept of Insurance Fraud

Insurance fraud, also known as claims extortion is an illegal act that involves acquiring financial advantage through falsification of an actual position (Derrig, 2002). According to Clemency

(2002), a fraudulent act is a bogus demonstration of a self-evident reality either in words or directly in action, false or deluding affirmations, or by impersonation of what is believed to have been camouflaged, that tricks and is aimed at cheating or enticing the other party so that the individual will follow up on it to her or his legitimate destruction. As a result, insurance fraud undermines the relationship amongst guarantors and decision makers since it exhausts the trust established from the guaranteed.

Several ways have been identified in which fraud is perpetrated in the insurance industry. Vieane and Dedene, (2015) expound that fraud in the motor vehicle industry can take the form of insurance firm employee manipulation of the system to pay undeserving person, forgeries of documents and impersonation of the genuine claimants as well as outright misappropriation of a claimants money. Bond and Crocker (2007) suggest that insurance fraud can generally be categorized into planned and opportunistic fraud. A premeditated fraud is usually carried out by a person on a one time basis to profit from the insurance system and is mostly accomplished through the help of an insurance firm employee. Opportunistic fraud on the other hand is carried out by persons who incurred a loss and try to transfer the costs to the insurance organization. Opportunistic fraud mostly takes the form of exaggeration of claims and be carried out by the customer alone or with the assistance of a service provider or legal person (Vieane et. al. 2015). From the different forms of which insurance fraud can take, the definition which best describes insurance fraud is that advanced by Derrig (2002) which considers fraud as an illegal act that involves acquiring financial advantage through falsification of an actual position for monetary gain. This is because the underlying basis of fraud is to gain a financial benefit from the transaction in terms of recovery of lost asset and be made good to the loss.

Duffield and Grabosky (2001) characterized fraud as an illegal act including duplicity, (for example, purposeful twisting of reality or distortion or covering of a material certainty) to pick up an unfair advantage over another keeping in mind the end goal to anchor something of significant worth or deny another of a right

1.1.2 Fraud Risk Management Practices

Fraud management risk practices are defined as controls instituted by a firm for purposes of deterring, detecting and investigating fraud on transactions handling condition without risking the advantages of mechanization regarding effectiveness, opportuneness and client benefit (Biegelman and Bartow, 2012). A report by KPMG (2009) suggest that fraud risk management alludes to the frameworks and procedures used to distinguish exposure of a firm to fraud risk, and to execute controls, methodology and training to avert, recognize and react to the key fraud dangers. Fraud risk management practices can therefore be broadly categorized into preventive, detective and responsive fraud management practices.

According to Weisberg and Derrig, (2011) being able to identify and classify a fraudulent claim starts with the ability to distinguish whether or not an insured event has happen and if not, then the fraud activity is planned but if it occurred but the claim is exaggerated then this is termed as opportunistic fraud. Whichever form a fraud takes, insurance firms should put in place effective way to fight fraud and to start with prevention system abuse. Further, it is vital to guarantee that fraudulent movement is recognized at the very early conceivable time, and therefore people swindling the system are quickly found (Piccard, 2008). In any case, it is vital to take note of that since fraud is certifiably not a self-discovery occurrence; insurance providers should set aside

sufficient funds to its uncovering and administration. The way towards examining completely suspicious cases has been known to be an exorbitant check, in light of the fact that the genuine degree of a claim must be found by methods for a top to bottom investigation (Bond & Crocker, 2007).

1.1.3 Concept of Organizational Performance

Moullin (2007) assert that firm performance is a means through which a firm provides value to its stakeholders and therefore is an indication of how well the managers succeed in utilizing firm resources. According to Koontz and Donnell (2010) organizational performance refers to the capacity that a firm has in order to realize such mundane objectives as high profit, increased market share, new product development, good financial results, and achieving long-term sustainability. Hence it is a measure of actions of the business firm in terms of achieving firm aims and objectives. Business firms achieve objectives if they are carrying out activities that satisfy owner's needs, customers and other participants. Similarly, business firms attain firm objectives, if they perform in an efficient and effective way than competitors.

Different ways are used to measure a firm's performance or success. According to Carton (2004), successful performance of an organisation can be assessed based on what value creation it has for stockholders. On the financial aspect, it is evaluated on the basis of how it has changed the financial state of an organisation. Prior studies have used different measurements of performance. Lumpkin and Dess (1996) applied sales development, profitability, market share and total performance to gauge on firms' level of performance. Mensah (2013) utilized three approaches, stock turnover, profit, and consumer satisfaction to gauge the relationship between

performance of a firm and strategic orientation. Calantone et al. (2002) utilized four performance measurements, to be specific: market share, customer satisfaction and return on capital, and general gainfulness to quantify learning orientation and organizational performance. Effiok, Ojong, and Usang (2012) contended for the utilization of four measurements of performance, in particular; retention of customers, success of a new item/product, established growth in sales and degree of profitability to quantify performance and market orientation of a firm. In the present research, the balance score card performance perspective measures will be used. This is a strategic performance measurement model developed by Kaplon and Norton (1992) and its main objective is to interpret an organization mission and vision into actual functioning actions. The perspective measures are namely, financial, internal processes, customer focus and, learning and growth.

1.1.4 Insurance Industry in Kenya

The Kenyan insurance business is generally regulated by Insurance Regulatory Authority (IRA) and managed by the laws and principles provided in the constitution of Kenya under the Insurance Act, Cap 487 that is housed under the Ministry of Finance. The controller of insurance industry is therefore in charge of definition of approaches that governs activity of all insurance providers in Kenya and is the body charged with the duty of accrediting and directing of all the players in the insurance industry. As indicated by Industry report by IRA (2016), insurance industry in Kenya is one of the quickest developing areas in Africa with penetration of 3.4% of the GDP for general protection and 1.9% for Life protection. The aggregate premium earned in the year 2017 was KES 86 billion contrasted with KES 72 billion in the year 2014. The motor

insurance premium over the same period was Ksh 31.74 Billion implying that it forms one- third of the total premium earned in the industry.

The motor vehicle insurance in Kenya is a key segment in the overall insurance industry with 35 out of the 53 insurance firms in the country offering the product and forms more than a third of the firm's total premium as at 2017. However, according to AKI (2016), the motor vehicle insurance segment is one of the products that are more risky compared to the other segments because of the number and value of claims lodged. Indeed the risk is higher for commercial motor vehicles, such that less than 30 insurance firms offer insurance cover to the commercial vehicles. Indeed, the motor commercial segment registered a net underwriting loss of Ksh 3.43 billion in 2016 and this was attributed by among other the high level of fraud (AKI, 2016). Consequently, there is need to investigate the motor vehicle insurance fraud management practices and its influence on the performance of insurance firms because it expected that adoption of appropriate fraud practices will have a significantly positive impact on the company performance.

Kenya's motor underwriting companies provide the largest insurance covers than any other coverage in premium volume with motor commercial accounting for 25.7% of total premiums, followed by motor private at 19.1% (Insurance Industry report 2016). Unfortunately, this single largest class of insurance business experiences the highest level of fraud. A first quarter Insurance Industry report (2016), showed that the initial three months of 2016 saw fraud purportedly hiked by more than 60% to an aggregate of 43 cases from a sum of 26 cases revealed

in the first quarter of 2015. Of the aggregate deceitful claims announced, classes of motor insurance ended up being the most defenceless against insurance fraud with an aggregate number of 18 fake cases (42%) detailed reported adding up to KES 52.45 million (83%). These included both the material damage claims and motor policy claims.

According to AKI (2016) report the insurance premium of motor private and motor commercial were almost equal since the total gross premium for motor private was Ksh 20.4 billion as compared to Ksh 24.031 billion for motor commercial. However, the motor commercial insurance was noted to have high claim levels and operating expenses of Ksh 23.4 billion with a high proportion being for claims relating to PSV vehicles. Further, AKI (2017) annual report highlights the challenges that come from fraudulent claims which need to be addressed in order to manage the level of claims made by the PSV vehicles.

The need to understanding the fraud risk practices that are employed by insurance firms and its effect on the performance of the firms will therefore serve to influence the operations of the sector.

1.2 Research Problem

Fraud poses significant and costly challenge for both policy holders and insurance companies (De Leeuw, 2014). For the genuine policy holders that are faced with the insured risk, existence of fraud delays the settlement of claim while to the insurance firms, fraud cases leads to high settlement cost to a company and eventually affecting the firms' performance. However, Doig and Levi (2013) highlight that despite the increase in fraud prevention budget and policies introduced, the sophistication and volume of fraudulent claims has been raising over the years, more so, electronic fraud. As a result, it is important that insurance firms come up with

appropriate fraud risk management practices to combat the vice because if the trend is not reversed, then the risk will continue having a negative consequence on the firm performance. However, according to Ndwiga et al., (2012), by a firm instituting appropriate fraud risk management practices, it will limit the effect of the fraud and therefore result in improved firm performance.

The issue of claims fraud and build-up is a major concern among motor insurance companies. In Kenya Motor Vehicle underwriting has become a high risk business line for insurance firms because of the high fraudulent claims that is being made by the insured (AKI, 2016). In the 2016 annual report, the insurance body identifies the risk that comes with underwriting motor vehicles and as a result, identifying the need to come up with appropriate practices of combating the vice. It is therefore important to establish the various practices that are being used by the motor vehicle underwriters in Kenya to reign on insurance fraud.

Prior studies both globally, regionally and locally have been done on the area of fraud risk management and performance. A study by Adeyemo (2012) on the techniques for fraud recognition and minimization in Nigerian tertiary educational foundations found that fraud execution was because of carelessness with respect to administration in the regions of selection and recruitment and also placement of staff in bursary and units of account. Both internal and external auditors were additionally observed to plot with degenerate authorities to cover fraud. Another investigation by Agbanje and Ganiyu (2017) on impact of forensic bookkeeping services on minimization or eradication of fraud in Nigerian banking industry discovered that forensic accounting services lessen fraud in banking industry. In Kenya, Kuria and Moronge, (2013) did a

study on the effects of insurance fraud control mechanism on the growth of the insurance insurance firms in Kenya. The study found out that regulation did not aid in fraud control and had little impact on the growth of the insurance sector. Technology and governance on the other hand had been used to fight fraud in the insurance industry and not only aided fraud mitigation but also promote growth of the sector. Githecha, (2013) conducted a study on the impact of fraud risk management practices on commercial banks' financial performance in Kenya. The study found out a positive and significant relationship between financial performance and fraud risk management practices of commercial banks in Kenya. Mbala (2015) investigated undertook an analysis of the nature and effect of fraud in the medical insurance in Kenya. The findings advise that common form of fraud in the health insurance in Kenya included exaggerated medical bills, cover-up of health history of the patient identity and document theft fraud as well as perpetration of the insurance premium fraud. Further, it was found that the level of fraud in the health insurance sector depend on the extent of process automation that the companies had adopted.

A review of the studies has revealed a number of research gaps. First, the local studies have sought to investigate the insurance fraud in the Kenyan commercial banks and not insurance firms. Further, studies that have concentrated in insurance firms have looked at medical insurance fraud and not the motor vehicle insurance. Different lines of businesses face different fraud challenges and the appropriate fraud practices cannot be generalized across all the insurance underwritings. As a result, the current study will seek to answer the following research question: what is the effect of Fraud Risk Management practices on the performance of motor vehicle underwriting companies in Kenya?

1.3 Research Objectives

The objective of this study was;

i. To establish the insurance fraud risk management practices adopted by the motor vehicle insurance companies in Kenya;
ii. To determine the relationship between adoption of between insurance fraud risk management practices and performance of motor vehicle insurance companies in Kenya

1.4 Value of the Study

The findings of this study will add value to the furtherance of theoretical underpinnings of fraud management practices; specifically, the fraud management lifecycle theory and the fraud triangle theory by paying attention to the context and the fraud management practices in a growing economy as Kenya. Empirically, this study will further add to the budding literature on insurance fraud in African countries that mostly have weak institutional practices. Further, motor vehicle fraud claims in Kenya has been considered as high and has led to the collapse of some of the insurance firms such as the Lakeview and the understanding on how the various insurance Fraud Risk Management practices can be adopted to reduce the fraudulent claims will help in furtherance of the existing knowledge.

The Insurance companies will also be able to device better fraud uncovering that will result to an enhancement in the detection and control of the level of fraud in the motor vehicle underwriting in Kenya. The study will provide more understanding into motor vehicle insurance in Kenya and potential customers may utilize the data to settle on the best decisions for their insurance cover needs. The identification of the problems will likewise permit Insurance organizations to

improve extent of the current insurance covers of motor vehicle and charge the correct premiums with the goal that exclusions that may otherwise have prompted fraud are included in the covers. This way, the occurrences of fraud will think of insurance policies that will be alluring to the mutual clients.

The study will likewise educate the decision makers and GoK department of fraud investigation unit about vital territories they should cover when managing fraud cases to have the capacity to build up the main driver of the fraudulent exercises in the sector of motor insurance as well as in different regions of general insurance with the goal that the underlying drivers of the fraudulent exercises are sealed off to relieve rate of crime.

CHAPTER TWO : LITERATURE REVIEW

2.0 Introduction

This chapter reviews empirical literature on the relationship between insurance fraud risk management practices on performance. The chapter begins with a theoretical framework, followed by fraud risk management practices, then performance finally the empirical studies of Fraud Risk Management practices and performance.

2.1 Theoretical Review

The debate on the fraud risk control practices and its effect on the performance of a firm can be discussed in light of two theories in the subject area namely; Fraud management lifecycle theory and fraud triangle theory

2.1.1 Fraud Management Lifecycle Theory

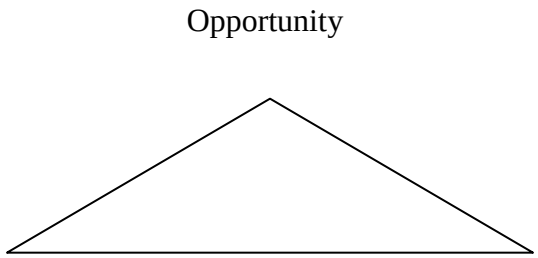
Albrecht, Albrecht, Albrecht, and Zimbelman (2009) advanced the fraud lifecycle theory. The theory represents fraud as a system lifecycle in which every single hub in the network and each phase in the lifecycle is a group of elements that are inter-related in one way or another in an organizations operation. According to the theory, there are eight phases in a fraud management lifecycle ranging from discouragement, avoidance, discovery, mitigation, analysis, policy, investigation and prosecution. The principal phase of deterrence is underlined debilitation through fear; to prevent activity by fear of the outcomes that might arise (Wesley & Fair, 2004).

In the fraud management lifecycle theory, it recognizes that failures occur on the ground that the culprits of fraud activities were not successful in their deceitful mission and that fraud was

detected, the suspects were identified, prosecuted and charges recorded against them in respect to predefined laws and principles (Wesley & Fair, 2004). It is clearly understood that in the fraud management lifecycle, interrelationships that exist among the eight phases are very important to the Fraud Management Lifecycle Theory. The theory of Fraud management life cycle is applicable in this study since it distinctively demonstrates the phases of fraud hazard management in a sequential way. Further, the theory demonstrates what the insurance company processes that should set up for fraud to be successfully overseen. The theory anyway does not explain the drivers of fraud in an organization. This theory expects uniform social, lawful, and innovative applications in the management of fraud. This theory does not endeavor to clarify fraud control practices in a domain when such frameworks and procedures fail.

2.1.2 The Fraud Triangle Theory

The theory was advanced by Cressey (1953) by postulating that behind everything that the people do, there must be a reason. According to the theory, there are three elements that define a fraud namely; perceived opportunity, perceived pressure and finally rationalization of the fraud activity. The three factors results to what is referred as the fraud triangle.



The Fraud Triangle (Albrecht, Albrecht, Albrecht, and Zimbelman, 2009)

As Albrecht, Turnbull, Zhang, and Skousen, (2010) put it, the three components are intuitive in that in any situation that the chances of perceived opportunity or perceived pressure is high, there is also less chances of rationalization taking place for somebody to be found committing fraud. However, fraud being a function of various activities, gives it a characteristically complex feature that makes it difficult to be identified and stopped (Rae and Subramaniam, 2008). Having a clear knowledge of how fraud is boosted by perceived opportunity, pressure and rationalization in a company can, to a greater extent, provide support towards lifting the actions of fraud and identifying the weak areas that fraud may arise and thus calling for fortify such areas (Albrecht et al., 2008).

Fraud culprits must have an apparent opportunity or they won't confer fraud, opportunity incorporate factors, for example, a frail top managerial staff, deficient internal controls or the capacity to shroud the fraud behind complex exchanges. (Albrecht et al., 2009). Different elements that make an opportunity to be a factor that promotes fraud activities include absence of controls, control circumvention that anticipate or identify false conduct, the powerlessness to judge the nature of performance, inability to punish fraud culprits, absence of access to information, obliviousness, insufficiency and the absence of an audit trail (Albrecht et al., 2009).

Opportunity is however a problem because it gives room for fraudsters to commit fraud in an organization (Rae and Subramaniam, 2008).

Insufficient controls or the capacity of the administration to abrogate controls likewise give an opportunity for a fraud to be committed (Cohen, Ding, Lesage, and Stolowy, 2013). Opportunities to confer fraud can likewise emerge when an employee achieves a level of trust in an association or when internal controls are powerless. (Hillison et al., 2009). Intensifying the opportunity to steal is the propensity for associations to put trust in a couple of long-term employees who after some time acquire independence and authority and along these lines have simple access to money related resources, combined with a thorough comprehension of how the framework functions and how to commit the fraud effectively (Kelly & Hartley, 2010).

2.2 Insurance Fraud Risk Management Practices and Performance

Insurance fraud is a challenge facing almost all insurance firms whether in the developing or developed world. As a result, many studies have been carried out to determine the various practices employed by insurance firms to manage level of fraud. Chen, Tao, Wang and Chen (2015) investigated the big data based fraud risk management at Alibaba online sites. The findings were that as a result of the huge volume of data handled at any given time by Alibaba, the firm had established a fraud risk management and monitoring framework in light of ongoing enormous information handling and keen hazard models. This framework captures signals of fraud directly from colossal sum of data that relates to a particular user behaviours and other networks, conduct a critical analysis on the data obtained using machine learning and come up with findings that predicts of forecast bad transactions and users.

Rawte and Anuradha (2015) sought to determine fraud identification practices in India's health insurance with the use of data mining approaches. The research findings suggested that a hybrid approach consisting of clustering and classification techniques was found to be a more appropriate system to detect and avoid the fraud. In addition, the insurance firm staff should possess some primary comprehension of health care framework and its fraudulent conducts and capacity of the features and components of health care insurance data. The study suggests that since each of the above practices has its own particular group of benefits and burdens, by consolidating the benefits of both the systems, a novel hybrid technique for identifying false claims in medical insurance industry is tabled.

Gatzert and Wesker (2014) investigated mortality risk and its impact on downfall and risk management in the life insurance sector. The study found that three major forms of mortality risk face insurance firms namely; unpredicted risk, poor selection, and systematic risk, influences a firm's risk situation. The study found that the common risk management practices employed by USA firms include natural supporting and mortality unexpected bonds. The outcomes of the study additionally demonstrate that unfavorable selection and basis risks have more effect not just on the viability of mortality unforeseen bonds, yet in addition on the insurer's hazard level, particularly when a portfolio comprises of several kinds of items. On their part, Dionne and Wang (2013), attempted to establish whether insurance fraud in motor vehicle theft insurance in Taiwan varied with the business cycle. The discoveries were that lingering insurance fraud exists both in the contract with the cost of replacement underwriting and the agreement with no-deductible support in the Taiwan automobile robbery insurance market. They found that the severity of insurance fraud is countercyclical with extortion being animated amid times of recession and relieved during expansion times.

Okura (2013) sought to determine the connection between moral hazard and insurance fraud among motor vehicle insurance firms in Kenya. The findings suggest that in an insurance market, there are both moral risk and insurance fraud and that the ability of an insurance company to avoid insurance extortion relies on its ability to give an extra enlightenment to a policyholder in return for understanding the likelihood of insurance fraud. On the same line, Lesch and Baker (2013) assessed the atmosphere for managing insurance fraud and misuse of a consumer to perpetrate insurance fraud by suggesting that a more effective mechanism is to enlighten the insurance customers about the need to observe the doctrine of utmost good faith and the importance of the value of insurance exchanges with the insurance firm.

Abdulrasheed, Babaitu and Yinusa (2012) analyzed the effect of extortion on performance of commercial banks in Nigeria. The study concluded that Nigerian banks registered the highest cases of fraud in 2008 and there is a correlation between the amount of resources invested in fraud management and incidences of fraud registered in a particular period. Similarly, Olaoye, Dada and Adebayo, (2014) inspected the nature, causes, impacts and solution for bank fraud in Nigeria. The findings reveal that to fight fraud cases, banks should decrease the impulse to commit extortion by the both the insured and bank employees as well as to expand the odds of identification of fraud.

Gisairo (2016) investigated the viability of utilization of biometric innovation to limit fraud in health insurance firms in Kenya. The findings reveal that the adoption of the biometric technology for identification has not had a significant effect in reduction of fraud cases in the health insurance segment in Kenya and suggested the need for ethical consideration among the

staff and the insured to curb the fraud challenge. Githecha, (2013) undertook a study on the impact of fraud risk management operations on the financial performance of banks in Kenya. The findings demonstrate that there is a statistically positive significant impact of fraud risk management practices on the performance of banks in Kenya. Factors such as technology appropriation, regulatory and governance are found to significantly affect the financial performance of the banks.

2.3 Summary of Literature Review and Research Gaps

The above reviewed studies, both local and at the international level have dealt on the various facets of insurance fraud in the insurance industry. It can be concluded that indeed the challenge of fraud risk affects different insurance lines and the insurance firms have adopted different practices ranging from the use of bio-metric technology to data mining systems to seek and limit incidences of insurance fraud. Most of the studies that have concentrated on prevention practices (Gisairo 2016), Lesch and Baker (2013) who evaluated the climate for managing consumer insurance fraud and abuses, and Chen, Tao, Wang and Chen (2015) who investigated the data mining fraud risk management system at Alibaba online sites. Further, Rawte and Anuradha (2015) sought to determine insurance fraud detection practices in India health insurance using data mining techniques. The above studies concentrated on different fraud management practices employed in different countries without establishing the relationship between the fraud risk management strategies and the performance of the insurance firms. Kuria and Moronge, (2013) deviated a bit by investigating on the effects of insurance fraud control mechanism on the growth of the insurance industry with emphasis on insurance companies in Kenya. However, the study

focused on the whole insurance industry products and little emphasis on motor vehicle underwriting companies.

Other studies that include Githecha, (2013) focused on establishing the impact of Fraud Risk Management practices on the performance of Kenyan commercial banks. Similarly, Mbuguah (2013) researched on the effect of response strategies to fraud on the financial performance of listed commercial banks in Kenya. The study was generalized in that it looked at all the insurance firms' products without narrowing on a particular segment like the current research. Further the study focused on commercial banks which are a different industry from the insurance industry and face different challenges and regulatory environment. Hence, it can be concluded that though insurance fraud has been investigated from different perspectives, there is limited research work that has delved into investigating the effect of insurance fraud management practices on performance of motor vehicle underwriting companies in Kenya. This research will therefore seek to fill this research area gap by concentrating on motor vehicle insurance and its associated fraud and its influence on performance of the firms. The performance measures will adopt the balance scorecard approach.

2.5 Conceptual Framework

According Miles and Huberman (1994), a conceptual framework is a diagram or written blueprint that elaborates, either in narrative or graphically format, the major points of concern to be studied, variables, the crucial elements, or ideas and the reputed associations among them. In the model presented in Figure 2.1, it is postulated that a firm's fraud management practices influence the performance of a firm

2.5.1 Conceptual model

Independent Variables **Dependent**

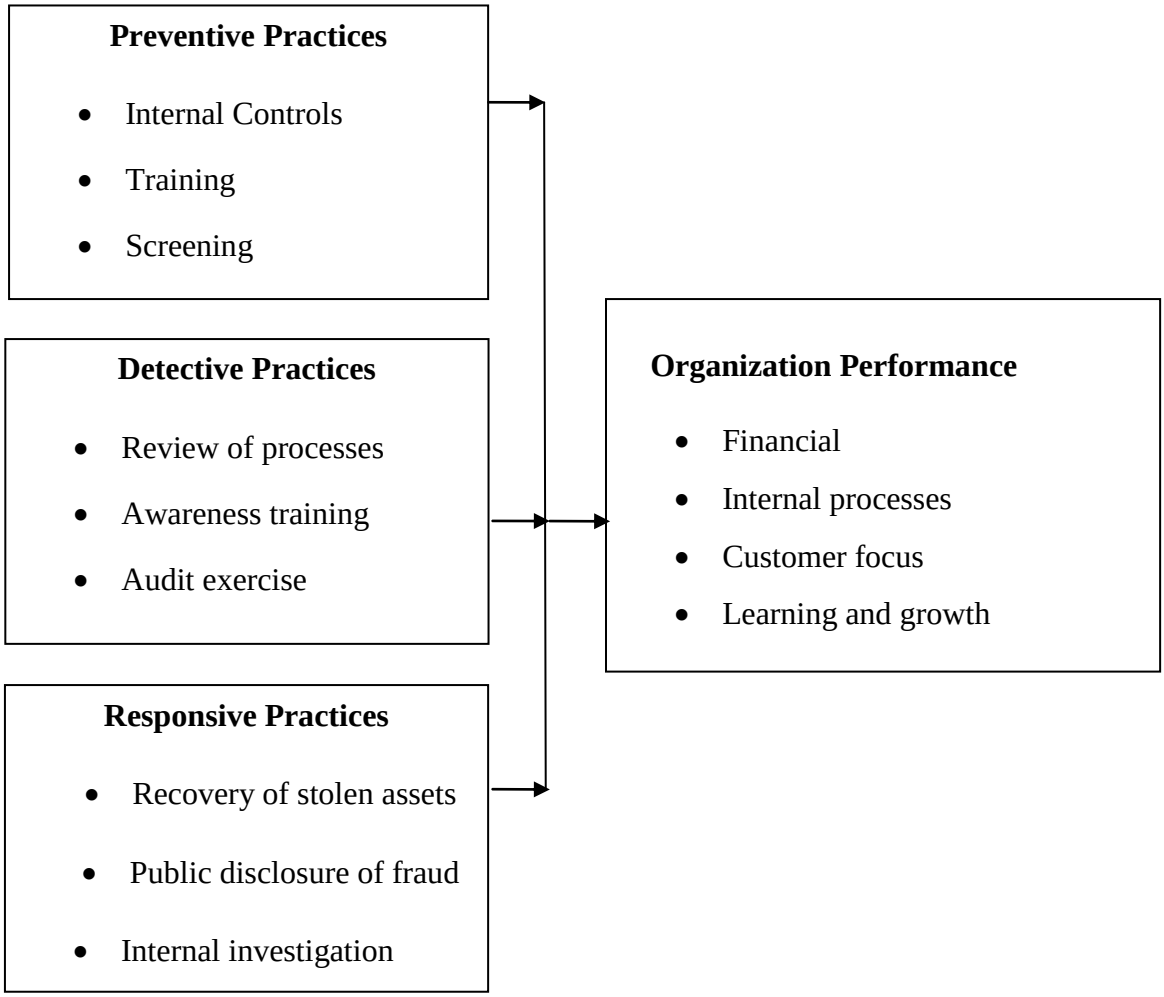


Figure 2.1: Conceptual framework

CHAPTER THREE : RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the methodology adopted in the entire research work. The chapter further elaborated on study design, the population of study and data collection processes that was applied and data analysis and presentation procedures.

3.2 Research Design

This study used a descriptive cross sectional survey design. According to McBurney and White (2009), descriptive study design describes the state of affairs as they appear on the ground. The design identifies every phenomenon in relation to what, when, who and how it appeared in the study (Sekaran & Bougie, 2009). Descriptive research design also enhances validity, reliability and generalizability of the research findings and involves quantitative and qualitative collection and analysis of data.

The design was considered appropriate since the main concern was to explore the viable relationship and describe how the fraud risk management practices influences organizational performance of insurance companies. Descriptive study design is a scientific approach which comprises observing and defining the nature of a topic without affecting it in any way. This design further gave an understanding into study obstacle by defining the desired variables.

3.3 Population of study

According to Mugenda and Mugenda (2003) “population is an entire group of people, individuals, events or objects that have a common observable characteristic”. The target group or

population for this research were 35 motor vehicle insurance underwriters in Kenya (Appendix 2).

3.4 Data Collection

The study gathered qualitative and quantitative data from both primary and secondary sources. The study used primary data from the claims and underwriting managers in 35 motor vehicle insurance underwriters in Kenya. These target respondents were deemed to be versed with insurance fraud management practices adopted in their organizations and also the effect it has had on the firm performance. The data instrument for data collection that was utilized in this research was a questionnaire as a result of the favorable circumstances it has for the research including, saving time, enhancement of privacy and for being the best primary data source. The researcher set up a questionnaire with both closed ended and open questions. The purpose of the closed ended questions was to offer consistency in responding to the inquiries while open ended questions were to offer objectivity to respondents by enabling them to give their own and unprejudiced perspectives.

3.5 Data Analysis

Analysis of data adopted descriptive statistics approaches for instance percentages, means, and frequency distributions tables were used to describe and provide an insight meaning of the responses mainly because it was considered a better measure of presenting the outcomes of the study. Finally, the study applied inferential statistics in the form of multiple regression.

The regression equation was:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where Y presents performance β_0 is a constant term,

X1 - Preventive practice,

X2 - Detective practice,

X3 - Responsive practice

CHAPTER FOUR : DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The main objective of this study was to examine the effect of insurance fraud risk management practices on the performance of motor vehicle underwriting companies in Kenya. The study findings are presented in standard deviations, mean and frequency distributions.

4.2 Response Rate

In the present study, the researcher distributed 35 questionnaires. Out of the questionnaires distributed, 29 questionnaires were duly filled and collected back which represented 82.9% of the population. This response rate is regarded suitable to draw inferences and make conclusions on the study topic. According Mugenda and Mugenda (2008), a 50% of rate response is sufficient, 60% is regarded as good and whereas 70% is rated very well. Bailey (2000) agrees that a response rate of 50% is deemed sufficient, whilst greater than 70% response rate is very good. With regard to the recommendations above, the response rate of 82.9% is very good.

4.3 Background information

The bio data information considered in this study included the position of respondent in the company and the length the company has been in operation. This is because the capacity of the respondent to appropriately answer to the questions depends on the working experience. The findings on the background information of the company are presented below.

Table 4.1: Background Information

Length of operation	Frequency	Percent	Cumulative Percent
Less than 10 years	3	10.3	10.3
10-20 years	6	20.7	31.0
20-30 years	18	62.1	93.1
over 30 years	2	6.9	100.0
Total	**29**	**100.00**	**100.00**

From the study findings in Table 4.1 based on the length of operation, 62.1% of insurance companies have been in operation for a period between 20-30 years. The study findings imply that most probably, due to long period of service, the insurance companies would have incurred one form of fraud during their operations.

4.4 Extent of the Motor Vehicle Fraud

The researcher also sought to establish the prevalence of the motor vehicle fraud among the insurance firms. The findings are highlighted below:-

Table 4.2: Extent of the Insurance Fraud

Motor vehicle fraud	Frequency	Percent	Cumulative Percent
Highly prevalent	14	48.3	48.3
Moderately prevalent	7	24.1	72.4
Occasionally prevalent	8	27.6	100
Total	**29**	**100.0**	

The results above shows that majority (48.3%) of the motor vehicle insurance firms had been adversely affected by motor vehicle fraud, majority of the respondents indicated that motor vehicle insurance fraud has been highly prevalent while 27.6% of the respondents indicating that motor vehicle fraud has been occasionally prevalent. Additionally, 24.1% of the respondents indicated that the fraud case has been moderately prevalent in the insurance firms. The study findings attest that among the motor vehicle underwriting companies in Kenya, there is no single company that has not registered motor vehicle fraud case.

4.5 Causes of Motor Vehicle Fraud

Under this section, the researcher wanted to determine the causes of the motor vehicle insurance fraud. The results are presented below:-

Table 4.3: Causes of Motor Vehicle Fraud

Statement	Mean	Sd. deviation
Poor internal controls	4.145	.968
Greed	3.991	.726
Inadequate training and re-training programs	3.852	.879
Inadequate staff to handle the motor vehicle segment	3.752	.814
Poor record keeping	3.624	.967
Disgruntle staff	3.234	.842
Poor salaries	2.942	1.112

From the study findings, it is found that motor vehicle fraud is as a result of poor internal controls (Mean=4.145, SD=.968) while some respondents indicating that greed is also another factor that leads to insurance fraud (mean=3.991, SD=.726). The results also indicate that

inadequate training and re-training programs on fraud risk management has led to emergence of motor vehicle insurance fraud (M=3.852, SD=.879) and that inadequate staff to handle the motor vehicle segment will expose the company to fraud related issues (mean = 3.752, SD =.814) This implies that in various motor vehicle underwriting companies in the county, there has been various causes of motor vehicle fraud ranging from internal to external factors. The low standard deviation in the responses indicates that there was concurrence among the respondents on the questions with regard to the top management diversity in response to organizational competitiveness.

4.7 Fraud Management Practices

In this section, the researcher sought to determine the effectiveness of the fraud management practices employed by the insurance firms. Three main insurance management practices investigated include preventive, responsive and detective practices. As a start, the researcher investigated the effectiveness of the various fraud management practices as employed by the insurance firms. The findings are presented below:-

Table 4.4: Effectiveness of Fraud risk Management Practices

Practice	Mean	Std. deviation
Preventive measure	4.321	.981
Responsive measure	3.942	.625
Detective practice	3.481	1.021
Overall mean	**3.915**	

Table 4.4 above indicate that the fraud risk management practices have been effective with preventive measure (Mean=4.321 SD=.981) being the most effective. Additionally, responsive measure (mean=3.942 SD=625) and detective measure (mean=3.481 SD=1.021) were also proposed to be effective though at a smaller extent than preventive measure.

Fraud management practices are defined as controls instituted by a firm for purposes of deterring, detecting and investigating fraud on transactions handling condition without risking the advantages of mechanization regarding effectiveness, and client benefit (Biegelman & Bartow, 2012). As a result, the study adopted three measurements of fraud risk management practice. The themes covered in this section include, Preventive, detective and responsive fraud risk management practices.

4.7.1 Preventive Fraud Management Practices

Preventive fraud management practices are tailored in preventing or limiting incidences of fraud from happening. The findings on the various practices are presented in Table 4.6.

Table 4.5: Preventive Fraud Management Practice

Statement	Mean	Std. deviation
Establishment of fraud department	3.997	.789
Establishment of strong internal controls	3.854	.689
Adoption of information technology	3.812	.912
Targeted training on fraud prevention and management	3.713	.954
Employment screening	3.512	.813

Reward to whistle blowers	3.484	.687
Establishment of effective code of conduct and related standards	3.217	1.029
Employment of support programs	2.985	1.041
Employment of screening techniques of potential policy holders	2.721	.994
Overall mean	**3.477**	

The study findings indicates that in preventive measure, insurance firms have established a fraud department to strengthen monitoring and evaluation process (Mean =3.997, SD =.789) and strong internal controls (Mean=3.854, SD=.689). In addition, the study show that the adoption of information technology (Mean=3.812, SD=.912) has helped prevent motor vehicle insurance fraud and targeted training on fraud prevention and management (mean= 3.713, SD= .954). in addition, establishment of effective code of conduct and related standards (Mean=3.217, SD=1.029) was cited as another factor that prevents fraud though the higher standard deviation that is greater than one indicates a variation on responses. This therefore can be concluded to imply that motor vehicle underwriting companies have adopted various approaches in preventing motor vehicle insurance fraud from happening.

4.7.2 Detective Fraud Management Practices

Detective fraud management practices are aimed at identifying the occurrence of fraud in the cause of insurance firms operation. The results on the various detective fraud practices are presented in Table 4.6.

Table 4.6: Detective Practice

Statement	Mean	Std. deviation
Establishment of monitoring system to detect fraud	3.987	.964
Fraud risk awareness training	3.854	.789
Monitoring system aimed at detecting fraud	3.691	.998
Management Review of processes	3.612	1.026
Proactive data analysis	3.517	.678
External audits	3.346	.992
External reward for tip-off	3.204	1.112
Internal audit	2.991	.976
Internal –reward for tip off	2.860	1.152
Overall mean	**3.451**	

The study findings demonstrate that in achieving detective fraud management practices, monitoring system to detect fraud was established (Mean=3.987, SD=.964) as well as fraud risk awareness training has been establish to educate employees on the possible ways of detecting fraud (M= 3.854, SD=0.789). However, it was also evident that monitoring system aimed at detecting fraud (mean=3.691, SD= .998) was established and implemented. This implies that management review of processes (Mean= 3.612, SD=1.026) and proactive data analysis (mean=3.517, SD=.678) helped in detecting insurance fraud among the motor vehicle underwriting companies.

4.7.3 Responsive Fraud Management Practices

The other fraud management strategy considered in the study was responsive fraud management practice. This practice is concerned with the handling procedures of a fraud after being detected. The findings are presented below:-

Table 4.7: Responsive Practice

Statement	Mean	Std. deviation
Disclosing internal investigation results	4.321	.754
Conducting internal investigation	3.984	.945
Prosecution of both internal and external offenders	3.712	.867
Disclosing the results of internal investigation to all interested parties	3.699	.994
Communicating to the employees of the action taken by the management	3.514	1.114
Strengthening internal controls	3.489	.911
Recovery of stolen assets	3.248	1.101
Public disclosure of fraud and misconduct	3.114	.954
Remedying the harm caused	2.945	1.121
Overall mean	**3.558**	

The study findings above demonstrate that disclosing internal investigation results (Mean=4.321, SD=.754) has helped insurance companies to reduce insurance fraud and also shows a way of acting responsibly with the said insurance companies conducting internal investigation (Mean=3.984, SD=.945) and disclosing the results of internal investigation to all interested parties. Similarly, communicating to the employees of the action taken by the management is meant to show how the insurance firm reacts to a fraud occurrence. though the higher standard

deviation shows that the respondents' answers were varied, being other factor that shows how responsible insurance companies are in preventing fraud.

4.8 Effect of insurance Fraud on Organizations' performance

Insurance fraud is a challenge nearly facing all insurance companies whether developed or developing countries. Accordingly, the present study was undertaken to determine the various practices employed by insurance companies to manage the level of fraud that would otherwise undermine organizational performance. In this section, the impact of insurance fraud on organization's performance has been discussed primarily from the study findings.

Table 4.8: Effect of insurance fraud on performance

Statement	Mean	Std. deviation
Fraud management practices has had positive effect on firm financial performance	4.248	.678
Fraud management practices positively affects the firm internal processes	3.968	.985
Fraud management practices has had a positive effect on the firm learning and growth capacity	3.542	.928
Fraud management practices influences firm customers relationship with the firm	3.259	1.124
Overall mean	**3.754**	

From the study findings presented in Table 4.9, the researcher found that fraud management practices have had positive effect on firm financial performance (Mean=4.248, SD=.678) and

that fraud management practices positively affects the firm internal processes (Mean=3.968, SD=.985). As one of the effect of fraud management on organizations performance, the study established that fraud management has had a positive effect on the firm learning and growth capacity (mean=3.542, SD=.928) and that fraud management practices influences firm customer's relationship with the firm (mean=3.259, SD=1.124). The low standard deviation imply that respondent's opinions were in agreement while the high standard deviation imply that there was disparity in respondent's opinions.

4.9. Regression analysis

The relationship between organization's performance and insurance fraud risk management practices was established by use of linear regression analysis. The researcher utilized statistical package for social sciences (SPSS V 20.0) to input and run the study measurements. Coefficient of determination evaluates the degree at which variations in independent variables explain deviations in the outcome variable (organizational performance) that is described by independent variables.

To determine the relationship, the overall mean of each of the fraud risk management practices under section 4.7 was regressed with the resultant mean from the performance measure in section 4.8. From their overall means of each factor, a regression was generated. 4.9.1 Model summary

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846[a]	.716	.682	.257

a. Predictors: (Constant), predictive fraud management practice, detective fraud management practice, responsive fraud management practice

Table 4.9 above presents the model summary of regressed study variables. The correlation coefficient (R) value signifies the degree and strength of relationship between dependent variable and independent variable. In this model therefore the coefficient of correlation is 0.846 which indicates a positive correlation between insurance fraud risk management practices and organization performance. The R Squared is the coefficient of determination which designates the degree of the total variation in the dependent variable. From the above the R squared statistic gives the goodness of fit of the model which shows how good the regression model predicts the real data points. The R squared of this model is 0.716 implies that the model is a good fit of the actual data. The coefficient of determination of 0.846 implies that 84.6% of the variance in outcome variable (firm performance in this case) is defined by fluctuations in independent variables.

4.9.2 ANOVA

Table 4.10: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.147	3	1.382	20.987	.000[b]
	Residual	1.646	25	.066		
	Total	**5.793**	**28**			

a. Dependent Variable: organization performance

b. Predictors: (Constant), predictive fraud management practice, detective fraud management practice, responsive fraud management practice

The summary on analysis of variance model also indicates that the dependent variable is significantly predicted by the regression model. The statistical importance of the model of regression analysis that was computed is shown by the F test. The P value=0.000, which is less than 0.05 imply that, generally the regression model significantly and statistically predicts the dependent variable that is good fit for the data.

4.10.3 Regression coefficients

Table 4.11: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.048	.233		8.786	.000
	Preventive fraud management practice	.414	.159	.613	2.605	.015
	Detective fraud management practice	.066	.119	.063	.554	.585
	Responsive fraud management practice	.102	.107	.227	.956	.348

a. Dependent Variable: Organization performance

The overall equation model for independent and dependent variables will take the following format.

Organization performance = 2.048 + 0.414 β_1+ 0.066 β_2 +0.102 β_3.From the model, it implies that at any given point, organization performance will be 2.048 units when all the values of independent variables are zero. The model demonstrates that when preventive fraud management practice is changed by one-unit organization performance will increase by .414 units. In addition, when detective fraud management practice changes by one unit, organization performance will

increase by 0.066 units. Similarly, when responsive fraud management practice changes by one-unit organization performance will increase by 0.102 units. Therefore, it can be concluded that all the independent variables considered in the present study had a positive impact on organization performance.

4.10 Discussions

The study established that fraud risk management practices have a positive effect on firm's financial performance, internal processes, firm's learning & growth and it influences customer's relationship with the firm. The three practices employed by the firm have been effective with preventive measure being the most effective according to the regression results. This concurred with a study by Githecha (2013) who found out that there is a statistically positive impact of fraud risk management practices on the performance of banks in Kenya.

Insurance firms should implement approaches that will minimise motive, restrict opportunity and limit the ability of prospective fraudsters to rationalize their activities. Prevention practices like introduction of policies, procedures and controls and activities i.e. training and fraud awareness will stop fraud from occurring. The fraud prevention measures will thus ensure the steadiness and continuous survival of the firm.

The study further revealed that fraud prevention techniques may not stop all potential perpetrators, Insurance motor firms should ensure that systems are in place to highlight the occurrence of fraud in a timely manner. The firm should employ fraud detection systems like exception reporting, date mining, trend analysis and ongoing risk assessment. This will highlight ongoing frauds that are taking place or offence that have already happened. This is in agreement

by the study of Rawte and Anuradha (2015) who suggested that a hybrid approach consisting of clustering and classification techniques was found to be a more appropriate system to detect and avoid fraud. Global risk (2008) indicate that while each risk captured may be important to management at the function and business level. This conger with that of (Beasley et al., 2008) who argued that clear definition of roles and responsibilities are a powerful catalyst for firms change.

The study further revealed that a poor internal control was the major cause of motor insurance fraud. The poor controls enable the greed staffs and customers to collude and process the fraudulent claims without thorough checks. This is in agreement by the study of Gisairo (2016) who suggested the need for ethical consideration among staff and insured to curb the fraud challenge.

CHAPTER FIVE: SUMMARY , CONCLUSION AND LIMITATION

5.1 Introduction

This chapter presents the summary of findings, conclusion, limitations and recommendations corresponding to the study topic which was to establish the effect of insurance fraud risk management practice on performance of motor vehicle underwriting companies in Kenya.

5.2 Summary of the Findings

The findings reveal that 62.1% of the insurance companies have been operating for between 20-30 years. The study further discovered that motor vehicle insurance fraud has adversely affected insurance companies with 48.3% of the respondents indicating that the effect has been highly prevalent. Furthermore, the study investigated the possible causes of motor vehicle insurance fraud among the motor vehicle underwriting companies. Consequently, the study highlights some of these factors which includes; poor internal controls, inadequate training and re-training programs of fraud management, greed among the top management and some employees, inadequate staff to handle the motor vehicle department and poor record keeping. The present study in conjunction to organizational performance, in this case premium collection, found that majority of insurance companies collected a lump sum of between six and ten billion on the previous financial year. Under the preventive fraud management practice, it is evident that insurance firms have done well in preventing motor vehicle fraudulent activities from taking place. As a result, the study found that insurance firms have established strong internal controls that are aimed to prevent such act. In addition, fraud department and effective code of conduct and related standards have been established. Detective fraud management practices that the said

companies have employed include; establishment of management review process, establishment of monitoring system to detect fraud, proactive data analysis and establishment of external audits. Responsive fraud management practice is efficiently and statistically important in lowering the levels and frequency of fraud activities. As a result, the study found that insurance companies has done well in conducting and disclosing internal investigation results to all interested parties. The summary of responsive dimensions adopted by insurance firms include; public disclosure of fraud and misconduct, recovery of stolen assets and prosecution of both internal and external offenders. However, fraud management practices was found to have a positive impact on organizational performance.

The relationship between organization's performance and insurance fraud risk management practices was explained by use of linear regression analysis. The coefficient of determination confirmed that 84.6% variation in firm performance is defined by fluctuations in the fraud risk management practices and the degree of total variation in performance was explained at 71.16 percent.The P value of 0.00 confirmed that the regression model significantly and statistically predict the dependent variable and this a good fit for the data. Preventive measure was practiced by majority of the firms and this was confirmed by the t of 2.605 and beta of 0.613.

5.3 Conclusion

The following conclusions can be determined based on the findings of the study. Fraud management practices have positive and significant impact on organizational performance. The study findings reveal that insurance firms with effective motor vehicle fraud management system have the capacity of registering greater organizational performance. This implies that the motor vehicle fraud management is significant for the successful competitiveness strategies in

insurance sector in Kenya. Insurance firms ought to dependably guarantee that they have an effective motor vehicle insurance fraud control system which has diverse proficiency and instructive foundation with a plan to attract the best in the market. Preventive measures, detective practices and responsive activities all have a significant contribution towards the achievement of organizational goals as far as fraud management is concerned.

5.4 Recommendation for Policy and Practice

The study recommends that motor vehicle underwriting companies should carefully deliberate the extent to which they adopt the various fraud risk management practices since it has been proven from the study that they affects firms performance differently. Insurance fraud risk management practices should therefore be made a core business practice by the motor vehicle underwriting companies and they should planned accordingly and systematically in the context of preventive practice.

The top management should fully support insurance fraud risk detective polices by allocating resources to the process to ensure that there is regular review. The study recommends the reinforcement of the controls that will enhance fraud risk detection.

The industry needs to lobby for creation of a police unit to handle insurance fraud. They should also lobby for creation of special courts to listen to and determine insurance fraud-related charges. This will encourage insurance companies to press charges against fraudsters. Insurance regulatory authority in collaboration with insurance companies should carry out a thorough public campaign against fraud, this will promote public understanding on the demerits of fraud and how it can be avoided

5.5 Limitation of the Study

The respondents were Claims Managers of motor vehicle underwriting companies in Kenya. Majority of the respondents were senior managers and having them to fill the questionnaire was a challenge as most of the time they were busy.

Majority of motor vehicle underwriting companies except Jubilee insurance have centralized their claim processes and the claims are processed at their head offices located in Nairobi. These companies also have branches country wide where fraud prevalence might be high.

The study concentrated on only motor insurance companies in Kenya and the cross sectional design used cannot analyze behaviors over a period of time and also it does not help determine the cause and effect. The study established that the motor insurance firms concentrated only on the preventive and detective measures and little attention is given on the responsive measures.

5.6 Suggestions for Further Research

The study has investigated the effect of insurance fraud risk management practices on the performance of motor vehicle underwriting firms in Kenya. The researcher suggest that it would be worth a study if findings from this study are applicable to other industries for example manufacturing or banking in Kenya to identify how risk management practices affect them.

Given that the R-squared calculated was 72% on the four variables, the study suggest for further research on the remaining 28% of factor that affect insurance fraud risk management practices on the performance of motor vehicle underwriting companies in Kenya.

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APPENDIX 1

LETTER OF INTRODUCTION

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P.O Box 19134-40123
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Date: 18th October, 2018

TO WHOM IT MAY CONCERN

The bearer of this NYANGA EVANS WERE
REGISTRATION NO: D61/79076/2015

The above named student is in the MBA program. As part of requirements for the course, he is expected to carry out a study on **"Insurance fraud risk management practices and performance of motor vehicle underwriting companies in Kenya"-**

He has identified your organization for that purpose. This is to kindly request your assistance to enable he complete the study. The exercise is strictly for academic purposes and your assistance will be greatly appreciated.

Thanking you in advance.

CO-ORDINATOR
19 OCT 2018

Sincerely,

DR NIXON OMORO
ASSISTANT CO ORDINAOTR, SOB, KISUMU CAMPUS

Cc File Copy

APPENDIX 2

QUESTIONNAIRES

Section A: General Information and Bio Data

1. Name of the Insurance Firm (Optional).....

2. How adversely has the Insurance firm been affected by Motor Vehicle fraud? Fraud is…

a) Highly prevalent [ ] b) Moderately Prevalent [ ]

c) Occasionally prevalent [ ] d) Has never occurred [ ]

3. The following are some of the common causes of motor vehicle fraud. Please indicate the prevalence of each of them

5 = to a very large extent, 4 = Large extent, 3 = Moderate extent, 2 = Small extent, 1 = Very small extent

Causes of motor vehicle Fraud	5	4	3	2	1
Poor internal controls					
Inadequate staff to handle the motor vehicle segment					
In adequate training and re-training programs					
Greed					
Poor salaries					
Disgruntle staff					
Greed by staff					
Poor record keeping					

Any other factors ……..

4. In your opinion, generally, what is the Insurance firm strategic approach to fraud detection?

Proactive [ ] Reactive [ ] Passive [ ]

Section B: Insurance Fraud Management Practices

5. Comment on the effectiveness of the components of fraud risk management practices in improving premium collection.

i) Not Effective ii) uncertain iii) Effective iv) Very Effective V) Extremely Effective

	(i)	(ii)	(iii)	(iv)	(v)
Preventive practice					
Detective practice					
Responsive practice					

Insurance Fraud Risk Management Practices and its effect in the Motor Vehicle Insurance Industry in Kenya.

6. Please show the extent to which the below insurance fraud management practices are practiced in your organization. Using the following rating;

Where, 5 = Greatly; 4 = Considerately; 3 = Moderately; 2 = Remotely; 1= Not at all

Preventive Fraud Management Practices	**5**	**4**	**3**	**2**	**1**
Establishment of strong internal controls					
Establishment of effective code of conduct and related standards					
Targeted training on fraud prevention and management					
Employment of screening techniques of potential policy holders					
Employment screening					
Reward to whistle blowers					

Establishment of fraud department					
Employment of support programs					
Adoption of information technology					
Detective Fraud Management Practices					
Management Review of processes					
Proactive data analysis					
Establishment of monitoring system to detect fraud					
Monitoring system aimed at detecting fraud					
Fraud risk awareness training					
Internal –reward for tip off					
External reward for tip-off					
Internal audit					
External audits					
Responsive Fraud Management Practices					
Disclosing internal investigation results					
Conducting internal investigation					
Prosecution of both internal and external offenders					
Disclosing the results of internal investigation to all interested parties					
Communicating to the employees of the action taken by the management					
Public disclosure of fraud and misconduct					
Recovery of stolen assets					
Remedying the harm caused					
Strengthening internal controls					

What other insurance fraud management practices does your firm apply.....?

.....

.....

SECTION C: Organization Performance

Indicate the extent of influence to which the Insurance fraud management practices has had on your organizations performance?

Where, 1= Not at all; 2 = Remotely; 3 = moderately; 4 = Considerately; 5 = Greatly

Statement	5	4	3	2	1
Fraud management practices positively affects the firm internal processes					
Fraud management practices influences firm customers relationship with the firm					
Fraud management practices has had positive effect on firm financial performance					
Fraud management has had a positive effect on the firm learning and growth capacity					

THANK YOU FOR YOUR TIME

APPENDIX 3

MOTOR VEHICLE UNDERWRITING INSURANCE COMPANIES IN KENYA

1	African Merchant Assurance
2	AIG Kenya Insurance Ltd
3	Allianz Insurance Company
4	APA Insurance Limited
5	Britam General Insurance
6	Cannon Assurance
7	CIC General Insurance Company
8	Corporate Insurance
9	Directline Assurance
10	Fidelity Shield Insurance
11	First Assurance Co Ltd
12	GA Insurance Limited
13	Geminia Insurance
14	Heritage Insurance
15	ICEA Lion General Insurance
16	Intra-Africa Assurance
17	Invesco Assurance Company
18	Jubilee Insurance Company
19	Kenindia Assurance Co Ltd

20	Kenya Orient Insurance
21	Madison Insurance
22	Mayfair Insurance
23	Occidental Insurance Company
24	Pacis Insurance
25	Pioneer Insurance Company
26	Resolution Insurance Company
27	Saham Insurance Company
28	Sanlam Insurane Company
29	Takaful Insurance Of Africa
30	Tausi Assurance
31	The Kenyan Alliance Insurance
32	The Monarch Insurance
33	Trident Insurance Company
34	UAP Insurance Company
35	Xplico Insurance Company

(Source: AKI (2017) Report)