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**EVALUATION OF THE CONTRIBUTION OF ORGANISATIONAL
FACTORS ON FRAUD RISK AT FMCG SMEs IN NAIROBI
COUNTY**



**A Research Project Submitted to Strathmore Business School in Partial
Fulfilment for the Degree of Master of Commerce at Strathmore
University**

June 2020

DECLARATION

I, the undersigned, declare that this management research project is my original work and that it has not been submitted for any course qualification in this or any other university or institution for academic credit.

Signature Date

Paul Otonglo

Student number 014431

This research project has been submitted for examination with the approval of the following;

Signature Date

Dr David Mathuva

Supervisor

Strathmore University



DEDICATION

I dedicate this thesis to all those who offered support in my academic studies: family, teachers and friends.



ACKNOWLEDGEMENTS

I would like to acknowledge the inspiration and support received from my Supervisor, Lecturers and fellow Students who challenged me to complete this Master's degree, my Supervisor for putting up with my "raw drafts" and "occasional disappearance due to other commitments" and all those who assisted in putting together this document.

My utmost and sincere gratitude for helping me through this demanding aspect of knowledge gathering.



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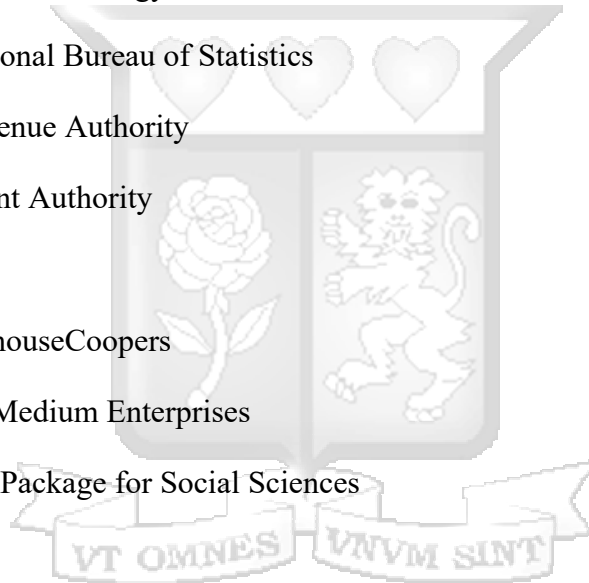
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ABBREVIATIONS AND ACRONYMS

ACFE	Association of Certified Fraud Examiners
CCTV	Closed Circuit Television
FDT	Fraud Diamond Theory
FMCG	Fast Moving Consumer Goods
FTT	Fraud Triangle Theory
GDP	Gross Domestic Product
IT	Information Technology
KNBS	Kenya National Bureau of Statistics
KRA	Kenya Revenue Authority
MA	Management Authority
Mn	Million
PwC	PricewaterhouseCoopers
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences



ABSTRACT

Kenya, like many other developing economies, relies on the ingenuity and perseverance of entrepreneurs to identify and exploit economic opportunities. These entrepreneurs set up and operate business ventures in the form of Small and Medium Enterprises (SMEs) and some of these end up being successful, providing a direct and indirect source of income to many households. Many local economies are driven by the abundance of SMEs in all sectors, and more so in retail trade. Separately, and according to several independent studies, Kenya is mentioned as one of the countries in the region and globally that is greatly affected by fraud. The complexity of fraud has a negative effect on business performance and fraud acts as a hidden cost of doing business and saps entrepreneurs' energy thus limiting overall economic potential. This study sought to evaluate the contribution of organisational factors on fraud risk at SMEs in Nairobi County, specifically those trading in Fast Moving Consumer Goods (FMCG). The specific objectives included; To examine the extent of fraud risk in SMEs; To examine selected organisational factors that affect fraud risk at FMCG-trading SMEs in Nairobi County and To identify counter-fraud measures put in place by FMCG-trading SMEs in Nairobi County. This study adopted a descriptive research design and the target population of the study was FMCG-trading SMEs in Nairobi County from whom respondents were selected using purposive stratified random sampling. This study used primary data collected using structured questionnaires. Descriptive statistics and inferential statistics like correlation coefficients, coefficients of determination and p values. The study found a significant relationship between the variables measured and the extent of fraud risk. The variables were (in order of significance) having a risk management framework, appropriate technology adoption and having a suitable management structure. Capacity building was also found to be a good multiplier in reducing fraud risk. The study found that the key fraud risks faced by SMEs were loss of cash, misuse of assets, bribery and corruption. The mitigation measures considered to be most effective were limiting access to key transaction documents, minimising usage of cash in operations and training of employees. The study recommends that SMEs should focus on having the extent of control over operations, invest more in technology such as mobile money systems, and focus on fostering communication on fraud risk throughout the organisation.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Corporate governance is the system of rules, practices and processes by which a company is directed and controlled and it focuses on balancing the interests of a business's stakeholders. One of the key aspects of corporate governance is preserving the value generated by a business and ensuring that the business remains sustainable. Fraud is a key issue that has an impact on the value of and sustainability of a business and it has been defined as a planned action specifically intended to deceive others, with a resultant loss to the victim and the perpetrator realising a gain of some sort (AICPA, 2008, Consideration of Fraud in a Financial Statement Audit). In recent times, fraud has been growing and it affects all types of businesses across the world. A 2007 Global Economic Crime Survey conducted by PricewaterhouseCoopers (PwC) found that more than 43% of the respondents had suffered at least one economic crime during the preceding two years. The respondents constituted 5,428 businesses based in 40 countries (PwC, 2007, Global Economic Crime Survey). Similar findings were reported in the same survey conducted in 2018, with findings that 49% of respondents had been affected by fraud or economic crime, compared to 36% in 2016 (PwC, 2018, Global Economic Crime Survey).

1.1.1 Fraud and Fraud Risk

Fraud risk management entails doing an assessment of illegal acts or wrongdoing, that may be committed in a given business environment. Such acts include theft (assets/cash/information), financial misstatement, ethical lapses, policy violations and issues relating to perception of conduct. For businesses to be proactive when it comes to fraud risk management, there has to be an understanding of ethical risks (fraud and misconduct) which are a threat to the activities and objectives of a given businesses. The important steps are to determine whether the existing controls and programs are effective and focusing on improvements to prevent, detect and respond appropriately to these risks (Turner, 2007).

Fraud's impact is wide and felt by all stakeholders, and it ultimately affects business performance – in the long run even leading to insolvency or business failure. Raju and Murthi (2015) define fraud as an intentional act geared towards obtaining an unjustified benefit. Misconduct refers to violation of processes, whether national law and regulations, organisational policies or ethical conduct. Potential fraudulent activities in a SME include unjustified taking over of assets, fraudulent financial reporting and the acquisition of illegal revenue or assets. According to Herbling (2014), many SMEs in Kenya seek formal loans for capital to finance their growth; thus expansion is significantly impacted by fluctuating interest rates. The cost of formal credit is considered to be high and many small businesses face cash-flow challenges. Many SMEs in Kenya turn to lenders – both formal and informal – for credit lines and overdrafts. In this regard, when fraud significantly impacts upon cash-flows, a business may collapse. Fraud further affects reputation and image, and most affected SMEs do not recover and these cease trading (Spedding & Rose, 2010). Fraud is often an unmitigated risk, with apathy constituting part of the problem – often, organisations do not do enough to prevent, detect and respond to ethical issues or establish an appropriate tone-at-the-top by encouraging an honest culture and ethical behaviour (European Federation of Accountants - FEE, 2005, How SMEs can reduce the risk of fraud).

One definition of fraud categorises it as an intentionally misleading statement/act by one party in order to unfairly benefit from another party that relies on the misleading statement/act. This is agreed by Ruin (2009), Wells (2007) and the Chartered Institute of Management Accountants, CIMA (CIMA, 2009, Fraud Risk Management: A guide to good practice). A more corporate definition of fraud comes from the Statement on Auditing Standards No. 99 of 2002 (SAS 99) that defines it as an intentional act to cause a material misstatement in financial reports. It achieves this through falsification of financial records and irregular takeover of organisational assets (tangible and intangible), among others (Ruin, 2009). Therefore effective mechanisms have to be put in place to prevent, detect and respond to incidents of corruption, misconduct and fraud.

There are two causes of risky events in a business: external factors (such as economic, social, environmental, political or technological) and internal factors (including infrastructure, human resource and the kind of technology used in an enterprise). Considering the many uncertainties that are involved in doing business, fraud risk management plays a colossal role in reducing uncertainty, thus ensuring production continuity, market trading, failure reduction and finally the promotion of the internal and external image of a company (Bradstreet, 2009).

There has been an increase in reported fraud in East Africa, according to a 2013 study by a global auditing firm (Deloitte, 2013, Financial Crimes Survey). This increase has been brought about by financial institutions' failure to put in place high-tech controls that match the kind of innovative products on the market (Ohando, 2015). Such failures have resulted in Kenyan financial institutions losing more than USD 10 million annually (Deloitte, 2013, Financial Crimes Survey). It is therefore imperative for organisations to try to minimize the chance of fraud occurring, which can be done by employing fraud risk management practices. Based on financial constraints, SMEs may not be able to afford the cost of hiring specialist technology consultants, auditors (external and internal) or to set up appropriate committees to assess the risk of fraud and respond to it. The purpose of this study is to establish the contribution of fraud mitigation techniques on fraud risks faced by FMCG-trading SMEs in Nairobi County. The research paper aims to provide guidance to SMEs on the merits of setting up effective and efficient fraud risk management techniques such as setting up internal control measures, continuous risk assessments and training.

1.1.2 Fraud Risk Management

Fraud risk management refers to the attempts (both systems and processes) used to identify an organization's exposure to fraud risk, and to implement controls, procedures and education to prevent, detect and respond to the key fraud risks (KPMG, 2009). The techniques can therefore be broadly categorized into preventive, detective and responsive fraud management practices.

Preventive fraud risk management practices are those techniques that are meant to reduce fraud and misconduct from occurring in the first place. Such practices include conducting a fraud risk assessment, establishment of strong internal controls, code of conduct and related standards, employee and third party due diligence, communication and training and introduction of policies

and procedures. Preventive controls aim to decrease motive, restrict opportunity for potential offenders to rationalise their action (Ohando, 2015).

Fraud prevention is the responsibility of every employee, vendor, supplier, contractor, service provider, consultant or any other agency(ies) doing business / having business relationship with the organisation to ensure that there is no fraudulent action being indulged in, in their own area of activity/responsibility. As soon as they learn of any fraud or have suspicion regarding it, they should immediately report the matter as per the procedure laid down in the memorandum of association. Responsive fraud management practices aim at taking corrective action and remedying the harm caused by the fraud. In each instance where fraud is detected, line management should reassess the adequacy of the current internal control environment (particularly those controls directly impacting on the fraud incident) to consider the need for improvements. The responsibility for ensuring that the internal control environment is reassessed and for ensuring that the recommendations arising out of this assessment are implemented lie with Line Management of the division concerned (Trevino & Victor, 2008).

1.1.3 Small and Medium Sized Enterprises

According to Turner (2007), Small and Medium Size Enterprises (SMEs) differ from large organisations specifically because of their size. This does not, however, make them less important with regard to the contribution that they make to the economy of a country. According to the European Commission, the major defining characteristics of SMEs include the number of employees, their annual turnover and also their balance sheet position (net assets). The European Commission data also mentions that at least one financial criterion has to be fulfilled, together alongside the number of employees, in order for a company to be define as a SME. Henschel (2008) specifically points out that the theoretical definitions of SMEs consider qualitative criteria such as independence, personal clarity as well as the financial and personal engagement of the owner/proprietor. Locally, the Kenya National Bureau of Statistics (KNBS) refers to SMEs as businesses that engage up to 99 employees (KNBS, 2016, Micro, Small and Medium Establishment Survey).

SMEs require an understanding of the fraud risks that they are exposed to, for them to be in a position to manage these risks. Fraud risk management starts with the identification of the risks, followed by their analysis and evaluation. It includes fraud risk assessment, which entails

evaluating the extent of risk and designing the best way to counter each risk; and how the process can be incorporated in the daily business of a firm (European Federation of Accountants - FEE, 2005, How SMEs can reduce the risk of fraud). The final step entails regular monitoring of fraud risk, and it tends to constitute a continuous cycle where the end of one activity creates the beginning of the next (Christoffersen, 2011). SMEs, in contrast to large organisations, lack the resources and know-how to respond quickly to internal and external threats that may cause financial collapse or huge losses that threaten the survival of the enterprises. SMEs are also more prone to face the limitation of lack of a qualified and highly-skilled workforce; and limited capital, thus having a greater exposure to fraud risk (Yusuf & Dansu, 2013).

The management of fraud risks should be considered a top priority for all businesses. Much has been written about fraud risk management in large enterprises, but there is little written material and advice available for owners and proprietors of SMEs. Many SMEs may not have the luxury of well-designed internal controls and internal auditors to check on the efficacy of the same, or experienced human resource departments to hire the right skills (Kagwathi, Kamau, Njau & Kamau, 2014). Business occurs under circumstances that are unpredictable, often guided by happenings both external (political/legal, economic/demographic, socio-cultural, technological and globalisation) and internal (management expertise, resources and individual characteristics) (Wanjiku, 2009). However, regardless of the importance of SMEs to many economies, reviewed literature mentions that SMEs continually face a number of challenges and risks which affect their growth and usually lead to the failure of a number of them (Gwangwava, Manuere, Kudakwashe, Tough, & Rangarirai, 2014). According to Longenecker et al. (2006), starting and operating a small business includes the possibility of success as well as failure; and because of the small size of SMEs, a simple management mistake can lead to sure death, therefore not much room to learn from past mistakes. Unavailability of credit has also been identified as one of the significant limitations within the SME sector that constrains their development (Okech, Mitullah & Atieno, 2000; Tomecko & Dondo, 1992; Kiiru, 1991).

Knowledge and acceptance of the above factors is helpful when it comes to fighting fraud. SMEs need to have policies, structures and procedures for the effective prevention and detection of fraud. Fraud is a major cause of social and economic damage which both the public and private sector should be in the forefront of fighting (Spedding & Rose, 2010). SMEs in Kenya constitute

a very important sector of the economy. They consist of self-employed individuals or entrepreneurs who start businesses, employing many skilled and unskilled Kenyans and those previously employed (retrenched or retired) (Kagwathi, Kamau, Njau, & Kamau, 2014). Small businesses in total employ many people and greatly contribute to the national income (Wanjiku, 2009). Some of the studies on the significance of SMEs include the works of Jiyaruth, Nabi, & Dornberger (2013); Berger & Udell (2005 and Kenya's Sessional Paper No. 2 of 2005 on Development of Micro and Small Enterprises, and all agree on the importance of the SME sector in an economy.

According to the Kenya Revenue Authority's (KRA) Corporate Plan (KRA, 2015, Sixth Corporate Plan), SMEs in Kenya contribute to growth in GDP and upskilling of the labour force, which are considered to be key drivers of future industrial growth. SMES have also strengthened the bond between social, economic and geographic sectors of the economy thereby increasing participation of indigenous Kenyans in their economy. Further, they have created opportunities to cultivate and nurture entrepreneurial and managerial skill within the country. SMEs also participate actively in the mobilisation of natural resources and reduce supply-side pressure relating to labour (Ogechukwu, 2011). Azende (2012) has noted that SMEs may appear to be irrelevant based on their scale but are actually the foundation of any economically stable nation.

The role of SMEs in the promotion of national development in Kenya has been well-documented (Government of Kenya, 2005, Sessional Paper No. 2 of 2005 on Development of Micro and Small Enterprises for Wealth and Employment Creation for poverty reduction. Nairobi: Government printer). According to the 2006 Economic Survey, SME-based employment accounted for 74.2% of the total employment and this sector contributes up to 18.4% of the Kenya's GDP. The sector is, therefore a key segment of our economy that enhances competition and innovation while being a major provider of goods and services and enhancing the culture of entrepreneurship which is necessary for private sector development and industrialization (Wanjiku, 2009).

It is with this assumption that Kenya's Vision 2030 has recognised the role of SMEs in making Kenya a globally competitive nation by 2030. One of the flagship projects under Vision 2030 is the creation of a minimum of five SME industrial parks in the country (Kagwathi, Kamau, Njau & Kamau, 2014).

This study focused on Fast Moving Consumer Goods SMEs. These are business dealing with fast foods, groceries, beauty, beverages and alcohol among other services. According to a survey by the Kenya National Bureau of Statistics (KNBS), there are more than 1.5 million SMEs operating countrywide, with 65,736 FMCG based SMEs located in Nairobi. These SMEs face higher risk as the products they deal with are highly convertible and also in great demand (which makes these products to be categorised as “fast moving”) therefore, it was justified to focus on them compared to SMEs dealing in services (also a major category according to the abovementioned KNBS survey).

1.1.4 Extent of Fraud Risk at SMEs

When fraud risk exposure is properly managed and mitigated, such a safeguard will protect the business from experiencing other business risks relating to competitive advantage and market share (Henschel, 2008). According to a 2013 KPMG Malaysia survey (KPMG Malaysia, 2013, Fraud, Bribery and Corruption Survey), fraud risk management refers to the procedures employed to find and measure an organisation’s susceptibility to risk of fraud-related loss. The definition extends to putting in place controls, procedures and education to prevent, detect and respond to the main fraud-related issues. Fraud risk management practices are broadly categorized into approaches to prevent, detect and respond to fraud. Large organisations have significant manpower thus the division of roles and responsibilities may reduce fraud risk arising from staff collaboration. In SMEs, the lower number of employees means that the decision making or authority is limited to a few people, or even one person, hence the risk of fraud (based on limited segregation of duties) is higher than in large firms. The Association of Certified Fraud Examiners’ consistent survey findings report that SMEs remain among organisations most vulnerable to fraud risk. Fraud risk indicators exist directly within an organisation; and include absence of an ethical culture, formalised processes and an effective tone-at-the-top (CIMA, 2009, Fraud Risk Management: A guide to good practice).

Apart from a technical and commercial dimension, many business decisions have moral considerations. SME managers, owners and employees’ actions towards championing ethical and honest behaviour should be the driver of daily decision-making and these (honesty and leading by example) directly correlate with the likelihood of ethical conduct. A general climate of dissatisfaction among employees creates an atmosphere conducive for perpetration of fraudulent

activity, as disgruntled employees are more likely to perpetrate fraud. Absence of documented processes and operating systems creates a scenario where employees do not have explicit rules to follow (CIMA, 2009, *Fraud Risk Management: A guide to good practice*). Entrepreneurs should therefore strive to create a culture of clean business and appropriate behaviour for SMEs to be effective in the fight against fraud, and the damaging consequences of fraud need to be understood and managed. Furthermore, an anti-fraud culture should be developed across the business; and policies, controls and procedures should be introduced.

Four key aspects of fraud management that need to receive attention are: prevention, detection, investigation and lastly mitigation. (Spedding & Rose, 2010). Prevention in fraud risk management focuses on ensuring that an organisation does not fall victim to fraud in the first place. These include carrying out fraud risk assessments, establishment of a strong control environment, codes of conduct and related standards, background checks on employees and third parties, communication and training; and implementation of appropriate systems (Ohando, 2015). Fraud detection focuses on implementing systems and procedures that are able to detect fraud early enough during its perpetration. Fraud prevention practices may not deter all potential perpetrators, and organisations should therefore ensure that robust systems exist and that these will quickly flag out potential fraud (Spedding & Rose, 2010). A strong fraud detection strategy ideally involves the use of technology-based data analytics that exposes anomalies, and incorporates reporting mechanisms that allow quick responses to potential fraud (Ohando, 2015). Fraud investigation addresses the need to obtain proper information to identify fraud and the organisational controls that failed. Responsive fraud management focuses on taking corrective action and countering the harm caused by the unethical acts. For each fraud instance, management should occasionally assess the adequacy of existing internal controls to evaluate the need for improvement. Management is primarily responsible for ensuring that internal controls are verified and also for implementing recommendations arrived at following a fraud risk management process (Treviño & Victor, 1992).

1.2 Statement of the Problem

In times of a sustainability crisis arising due to fraud, organisations need to consider as well as monitor expenditure while at the same time considering potential costs. In the United States (world's largest economy), SMEs output constitutes 46% of GDP (Heneman et al, 2000), China

– more than 55% (Cunningham LX & Rowley, 2008), Philippines – 95% of registered businesses and Taiwan – 96.5% (Man & Wafa, 2008). Locally, the Kenya Bureau of Statistics reports that SMEs contributed to 33.8% of GDP output in 2015 (KNBS, 2016, Micro, Small and Medium Establishment Survey). Across both developed and developing countries, it has been commonly accepted by policy-makers that the importance of SMEs in absorbing labour, creating value and enhancing innovation cannot be overstated (Nieman, Hough and Nieuwenhuizen, 2003).

Although many challenges and difficulties face SMEs, this sector has high potential for increased labour uptake (Miller et al., 2003). The peculiarities of business - survival, accomplishment and development (or failure and poor performance) of SMEs have deliberated upon by researchers for many years and have thus become a focus point for regular analysis (Perks and Struwig, 2005). The value of entrepreneurship has soared due to the general acceptance of capitalism and globalisation (Rwigema and Venter, 2004; Lee, Lim, Pathak, Chang & Li, 2006). Further, statistics show that one good way to achieve a sustainable basis for rapid economic growth is to generate a great increase in the number of active entrepreneurs (Pretorius, van Vuuren and Nieman, 2005).

This study aimed to ensure that SMEs and those with an interest, specifically stakeholders such as entrepreneurs, owners and managers, financiers, creditors and suppliers will be able to predict the success or failure of a SME, based on corporate governance measures, specifically anti-fraud measures, put in place by SMEs.

Several studies have focused on fraud risk management practices. Murray (1958) carried out a study on the elements of fraud, mitigating circumstances in the control environment and fraud investigation; Glover and Aono (1995) carried out a study on focusing on improving the approach available for preventing and detecting fraud; Bishop (2004) studied the prevention, deterrence and detection of fraud; Abiola and Idowu (2009) studied fraud in Nigerian businesses and Lanoue & Dominic (2015) studied fraud losses in Canadian organisations. Research has also been carried out in Kenya: Njagi (2009) looked into the effectiveness of Know-Your-Customer processes implemented by financial ventures in Kenya; Cheptumo (2010) assessed available response strategies to fraud-related challenges and Waneaba (2010) conducted a study on approaches applied by financial institutions in Kenya to deal with fraud. Olaniyan and Kolapo (2018) researched on the impact fraud has on business performance in Nigeria while Sow (2018)

researched on fraud prevention in Malaysian SMEs. In Uganda, Turyakira (2018) has looked into the ethical environment SMEs in developing countries are subject to.

The studies mentioned above have not focused on the extent to which organisational factors influence fraud risk at SMEs and the approaches SMEs undertake to mitigate fraud risk in Kenya. Local studies that have been done on fraud risk management practices in Kenya mainly focus on the effect of fraud on the financial performance of established organisations. This study aimed to fill the existing gap by studying the organisational factors contributing to fraud risk at SMEs.

This study therefore filled the existing gap by answering the following research question:

"What is the contribution of organisational factors on the extent of fraud risk at FMCG-trading SMEs in Nairobi County?"

1.3 Research Objectives

1.3.1 General Objective

To evaluate the extent to which organisational factors contribute to the level of fraud risk faced by FMCG-trading SMEs in Nairobi County.

1.3.2 Specific Objectives

1. To examine the extent of fraud risk at SMEs.
2. To analyse the effect of management structure on level of fraud risk at FMCG-trading SMEs in Nairobi County.
3. To assess the effect of technology adoption on level of fraud risk at FMCG-trading SMEs in Nairobi County.
4. To evaluate the effect of fraud risk management frameworks on level fraud risk at FMCG-trading SMEs in Nairobi County.
5. To determine the moderating effect of capacity building on the relationship between organisational factors and level of fraud risk at FMCG-trading SMEs in Nairobi County.
6. To identify counter-fraud measures put in place by FMCG-trading SMEs in Nairobi County.

1.4 Research Questions

1. What is the extent of fraud risk at SMEs?
2. What is the effect of management structure on fraud risk level at FMCG-trading SMEs in Nairobi County?
3. What is the effect of technology adoption on fraud risk level at FMCG-trading SMEs in Nairobi County?
4. What is the effect of risk management on fraud risk level at FMCG-trading SMEs in Nairobi County?
5. What is the moderating effect of capacity building on the relationship between organisational factors and level of fraud risk at FMCG-trading SMEs in Nairobi County?
6. What are the counter-fraud measures put in place by FMCG-trading SMEs in Nairobi County?

1.5 Significance of the Study

The study findings may be relevant to SME stakeholders since it will assess the extent to which organisational factors contribute to the level of fraud risk at Kenyan SMEs. This may contribute to greater appreciation of limitations (both actual and potential) faced by SMEs in Kenya as they try to mitigate risk. The study may also be valuable to investors who increasingly rely on services provided by SMEs and to policy makers to whom it shall provide information useful in the identification of additional matters relevant to the performance of local SMEs and their operating environment.

1.5.1 Owners and Employees

This study may be beneficial to the owners/operators and employees of SMEs in the FMCG-trading sector because they shall be able to understand their common challenges as regards fraud. From this understanding, then new entrants and more established businesses can put in place the right mitigation procedures against the occurrence of fraud by incidence and value.

1.5.2 Policy makers

The study may also be valuable to policy makers because they can assess the extent to which overall anti-fraud measures are succeeding; and the gaps in anti-fraud practice. One of the roles of government is to prevent and detect crime, including fraud, and the experience and perception of SMEs towards commercial crime (fraud) will be of value to authorities to gauge the effectiveness of anti-financial crime activities.

1.5.3 Business analysts and Researchers

The study may be valuable in establishing the significance of SME anti-fraud controls that determine part of their long term viability. This is important for business analysts and auditors to pay particular attention to when reviewing the operations of SMEs. Such evaluations are critical for SMEs which are evolving into more established or higher profile businesses hence seek additional finance (from banks or the public) to expand their operations.

1.6 Scope of the Study

The study focused on FMCG-trading SMEs operating within Nairobi County as it has the highest proportion of SME type establishments at 14.8 percent (KNBS, 2016, Micro, Small and Medium Establishment Survey). According to this KNBS Survey, there are more than 1.5 million SMEs operating countrywide, with 65,736 FMCG based SMEs located in Nairobi. These SMEs face an elevated level of fraud risk given the nature of services/ product they provide and therefore, it was justified to focus on them. Secondly the most significant economic activity by region occurs in Nairobi as it is the financial hub of Kenya. The study was limited to the use of questionnaires. The study was conducted in 2019.

1.7 Limitations of the Study

Since financial loss and corruption are a sensitive matter, the study may have been limited by the forthrightness of the respondents in providing comprehensive answers on their experience relating to these two fraud-related elements.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Different countries have their own thresholds for the definition of SMEs based on their role in the economy. These varying definitions may arise from differences in how the industries are organised or the different level of national development (Anamekwe, 2001). According to Sule (1986) firms that would be regarded as micro or small in advanced nations like the United States of America, United Kingdom or Japan may be considered to have the status of medium or even large organisations in developing countries such as Nigeria, due to a gap in capital intensity and technology. Definitions are also dynamic, based on price levels and technological advancements among other considerations.

In the United States of America, the Small Business Administration (SBA) defines small businesses based on the type of industry they are involved in. Manufacturing and mining businesses with fewer than 500 employees are categorised as SMEs whereas the threshold for wholesale enterprises is those having fewer than 100 employees. In retail and construction enterprises, the categorisation is based on their annual revenue. However, criteria such as business turnover and production volume are directly attributable to effectiveness and efficiency of management, which varies among industries (Ajayi, 2002). Locally, the Kenya National Bureau of Statistics (KNBS) refers to SMEs (including micro-SMEs) as businesses that engage between 1 to 99 employees (KNBS, 2016, Micro, Small and Medium Establishment Survey) while KNBS' 1999 National Baseline Survey defines SMEs on the basis of employee count – micro (1-9 employees) small (10-49) and medium (50-99) respectively.

Existing research on SMEs heavily concentrates on their financial performance, but SMEs face additional unique challenges that affect their growth, profitability and longevity. Management issues abound – studies by Kazooba (2006) and Mambula (2002) identified gaps in documentation, limited entrepreneurial exposure, corruption, poor infrastructure, wrong operating locations, wanting market research and unfavourable economic cycles as factors hindering SMEs. Kiggundu (2002) identified practices such as "Kalabule" (Ghana) and "Magneto" (Uganda) that impede growth and development of African enterprises. These refer to illegal/irregular practices that result in entrepreneurial activities being criminalised, and which

benefit persons in control and with influence. In addition to undermining national integrity and legal regulations, corruption also interferes with trust and confidence evidenced by budding businesspeople (Langseth & Stapenhurst, 1997 and Pop, 2002).

Recently fraud has gotten more complex and there is increasing demand for organisations to hire specialists such as forensic investigators to identify and combat potential occupational and financial fraud. Sutherland (1945) describes occupational fraud as the process of an individual using their position within an organisation to enrich themselves by misusing their authority, which is the same definition provided by the Association of Certified Fraud Examiners. Fraud still manifests itself in organisations across different economic sectors, for example swindles and employee trust violations (Association of Certified Fraud Examiners, 2010, Report to the Nations on Occupational Fraud; and Kiragu, Wanjau, Gekara & Kanali, 2013). Fraud in this case includes any deliberate misrepresentation, concealment/negligence and manipulation of financial records at the expense of the firm.

Principles of fraud risk management include proper governance, risk assessment, fraud prevention, fraud detection and lastly monitoring and reporting. O' Bell (2009) mentions that when these principles are absent, the risk of occurrence of fraud increases significantly. The American Institute of Certified Public Accountants (AICPA) Statement on Auditing Standards Number 99 (2002) agrees that motivation or pressure, opportunity and rationalisation (the Fraud Triangle) are conditions that could encourage the occurrence of fraud.

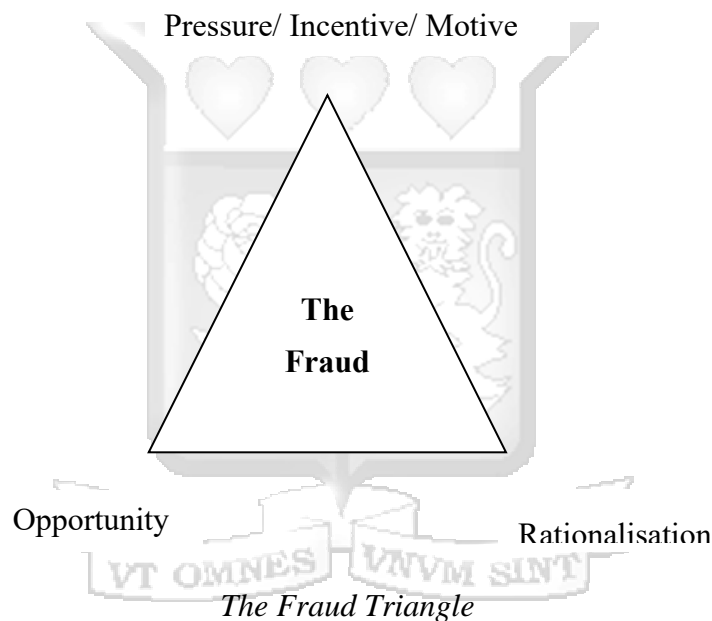
2.2 Theoretical Review

The two main classical theories – the fraud triangle theory (FTT) and the fraud diamond theory (FDT) were reviewed as they are considered to be some of the key theories relating to fraud risk management (Abdullahi & Mansor, 2015). In addition to these, another theory on fraud will also be highlighted – the fraud management lifecycle theory.

The theories upon which this study is based will further provide an understanding of the fundamental motivations for fraud and an evaluation of their common factors. The comparison will assist anti-fraud authorities and SMEs in formulating practical strategies that prevent and investigate organisational frauds (Abdullahi & Mansor, 2015).

2.2.1 The Fraud Triangle Theory

In 1950, criminologist Donald Cressey argued that there must be a reason behind each person's actions. His focus was on the reason for individuals to commit fraud, which led him to conduct research on the circumstances under which people violate trust. Over a 5 month period, he interviewed 250 criminals whose actions met two criteria: (i) Initially, they were people who had accepted positions of trust and held them in good faith and (ii) Circumstances made them violate this trust. According to Cressey, there are three specific factors which make people commit fraud: perceived pressure, perceived opportunity and perceived rationalisation, together considered the fraud triangle illustrated below.

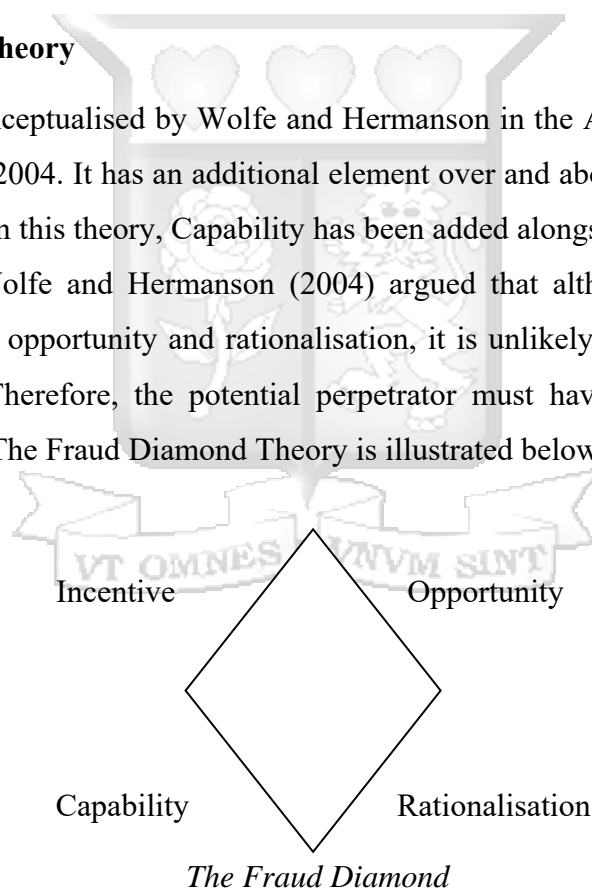


Cressey theorised that every individual involved in fraud is subject to perceived pressure (official or personal), which consequently motivates the individual to commit fraud. Zuberi (2018) found that, in Tanzania, factors constituting motivation were business financial strain; social incentives and pressure, greed, operating problems, internal pressures and a malevolent work environment. Next, the fraudster needs to perceive that s/he will not be caught in the event s/he commits fraud (opportunity). This aspect is also augmented by weak organisational/process controls. The last contributor to fraud is the fraudster's ability to rationalise his/her actions as acceptable. A value is then attached from which the individual draws the belief that they should benefit from the victim of fraud (Chiezey & Onu, 2013). Cressey's conclusion was that people in positions of

trust violate this trust when they consider themselves to be facing a non-shareable financial problem that can be solved through unethical means. In such circumstances, the individuals believe that they have a right to benefit from an organisation's assets (Wells, 2007). The fraud triangle theory suggests that the most effective way to combat fraud is to "think like a fraudster" and attempt to understand a fraudster's situation and actions (Vona, 2008). The fraud triangle theory is applicable to this study since it implies that fraud can be reduced significantly if the motive, opportunities and rationalisation in the organisation are reduced (Cressey, 1953). Fraud through based on the Fraud Triangle is beneficial to auditors and enterprise managers since it enhances the efficiency of fraud detection and critical evaluation (Huang, Lin, Chiu and Yen, 2016).

2.2.2 Fraud Diamond Theory

This theory was first conceptualised by Wolfe and Hermanson in the American Certified Public Accountants' Journal in 2004. It has an additional element over and above those described in the Fraud Triangle Theory. In this theory, Capability has been added alongside the other components of the fraud triangle. Wolfe and Hermanson (2004) argued that although perceived pressure might exist alongside an opportunity and rationalisation, it is unlikely for fraud to occur in the absence of capability. Therefore, the potential perpetrator must have the specific skills and ability to commit fraud. The Fraud Diamond Theory is illustrated below.



The Fraud Diamond

Wolfe and Hermanson (2004) proposed that opportunity results in an 'open doorway' to fraud while incentive/pressure and rationalisation 'lead an individual toward this door'. In this description, Wolfe and Hermanson theorised that capability enables an individual to recognise the 'open doorway' as an opportunity and to take advantage of it by 'walking through'

repeatedly. Capability was defined as the state of having the necessary traits/skills/abilities to commit fraud. Also considered in the study were ego, position, intelligence, deceit coercion and stress, which were considered to support capability.

Mackevicius and Giriunas (2013) state that not every individual who possesses motivation, opportunities and realisation may commit fraud, which arises as there is an absence of (or insufficient) capability to commit or conceal fraud. Albrecht, Williams and Wernz (1995) mention that capability is of particular importance when the fraud is large-scale or long-term. Furthermore, Albrecht et al (2008) believe that sole individual who has significant capability will be able to understand the control environment, identify control weaknesses and exploit these for fraud. Similarly, Wilson (2007) theorises that rationalisation and capability are interrelated and influence the other aspects of the fraud triangle. A key factor that enables a fraudster is their position within an organisation, which Wolfe & Hermanson (2004) suggest enables an individual to master controls and have a greater influence on organisational trust.

The fraud diamond theory is applicable to this study as it implies that fraud can be carried out by individuals with the necessary skills (such as an accountant working within a Finance team or those who hold key positions in management, who are considered to have the necessary wherewithal to identify and exploit loopholes in an organisation. The theory also states that an individual must be influenced by all of the four drivers in order to successfully commit fraud.

2.2.3 Fraud Management Life Cycle Theory

Wesley (2004) defines the fraud management lifecycle as a network lifecycle. Webster's dictionary describes a lifecycle as the series of events/activities stages that are undertaken from a primary stage to a subsequent stage. A clear understanding of the several stages defined in this theory will lead to effective fraud management. The lifecycle has several distinct stages traditionally not allowing any deviations between the commencement and completion of each stage. Deviations such as changes in scope affect the overall success of each project. The traditional lifecycle is specific that one process must be completed before the next commences as the processes are linked sequentially. On the contrary, a network lifecycle anticipates and allows sequential and simultaneous actions in every stage or at each network node. Each stage of the lifecycle is made up of interrelated, inter-dependent and separate actions, functions and

operations; and activities can, occur in a sequential flow, although this is not always necessary (Wesley, 2004).

The Fraud Management Lifecycle Theory hypothesises that the effect of a fraudulent act is shouldered by the defrauded entity's market. Unusually high prices arise from a defrauded entity's efforts to recover lost funds and resources, and potential customers should be aware of this factor (Caveat Emptor), while potential and actual vendors should similarly beware of fraud trends (Caveat Venditor). Fraud costs are passed on to the overall market and society in the form of increased customer inconvenience, opportunity costs, unjustified high prices and crime funded by fraudulent earnings. The overall notion of the theory is that prices and social costs are a direct reflection of the level of fraud in an industry/market/society and thus fraud management mechanisms should be dynamic, evolving and adaptive in each industry/market/society.

The Fraud Management Lifecycle consists of eight stages: Deterrence, Prevention, Detection, Mitigation, Analysis, Policy, Investigation and Prosecution. This theory highlights that Prosecution (last stage) results from of the combined outcomes of the lifecycle. Failures arise in cases where fraud was successful and the perpetrator escaped; and successes occur in cases where fraud was detected and a suspect identified, apprehended and charges filed against him/her (Wesley 2004). The interrelationships among the components of the Fraud Management Lifecycle are considered to be building blocks of the theory.

Adoption of the Fraud Management Lifecycle approach to fraud risk management makes it is possible for businesses to avoid loss as this lifecycle outlines an anti-fraud method and structure that is adaptable to emerging fraud trends. The network of lifecycle stage interactions enables a business to persistently evolve and improve its fraud management activities (Wesley, 2004). This theory will focus on the value earned by SMEs cooperating with each other, especially in understanding the anti-fraud techniques that work in each industry and entity. This theory is important as it clearly outlines the stages of fraud risk management within a process (Githecha, 2013).

2.3 Business Management Structure and Fraud Risk Exposure at SMEs

The business structure refers to the applicable organisational framework for conducting commercial activities. The structural organisation of a SME contributes to its thriving (or otherwise) in its chosen business field and is responsible for making authoritative decisions in

the running of the company. The business structure runs across the organisation from top to bottom. All strategic decisions of the SME stem from executive decisions made by executive management at the top of the SME's structure. Business structure has a significant bearing on the strengths, weaknesses, opportunities and threats relating to the organisation. Therefore, the level of fraud that an SME faces is directly linked to its business structure (Possamai, Marschdor & Stampler, 2014).

Different business structures define the level of fraud risk that a SME is exposed to. A sole proprietorship structure (where an individual engages in trade on his/her own), for example, is less susceptible to internal risk if the business owner incorporates elaborate fraud risk management mechanisms, such as personal approval of all financial decisions and owner's sole responsibility over financial management. However, it is plausible that a sole proprietor may have no previous business administration experience and is a first-time entrepreneur. In such a case, s/he may also not be exposed to fraud risk management practices and would thus be more susceptible to fraud at a greater extent than if they have previous business know-how. It is prudent for such single-person enterprises to therefore employ persons with fraud risk management experience, so as to avoid being defrauded by any unscrupulous persons. The advantage with sole proprietorship structure as regards fraud risk is that any significant policies may more easily be applied and enforced, because the executive owner puts his/her business needs first and would easily accept to install an elaborate fraud risk management system (Riley & Rezaee, 2009).

Different from sole proprietorships, Vona (2012) states that the business structure evident in partnerships also affects the level of fraud risk that a SME is exposed to. A partnership may be better equipped to deal with fraud risk exposure in an SME because the partners are more likely to complement each other's strengths as regards fraud risk management. The parties may also have invested in the business for various personal purposes and tend to be determined to safeguard their personal interests. The parties therefore are more likely to strive to have fraud risk exposure levels at the minimum as the business grows. The executives in a partnership are more likely than a sole proprietorship to invest in more advanced mechanisms to prevent fraud, through the partners' pooled resources. However, this type of business plan is based on mutual trust and a common understanding between the partners. As such, fraud and misappropriation of

assets is not anticipated to arise among the partners themselves might not be adequately mitigated against. In cases where fraud amongst the partners occurs, it has been discovered that policies and procedures in place to combat fraud losses at executive level are weak and ineffective (Marchetti, 2011).

Family – run businesses are more robust than partnerships when it comes to reducing fraud risk exposure as the common family good is espoused and business profits are spent together, thus foul play is easier to discover. Fraud risk management systems in place are usually merely a formality for the executive management (family members with authority); and tend to focus on risks emanating from persons outside the family who may perpetrate fraud. However, the element of trust is also a key factor in such organisations as family members may not expect to be subject to fraud by their own close relatives. Therefore, there tends to be a lack of procedures to handle, prevent or deal with executive fraud. As a family-run business grows and attracts outside investors, there is a greater risk of fraud as the new individuals may not retain the same level of trust as that among family members, yet the processes may not be change to cater for this new management authorities. When “outsider” executives defraud a family-run business, the SME can be severely affected (Giles, 2012).

SMEs operating as companies are the category most susceptible to fraud. These tend to operate with a large(r) staff which transacts numerous transactions on a regular basis. As employment is ideally based on merit, there is usually little informal relationship among the employees and as such, mutual trust and friendship (that could be a buffer against fraud) are absent. Fraud here is driven by selfish motives, ranging from submission of false expenses and absenteeism to outright larceny. As a company is a legal entity that is separate and distinct from shareholders, shareholders whose assets are mismanaged are not always present to oversee the proper usage of resources. By the time cases of fraud are identified, it is usually too late to act and the fraudsters have fled the ‘scene of crime’. Additionally, larger SMEs may undertake so many transactions that by the time a particular fraudulent transaction is identified, it may have remained undetected over a long time and its effect can be so damaging that the only option available is damage control. Therefore such SMEs may focus on investing in effective public relations mechanisms rather than robust preventive and detective measures thus leaving themselves exposed to fraud (Banks, 2003).

Related to the form of business is the management structure and control setup. Organisations have to provide some room for individuals to exercise authority, which can be defined as the span of control; and which increases depending on seniority (Keren & Levhari, 1979). Those with more authority can achieve more and have greater influence on day to day activities. The flow of authority within the organisation is defined as the chain of command; and departments are set up due to work specialisation, which refers to the main divisions that define operations. Management structure is defined based on the need to balance risk arising from the Agency Problem in which third parties (such as employees) must be trusted to carry out beneficial activities on the business's behalf while checking that their activities are in the organisation's best interest.

In the East African region, SMEs tend to operate at the grass-root level interacting directly with numerous individuals or several companies. This being the case, the structure of many SMEs is 'people-based'. Given that people have different unpredictable motives, it can be quite difficult to actually spot, identify and deal with potential fraudsters. Nevertheless, many SMEs do not install fully functional and well-structured fraud risk management systems, even in the absence of financial constraints. SMEs should consider fraud risk management as central to the survival and success of business so as to reduce loss and misappropriation of resources, effectively increasing productivity and profitability. Reduction of fraud risk exposure should be rated as one of the strategic aims as they affect sustenance of the business and every proprietor of a SME should be committed to the reduction of fraud risk regardless of the specific business structure (Banks, 2003).

2.4 Incorporation of Technology in operations and Fraud Risk

Fraud risk exposure can be described as the probability of an enterprise experiencing a financial loss due to the activities of certain parties; with these activities arising from the intention to secure an unlawful, unfair and/or illegal gain. Fraud is often difficult to detect until a loss has already occurred, at which point detection may no longer be relevant and cost-effective. The need for prevention and prompt response goes a long way in reducing the resultant damage due to fraud, in both cash and time. Technological advances have come up with options for monitoring key business aspects: assets, capital expenditure, operational risks and net earnings. In enterprises that have significant operations; the data to be analysed can be humongous as and

complicated. This complexity gives some leeway to fraudsters who can employ their technological know-how to perpetrate fraud (Hall, 2010).

Hall (2010) further argues that the use of technology to monitor and test compliance can improve adherence to operating policies and ensure minimal irregular happenings and shady deals. Technology has a great impact on how fraud can be identified and perpetrators identified, specifically in terms of the quantity of information that can be reviewed and the speed with which detailed analysis can be done. Prudent businesses are those that invest in effective and efficient fraud monitoring systems and adopt technologies beyond basic tools for the convenience of their stakeholders. The introduction of electronic transfer systems like online banking, mobile phone banking and point of sale (POS) payments has resulted in new opportunities for trade and even large payments are quicker to perform while communication is more comprehensive and has been simplified by technology. Money is the lifeblood of international commerce and is very attractive to fraudsters even in electronic format; and the recent migration by banks from magnetic strip ATM cards to chip-and-pin technology is an example of banks' technological initiatives to reduce fraud and theft of customer finances (Zimbelman, Albrecht & Albrecht, 2011).

Upon introduction, technological systems improve fraud detection and build customer and firm relationship while simultaneously improving efficiency, and this enhances customer confidence and enhances profit. As the business grows in revenue and cash-flow, so does its exposure and attractiveness to fraudsters. Audits may be accurate only if a business takes time to invest in an up to date security system and record maintenance system (Zimbelman, Albrecht, & Albrecht, 2011). Monitoring systems like Closed Circuit Television (CCTV) cameras for security purposes are a way to effect "live" supervision of operations to avoid fraudsters' physical entry into business premises thus avoiding exposure from intruders. In covering security risk, technology should be applied to physical access and information as well as electronic information. There is a further need to secure electronic systems as they serve as the backbone of both past and potential record keeping (Gee, 2014). Electronic analysis is invaluable even in evaluating staff remuneration to avoid the 'ghost workers' menace that plagues many firms with numerous employees. This can extend to evaluating whether employees are truly available and on duty for the time required of them. Businesses can use technology very well to evaluate staff activities.

Queries such as: 'Who checked in at what time?' 'Who authorized this payment?' 'At what time?' 'Who did not report to work today?' can be solved by proper monitoring systems. Technology aids fraud risk management and the knowledge that a business's systems are strong acts as a deterrent against fraud. Electronic systems should be considered as vital as the business's profitability and reputation (Vona, 2012).

2.5 Fraud Risk Management Framework and Fraud Risk at SMEs

Risk management refers to all attempts to identify, explore, mitigate and control risks affecting an entity (Jorion, 2000). A risk management framework refers to the set of procedures that are used to effect risk management at an organisation (Miller, 1992). Fraud risk is a subset of risks faced by a business, including financial risks, sustainability and human resource risk, which factors are together mitigated through enterprise risk management. Enterprise Risk Management (ERM) is a comprehensive approach to identifying and addressing all risks faced by an organisation while fraud risk management focuses specifically on fraud risk. Organisational risk management looks at a variety of factors that make organisations unique, such as setup and management, strategy, staffing, business objectives, risk appetite, systems and procedures among others.

All enterprises are prone to risk of fraud and swindling and general misconduct. SMEs face this challenge more seriously than other large scale businesses. This is because they are a more 'face-to-face' operational entity and rely mostly on their relationships and interactions with people to grow business. Based on pressure to develop a lengthy list of actual and potential clients, SMEs face the risk of fraud by persons presenting themselves as clients, and this may make SMEs cautious in their development (Dun & Girma, 2012). Giles (2012) states that SMEs must develop workable solutions to counter fraud since the impact of fraud is mostly felt by the very same people who are also the potential perpetrators – employees, stakeholders and counterparties. Further, many fraud cases are so smoothly carried out that they remain either undetected or unreported for a long time. A fraud risk management framework would focus on the fraud exposure facing an organisation from these sources. This framework includes having an appropriate governance and strategy and risk management controls focusing on people, processes, systems and policies. Such controls are designed to prevent, detect and respond to fraud (KPMG, 2009).

People are a major source of fraud. According to CIMA, employees perpetrate or are complicit in most successful (high impact) fraud cases (CIMA, 2009, *Fraud Risk Management: A guide to good practice*). This internal fraud is prevalent, but outward-facing fraud caused by businesses themselves is also increasing. Outward-facing fraud can be described as attempts by an enterprise's executive management to unfairly benefit from stakeholders in one way or another and is typically manifested in the financial reports of the business. Many SMEs face the challenge of being 'a house divided against itself' with their employees being the very perpetrators of their loss and distress. Due to a lack of sophisticated internal control systems and monitoring techniques, the scale of fraud at SMEs can be greater than that in larger organisations. Employees tend to misuse their positions and influence within an organisation when they are not supervised, work alone or where the organisation lacks an appropriate ethical culture (Thomas, 2008). A fraud risk mitigation framework would focus on the exposure that recruiting and transacting with people presents to the organisation.

Fraud manifests itself in processes and operations while tending to be difficult for audit to detect, whether internal or external audit. Statutory (external) audits tend to not detect fraud because that is not their primary objective and purpose; and internal audits tend to be focused on operational performance improvement based on key functions of an organisation. Fraud tends to be better detected by forensic investigations which are initiated when there is a reasonable suspicion of fraud having occurred. This approach tends not to succeed because it is reactive – the action takes place once money has been lost and perpetrator has fled, leaving the organisation nursing its losses without compensation. This is especially ruinous to SMEs because they work and operate on limited capital that should be safeguarded and utilised sparingly (Vona, 2012). A fraud risk mitigation framework would highlight the role of properly designing operations with adequate controls to deter and detect fraud, especially given the fragile nature of most start-ups.

Many SMEs are not focusing appropriately on the prevention and countering of fraud, or appropriately managing organisations under a culture of ethical conduct. SMEs tend to use an approach that results in absorption rather than prevention of risk (effectively self-insurance). This approach is widely used because as it appears cheaper, meaning that other more beneficial formal approaches are ignored. SMEs use this approach because as part of entrepreneurship, they are expected to pursue risk rather than avoid it, but such an approach ends up leaving a business

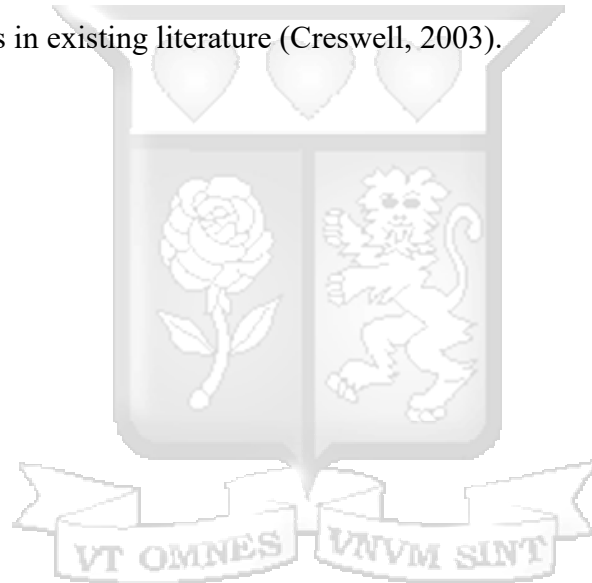
highly vulnerable to fraud when it occurs (Zimbelman, Albrecht, & Albrecht, 2011). Businesses having this sort of strategy eventually face damage due to the far – reaching and ruinous effect of fraud (Gee, 2014).

An appropriate fraud risk management framework should cater for SMEs approach of working with a small operational margin of capital, meaning that there is little or no finance allocated towards the implementation of an elaborate fraud risk management system. This tendency exhibited by SMEs would result in a gap in the management of fraud when it occurs and mitigation strategies for the same. This absence of effective systems is also what contributes to employees themselves participating in fraud. Due to limited capital in many SMEs, the operational costs are kept to the minimum, including salaries and benefits to employees. This results in a “rationalisation” factor as described within the Fraud Triangle, and employees resort to making illicit earnings off the business. In ordinary cases, where employees participate in fraud without a malicious intent to harm the business, the loss from fraud tends to be low when fraud is discovered early as only small amounts are misappropriated. Such losses tend to be simple to recover (Banks, 2003). Accounting fraud can be crippling even to large enterprises and in cases where the promoters and managers are not financially savvy, are a key reason for SMEs to have in place elaborate reporting systems as they (SMEs) specialise in numerous small-scale transactions (Vona, 2012).

The viability and success of a SME is dependent on the strategies put in place by its promoters and managers; and one of these strategies should include having an appropriate fraud risk management framework with robust mechanisms to prevent fraud from an external and internal source; as well as proactive review of emergent fraud trends. This will result in great operating efficiency (minimum “normal” fraud loss) and profits that can be reinvested to grow the business and make the enterprise successful. A study on fraud prevention in Malaysian SMEs (Sow, 2018) found that a infusing integrity and honesty in the organisation’s culture, implementing proactive mechanisms for prevention and detection and ensuring that activities are effectively supervises improves the efficacy of fraud risk approaches. Further research into business continuity planning in Thailand SMEs found a low-level of preparedness for business continuity (Kato & Charoenrat, 2017).

2.6 Conceptual Framework

Kombo and Tromp (2009) define a concept as a general/abstract idea inferred from certain defined information. A conceptual framework entails defining a general set of ideas and principles arising from certain enquiries and applying the same to an academic presentation. Mugenda and Mugenda (2003) define a conceptual framework as a hypothetic model linking the dependent and independent variables, and in relation to these, Kothari (2004) defines an independent/exploratory variable as the supposes cause of changes in a dependent variable, with the latter being the factor a researcher attempts to explain. The objective of a conceptual framework is to categorise and highlight concepts in the study and link the relationships identified. Such models assist researchers to determine the concept, lay out research approach or and identify existing gaps in existing literature (Creswell, 2003).



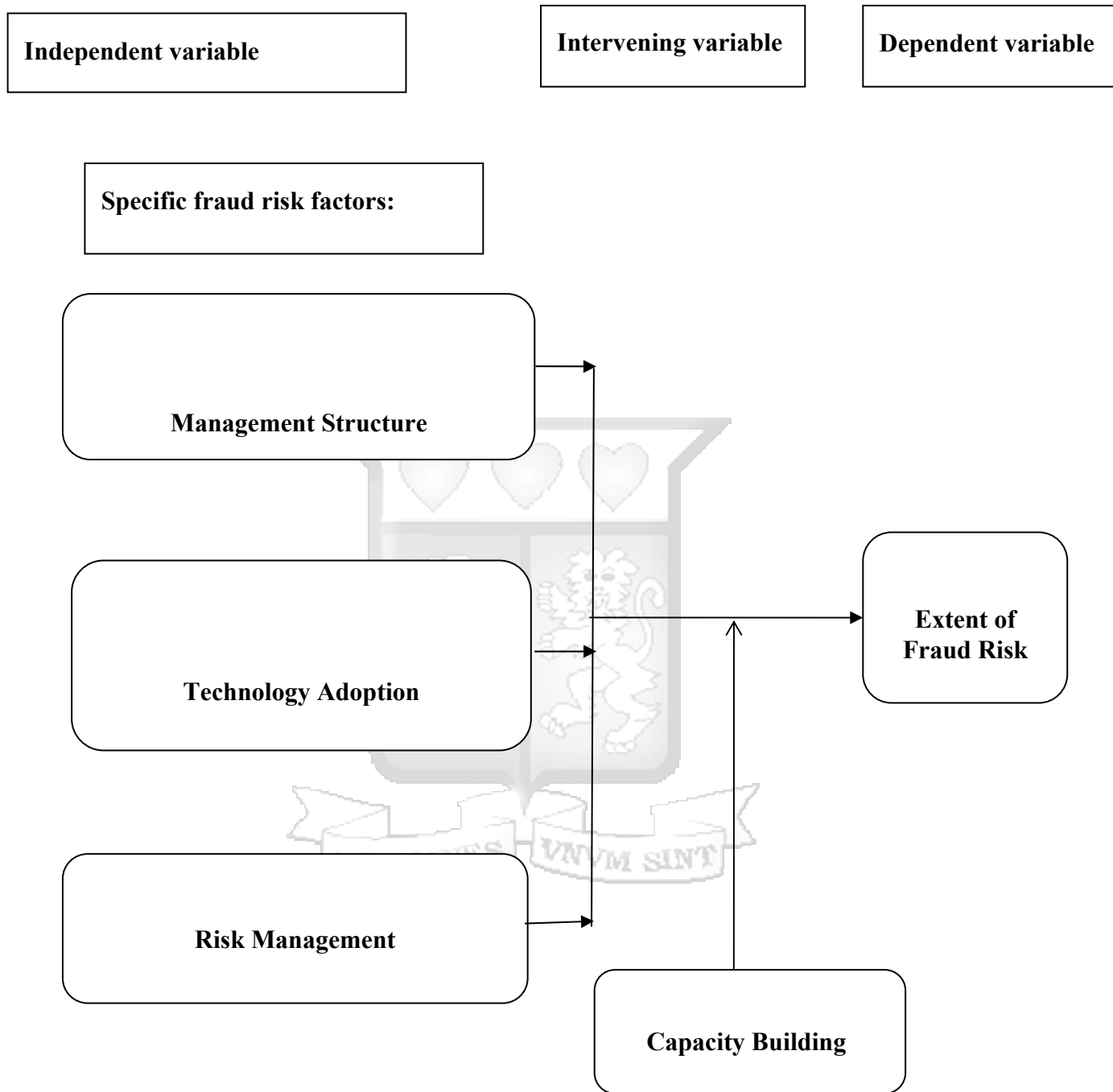


Figure 2.1: Conceptual Framework

Source: Author's construct, 2019

2.7 Operationalisation of the variables

With regard to independent variables, the form of business organisation and management structure have a bearing on level of fraud risk, especially when sole-proprietorships are compared to partnerships and companies. The collective organisations have greater bureaucracy within them and also tend to have more discussion and conflict due to the greater number of persons with a direct stake in ownership. This study attempted to ascertain the link between form of business organisation and management structure and the level of fraud risk. The age of the business enterprise is another factor to consider – as organisations get more mature, their structure and systems are likely to stabilise, including measures meant to address fraud risks. With regard to geographic spread, enterprises with several branches require coordination of their operations as well as financial reporting. This factor of structure results in the fraud risk mitigation technique in such enterprises differing from those of ventures based at one location. Segregation of duties is also affected by the size of staff employed at SMEs versus larger entities. The study looked into controls relating to segregation of duties and their relationship with the number of employees. Management experience as well has an impact on the fraud risk mitigation measures applied as the depth of management experience improves the enterprise's ability to respond to unusual occurrences such as those that arise due to fraud. Such experience would impact on the selected fraud risk management technique.

Similarly, another related factor is the employment of technology in the systems that manage operations – for example enterprise management systems. Operating such systems is premised on an understanding of information technology and financial concepts and their connection to possible fraud. The same applies to usage of electronic payment systems such as mobile money which rely on an electronic system and external intermediary (mobile company) to effect. SMEs are more greatly subject to financial limitations than larger enterprises (including limited access to credit); and this affects how much they can invest in systems to prevent loss due to fraud. In this study, technology adoption was measured in terms of change management, systems override, system implementation and access to programs and data and audit trails. Fraud risk management as a factor was measured using the following elements; risk identification, weighting, mitigation, reporting and monitoring. The study used capacity building as an intervening variable. The intervening variable was used to explain the relationship between the organisational factors and

the extent of fraud risks. The effect of the intervening variable on the relationship between each of the independent variables and dependent variable was measured. The measures of the intervening variable were training budget, fraud related trainings and training programs.

The dependent variable in this study was the extent of fraud risk at FMCG-trading SMEs in Nairobi County. Extent of fraud risks was measured using the following aspects: cash theft, stock pilferage, misappropriation of assets, fraudulent financial reporting, collusion with stakeholders, poor quality of stocks purchased, payroll schemes, bribery and corruption and illegitimate suppliers.

2.8 Summary of Literature Review/ Research Gap

Empirical literature review involves citing the relevant past studies relating to the subject of interest. Some of the studies that have been conducted on fraud risk management practices and their influence on business enterprises are referred to below.

Hess and Cottrell (2015) in their publication on fraud risk management and SMEs noted that SMEs were a key driver of the American economy yet faced great challenges in addressing fraud risks, attributable to financial strain, rapid growth and a lack of resources and expertise. Their recommendations were for the greater application of ethics, reporting, verification, financial analysis and employee motivation to prevent, detect and mitigate occurrence of fraud.

PwC in their 2014 Global Economic Crime Survey categorized fraud detection into: Corporate controls, corporate culture; or Chance. Their findings were that 16% of Kenyan respondents indicated that reporting of suspicions was an effective way of detecting fraud, 14% of respondents relied on internal audit and 13% had formal fraud risk management processes. PwC recommended that internal audit should be further strengthened and fraud risk assessments should be carried out to prevent and detect economic crimes.

Dominic (2015), in his study on management of fraud risks in Canadian firms, considered the effectiveness of anti-fraud controls on reducing occupational fraud losses. He based his study on data from the Association of Certified Fraud Examiners and Peltier-Rivest (2007). The findings of this study were that reporting channels such as hotlines, regular anti-fraud training, surprise audits and thorough internal reviews all reduced the probability of commission of fraud and resulted in early detection. The study continued that hotlines and surprise audits were statistically

significant controls when checking for potential correlation in all internal controls. Hotlines contributed to a reduction of 54 per cent in median fraud losses, while surprise audits reduced median losses by 69 per cent.

Mbuguah (2013) carried out a study on strategies used to deter and respond to fraud by registered financial institutions in Kenya and discovered that the pressures contributing to fraud include employee frustration and control weaknesses. The study also found out that counter-fraud training, investigation (detection) and prosecution strategies were used to limit the effects of fraud. Government agencies (police and prosecutors) were found to have a vital role in identification of fraud and punishment for its perpetration. This study adopted descriptive research design and used primary data.

Turyakira (2018) reported that SMEs cannot continue to operate in ignorance or avoidance of business ethics; and further that unethical conduct leads to business failure especially irregular conduct which arises internally.

2.9 Chapter Summary

The literature review has detailed the concepts of fraud, fraud risk management and the significance of SMEs. Business entities are exposed to a high risk of fraud in their operations; and the management of and responses to fraud are essential for survival and profitability, especially in the key SME category.

There is no direct study that has been carried out into the extent to which organisational factors contribute to the level of fraud risk at SMEs in Kenya. Many of the studies available focus on fraud risk management in financially established organisations and do not extend to SMEs which drive a large part of the economy. This study sought to bridge the existing knowledge gap.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents a description of the methodology that was adopted to carry out the study and analyse the findings. The chapter begins with the research design, then proceeds to sources and type of data, sampling design and finally concludes with data collection techniques and instruments as well as data collection procedures and data analysis.

3.2 Research Philosophy

The study adopted the positivist philosophical orientation, which is associated with objectivity. In this approach, the consideration of researchers is to evaluate society based on objectivity rather than subjectivity (Cooper & Schindler, 2006). In this approach, rather than focus on the details of the research, researchers aim to collect general information and data from a large social sample. This philosophy will be adopted because of these key features.

3.3 Research Design

The study adopted a descriptive research design. The research design also sought to explain the relationship between variables (Saunders, Lewis & Thornill, 2009; Bryman & Bell, 2007; Cooper & Schindler, 2006). This approach seeks explanations for observed phenomena/problems/behaviours as well as the answers for “why” and “how” types of questions; and attempts to connect variables in research (Small et al, 2011). The approach provides an opportunity to explain the techniques used by SMEs in Nairobi County (specifically those trading in FMCGs) to prevent and detect fraud.

3.4 Target Population

A population is defined as an entire set of individuals/cases/objects with some common observable characteristics (Mugenda & Mugenda, 2003). The target population for this study was FMCG-trading SMEs in Kenya operating in 2018. According to a survey by the Kenya National Bureau of Statistics, there are more than 1.5 million SMEs operating countrywide, with 65,736 FMCG based SMEs located in Nairobi as indicated in Table 3.1.

Table 3.1: Target Population

Category	Population	Percentage of Total
Fast food	15,876	24%
Groceries	12,010	18%
Beauty	4,569	7%
Beverages and alcohol	6,286	10%
Other services	26,995	41%
Total	65,736	100%

Source: Kenya National Bureau of Statistics

3.5 Sampling Frame

A sampling frame is a list of population from which a sample is drawn (Kilmer & O’leary, 2001). It is the source material or device from which a list of elements that can be sampled within a population is drawn (Särndal, Swensson & Wretman, 1992); and it may include individuals, households or institutions. It can also be defined as a published set of directions for identifying a population (Gall, Gall & Borg, 2007). Jessen (1978) highlights the importance of a sampling frame based on features such as single representation of each and every element, numerical identifiers, contacts, etc presented in a logical and systematic fashion.

A sampling frame enables the formation of a sampling unit which is one member of a set of entities under consideration and it is the material source of the random variable (Bailey, 2008; Klaus & Oscar, 2008; Cochran, 1977 and Sarndal, Swensson & Wretman, 1992). For the purpose of this study, the sampling frame for the target population is the Nairobi County business registry database of all SMEs considered alongside data from the Kenya National Bureau of Statistics. The study adopted purposive random stratification sampling, through which the sampled respondents were selected and their suitability assessed based on confirming that they fit the characteristics of the population.

3.6 Sampling Design

A sample design refers to the architecture/strategy applied in the selection of study participants or respondents (Kothari, 2004). Sampling is the systematic selection of a limited subset of elements out of a theoretically defined population of elements. The objective of sampling is to

draw a fitting conclusion about the entire population. Kothari (2004) postulates that the ultimate test of a sample design is how well it represents the characteristics of the population it purports to measure. Stratified random sampling was used to separate respondents into owners and employees, to enhance greater efficiency and reduce chances of sampling error. Kothari (2004) supports random sampling, indicating that a random sample shares, on average, the same characteristics and composition as the population from which it is drawn, which is a requirement for statistical regularity. Reasons for sampling in this study include lower research costs, ease of accessing the study population and greater speed of data collection.

3.7 Sample Size

Kombo and Tromp (2009) and Kothari (2004) describe a sample as a collection of units chosen from the universe to represent it, while Marczyk, Dematteo, Festinger (2005) and Park & Yang (2008) define a sample as a subset of the population to be studied. Sampling is the selection of a subset of individuals from within a population to provide some information about the whole population, especially to make predictions based on statistical inference (Scott & Wild, 2001; Black, 2004). Sampling consists of defining the population, sampling frame, sampling method, sample size and sample plan (Lavrakas, 2008).

The estimated population of FMCG based SMEs located in Nairobi was 65,736, greater than 10,000. Determining a sample for a large population requires the assumption that the population is normally distributed. This study adopted Equation (i) below recommended by Mugenda and Mugenda (2003).

$$n = Z^2 * p * (1-p) / d^2 \dots \dots \dots \text{Equation (i)}$$

defined as;

n = sample size of a big population (more than 10,000),

Z = Normal distribution Z value score, (1.96),

P = Proportion of units in the sample size possessing the variables under study, where for this study it is set at 50% (0.5),

D = Precision level desired for the study (0.05).

Based on the above equation, the sample has been established as:

$$n = 1.96^2 \times 0.5 \times (1 - 0.5) / 0.05^2 = 384.16$$

The target sample size of 384 constituting 5% of the target population is adequate for research based on the Creswell (2007) recommendation who asserted that a sample of at least 5% to 10% is able to lead to meaningful generalizations about the general characteristics of a study population. The sample size was distributed within five strata: fast food, groceries, beauty, beverages and alcohol and other services to ensure that sample distribution was unbiased and balanced. The detailed sample distribution is as indicated in Table 3.2.

Table 3.2: Sample size

Category	Population	Sample
Fast food	15,876	92
Groceries	12,010	70
Beauty	4,569	27
Beverages and alcohol	6,286	37
Other services	26,995	158
Total	65,736	384

Source: Excel computation based on analysis of SMEs

3.7 Data Collection Instruments

The study used questionnaires to collect primary data for analysis. Schwab (2005) defines questionnaires as measuring instruments that attempt to obtain information from individuals by their responding to a set of questions or statements. Mugenda and Mugenda (2003) and Kothari (2004) define a questionnaire as a document containing questions in a particular definite order on a form or set of forms.

According to Dawson et al (2002), there are three basic types of questionnaires; closed-ended, open-ended and a combination of both closed and open ended. Closed-ended questionnaires are used to generate statistics in quantitative research. These questionnaires follow a set format and can generally be processed by a computer for quick, easy analysis, and can also be produced in greater numbers. In contrast to closed-ended questionnaires, open-ended questionnaires are used in qualitative research.

Mugenda and Mugenda (2003) and Kothari (2004) agree that use of questionnaires presents benefits such as having a relatively low cost even when the universe is large and geographically

spread out; being free from interviewer bias; providing answers in respondents' own words and providing adequate time for respondents to give well thought out answers.

Mugenda and Mugenda (2003) and Kothari (2004) also concur that the main disadvantages of questionnaires are; low response rate (rate of return of properly filled in questionnaires) and inability to determine bias arising from non-response.

3.8 Data Collection Procedure

Burns and Grove (2003) define data collection as a programmatic collection of information relating to the research, employing methods such as interviewing, direct observation and focus group discussions. This study used questionnaires to obtain both quantitative and qualitative data for analysis. Park & Yang (2008) state that the questions in a study should be directly connected to the research questions. During the development of a survey questionnaire, the variables should have been pre-emptively identified and defined.

According to Newing (2011), questionnaires should contain specific, short questions whose responses can be compiled by the respondent or an interviewer. Primary data was collected through the administration of questionnaires to the respondents – owners and management level employees of SMEs. Kothari (2004) describes primary data as that which is collected fresh and for the first time, and thus is original in character. Cohen et al (2000) describe primary data as those items that are original to the problem being investigated. Polit and Beck (2003) describe a primary data source as the original description of a study prepared by the researcher who conducted it. Primary data was collected through the administration of questionnaires to the respondents and research assistants were engaged to administer and collect the questionnaires. The study adopted drop and pick later method in administration of the questionnaires. This gave respondents enough time to go through the questions and to response adequately.

3.9 Pilot Test

To verify the validity and reliability of the questionnaires in collecting appropriate information, a pilot study was undertaken. The purpose of pilot testing is to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis & Thornhill (2007). Newing (2011) states that pilot testing as a procedure is invaluable; one may discover issues such

as questions that the intended respondents may not understand or may interpret in different ways and questions that turn out not to extract useful information.

Cooper & Schindler (2006) concur that the role of this testing is to find potential shortcomings and also to constitute a proxy for data collection of a probability sample. Sekaran (2006) reinforces that pilot test is necessary for testing reliability of instruments and the validity of the study.

3.9.1 Instrument Reliability

According to (Jack & Clarke, 1998), reliability is the assessable repeatability/stability/internal consistency of a questionnaire. Cronbach's alpha was used to evaluate the questionnaire's reliability (Cronbach, 1951). According to Sekaran (2006) and Cooper & Schindler (2003), Cronbach's alpha has the greatest utility for measurement, requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale. Baker (1994) states that the sample size to be considered for pilot testing varies, depending on time, costs and practicality, but should be 5–10 % of the main survey's sample. According to Cooper and Schindler (2006), respondents in a pilot test do not have to be statistically selected during the testing of the validity and reliability of the instruments.

Reliability was tested using questionnaires which were completed by twenty (20) respondents, randomly selected, and these respondents were not included in the final study sample - to check for response bias.

3.9.2 Instrument Validity

Validity refers to the assessment of whether a questionnaire has measured what it purported to measure (Bryman & Cramer, 1997). It is also defined as the extent of alignment between the explanations of the phenomena and the real world. Absolute validity may be difficult to establish but demonstrating a developing measure's validity is important in research (Bowling, 1997). This study used both construct validity and content validity. For construct validity, the questionnaire was divided into several sections to ensure that each section assessed information for a specific objective and also ensure that the same closely tied to the conceptual framework.

For content validity, the questionnaires were subjected to thorough examination by two randomly selected respondents who were asked to evaluate the statements in the questionnaire

for relevance and to confirm whether the questions were meaningful, clear and practical. On the basis of the evaluation, the instrument was adjusted appropriately before using it for data collection.

3.10 Data Processing and Analysis

According to Zikmund et al (2010), data analysis is the application of reasoning to understand the gathered data, with an objective of identifying consistent patterns and summarising relevant details identified during the investigation. In order to establish the patterns revealed in the collected data, analysis was guided by objectives of the research.

The approach considered was based on correlational research design which aims to determine the extent to which two or more variables are related. The key independent variables were assessed against the perceived level of fraud risk which is the dependent variable. Individual respondents' perceptions about the level of fraud risk and sufficiency of fraud mitigation procedures were considered against other respondents to rate assessed effectiveness of approaches to risk mitigation.

Processing and analysis involved examination of the perception of the respondents about their exposure to fraud risk relative to other similar organisations, ranking of the responses and commenting on the extent to which the mitigation techniques affected the perception of fraud.

Further statistical analysis using SPSS was done. Descriptive statistics including percentages, mean and standard deviations were generated. This helped the researcher to capture respondents' opinion in regard to the study variables. Inferential statistics including correlation coefficients, coefficients of determinations and ANOVA results were also generated to describe the strengths of relationships as well as direction of the relationships between the variables and how significant they are using the P values compared with the confidence level of 5%.

The multiple linear regression model in the form described in equation (i) below was used

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \dots \dots \dots \text{Equation (i)}$$

Where:

Y = the value of the dependent variable, Fraud Risk Level

{ β_i ; $i=1, 2, 3$ } = The coefficients for the various independent variables

X1 = Management Structures

X2 = Technology Adoption

X3 = Fraud Risk Management Framework

The following model was used to test for moderation effect of capacity building.

$$Y = \beta_0 + \beta_1 X_1.M + \beta_2 X_2.M + \beta_3 X_3.M + e \dots\dots\dots \text{Equation (ii)}$$

Where

Y = Fraud Risk Level

X₁.M = Management Structure*capacity building

X₂.M = Technology Adoption*capacity building

X₃.M = Fraud Risk Management Framework*capacity building

M = Capacity Building (Moderating Variable)

3.11 Ethical Issues in Research

The research adhered to the following ethical considerations in the course of the data collection process. First the respondents participated on their own volition – should the respondents have wished to withdraw during the data collection process, this was allowed. Secondly, the researcher sought permission from the relevant stakeholders before undertaking the study. Thirdly, the researcher upheld anonymity and the respondents were not required to provide their names.

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of this study as set out in the research objectives and research methodology. The purpose of this study was to evaluate the extent to which organisational factors contribute to the level of fraud risk at FMCG-trading SMEs in Nairobi County. The first section of this chapter covers demographic profiles of the respondents while the second section provides analysis on the four objectives of this study.

4.2 Response rate and Demographic Characteristics

Out of the 384 questionnaires sent out to the respondents, 250 were returned fully complete representing a 65% response rate. According to Mugenda and Mugenda (2005), 50% of returned questionnaires are an indication of a successful response rate. The demographic characteristics of the respondents included age of the respondent, gender, position, education level and years of operation. From the study results, 53% of the respondents were male and 47% were female, indicating that SMEs are male dominated. 20% of the SME owners are in the age bracket of 18-35 which implies that few young Kenyans own businesses; 30% of the respondents are in the age bracket of 36-50 years and 50% are above 51 years. This further implies that it takes several years for people to try out business, possibly due to time taken to raise capital as well as stability in careers. The majority of respondents (87%) had secondary level and above with regard to education. The respondents therefore had good exposure to formal education and could be expected to have a reasonable understanding of technical matters evaluated in the study. Further, the majority of businesses considered were over 3 years old since establishment and thus had undergone reasonable experience in their selected areas. These respondents would also have experienced several business cycles including renewal of official licenses and financial (tax) reporting which is carried out on an annual basis.

4.3 Trend of Fraud at FMCG – trading SMEs

This study sought to understand the trend of fraud at FMCG-trading SMEs by asking the respondents to indicate the number of frauds and number of persons/teams involved over a period of 5 years from year 2014 to year 2018. From table 4.1 below, the number of incidents of fraud has been on the increase, from 932 incidents in 2014 to 1,901 incidents in 2018 (fraud more than doubled at these SMEs).

On the number of persons/departments involved in the frauds, this grew from 3 in 2014 to 5 in 2018. This implies that SMEs are exposed to fraud from multiple areas and a “one size fits all” solution against fraud may not be suitable.

Table 4.1: Trend of Fraud

Year	Number of fraud incidents	Average number of functions/ persons involved
2014	938	3
2015	1,128	3
2016	1,238	4
2017	1,423	4
2018	1,901	5

4.4 Factor Analysis Results

To determine the various fraud mitigation techniques used to reduce fraud risks faced by FMCG SMEs in Nairobi county, factor analysis was conducted to include appropriateness of the model, communalities, total variance explained, and the factors extracted from the process. To test the appropriateness of the factor analysis model used in determining fraud mitigation techniques, Bartlett’s test of sphericity was used to test the null hypothesis that the variables were uncorrelated. The results of Principal Component Analysis (PCA) indicated that the null hypothesis, (that the fraud mitigation techniques correlation matrix was an identity matrix) was rejected by the Bartlett’s test of sphericity., as detailed in Table 4.2 below.

The approximate chi-square statistics was 224.495 with 210 degrees of freedom, which was significant at the 0.05 level. The values of KMO statistic (0.49) is just slightly less than 0.5. Thus, factor analysis was considered an appropriate technique for analysing the correlation matrix.

Table 4.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.49
Bartlett's Test of Sphericity	Approx. Chi-Square	224.495
	df	210
	Sig.	0.035

The researcher conducted factor analysis on 250 questionnaires sent to participants of the study. Using Eigen values greater than 1.0, total explained variance, and factor loadings greater than 0.4 as criteria for identifying meaningful mitigation techniques, the study identified three types of factors affecting fraud risk. The rotated factor matrix sorted out three factors that were deemed significant for this research. Each of the factor had loadings greater than 0.4.

Varimax with Kaiser Normalization rotation method was used where items were sorted from one with the highest loading to the one with lowest. The results of the rotated matrix helped to determine the major fraud risk factors at FMCG SMEs. The research had twenty-one initial variables, which were reduced to three. They account for 60% of variance with loadings ranging between 0.419 to 0.741. The identified factors are presented in the Table 4.3 below.

Table 4.3: Explanation of Variables

Variable	Description of the Variable	Factor loadings	Explained variance %	Factor
Var6	Firm's structure is formal and changes are clearly communicated	0.679		
Var4	Structure has an appropriate span of control for ease of management	0.670		
Var1	Firm's structure facilitates work specialization	0.644		
Var3	Having a clear chain-of-command in our company has reduced fraud	0.629	12.645	Management structure and fraud risk
Var5	Growth in the business and structure has yielded more fraud risk	0.627		
Var7	Every employee's role/authority is defined	0.546		
Var2	We have a clear organisation structure	0.504		
Var8	All employees understand each other's responsibilities	0.419		
Var11	The business has a defined approach to system implementation to avoid fraud	0.662		
Var12	Our firm has a defined policy and procedure to define access to information	0.653		
Var13	Our firm is keen on audit trails for all transactions	0.602	17.052	Technology adoption and fraud risks
Var10	There are uncontrolled system overrides in our firm, which increase fraud risk	0.476		
Var9	Change management is effective in case of technological changes	0.474		
Var14	Our firm is very keen on managing information during system changeovers	0.444		
Var16	It is the duty of all employees to identify risks and report them centrally	0.741		
Var21	The business has an effective anti-fraud policy with clear guidelines	0.740		
Var17	The business has put in place a regularly reviewed risk mitigation framework	0.621	14.65	Fraud risk management framework and fraud risks
Var20	All employees are aware that they are responsible for identifying and responding to fraud	0.621		
Var15	The firm has a defined risk management framework	0.600		
Var19	Following past fraud, a fraud response plan was instituted to deal with similar threats	0.564		
Var18	Employees regularly report fraud risks to the management for monitoring	0.541		

4.5 Status of fraud risk at FMCG-trading SMEs in Nairobi County

The study sought to know the status of fraud risk at FMCG-trading SMEs in Nairobi County. The respondents were asked to indicate their 'level of agreement' to statements provided using a Likert 1-5 scale with 1 being 'Strongly disagree', 2 being 'Disagree', 3 being 'Neutral', 4 being 'Agree' and 5 being 'Strongly agree'

From the study findings in table 4.4; majority of the respondents agreed to the statements indicated by a mean the centred around 4.0 across all the statements. Majority of the respondents above 78% either agreed or strongly agreed with the statements with only 22% either disagreeing or remaining neutral.

Table 4.4: Status of fraud risk at FMCG SMEs in Nairobi County

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total	Mean	Std Dev
Fraud risk is high due to lack of capital	4.80%	6.00%	4.40%	37.60%	47.20%	100%	4.16	1.08
SMEs face higher corruption risk	2.40%	6.00%	2.00%	49.60%	40.00%	100%	4.19	0.919
Fraud in Kenya has a material/unsustainable cost	5.60%	10.0%	3.60%	43.60%	37.20%	100%	3.97	1.147
Insiders are a greater fraud risk than outsiders	5.60%	6.80%	1.20%	45.20%	41.20%	100%	4.1	1.093
Insiders and outsiders are properly vetted	6.80%	10.0%	2.40%	43.20%	37.60%	100%	3.95	1.19
Some known SMEs have shut down due to fraud loss	2.80%	6.40%	2.40%	41.60%	46.80%	100%	4.23	0.975
Outsiders collude with insiders to commit fraud	4.40%	10.4%	4.80%	41.60%	38.80%	100%	4	1.119
Many counterfeit/ poor quality goods are sold on	2.00%	6.40%	3.60%	43.60%	44.40%	100%	4.22	0.933
Fraud and limited experience cause failure	5.20%	11.2%	4.00%	38.80%	40.80%	100%	3.99	1.17

This study sought to establish the nature of fraud incidences experienced by the SMEs, shown in table 4.5. Among the 12 listed types of fraud, the most prevalent fraud was cash theft with 38% of the respondents reporting that they had experienced it. This was followed by false invoicing at 15% implying that false invoicing could be done to facilitate cash payments. Fraudulent financial

reporting ranked third, indicating that it could be supporting false invoicing schemes to process payments by falsifying accounting records to cover loss.

Table 4.5: Nature of Fraud Incidences

Type of fraud experienced	Frequency	Percentage
1 Fraudulent accounting	26	10%
2 Cash theft	94	38%
3 Stock pilferage	19	8%
4 Misappropriation of assets	7	3%
5 Collusion with external stakeholders	9	4%
6 Non-delivery of stocks	5	2%
7 Poor quality of stocks purchased	7	3%
8 False invoicing	38	14%
9 Payroll manipulation	11	4%
10 Bribery and corruption	15	6%
11 False credit references	9	4%
12 “Fake” supplies	10	4%
Total	250	100%

The above findings point towards cash being considered a high risk item due to its liquid nature. Issues relating to inventory followed, specifically false invoicing (14%), stock pilferage (8%), and poor quality supplies (4%). Activities aimed at concealing the occurrence of fraud, such as fraudulent financial reporting (10%), collusion (4%) and payroll manipulation (4%) also had a significant combined bearing on the results.

4.6 Management Structure and Fraud Risk

4.6.1 Descriptive Statistics

To determine whether management structure influences the level of fraud risk faced by FMCG-trading SMEs in Nairobi County, the respondents were asked to indicate their 'level of agreement' to statements provided using a Likert 1-5 scale with 1 being 'Strongly disagree', 2 being 'Disagree', 3 being 'Neutral', 4 being 'Agree' and 5 being 'Strongly agree'. From table 4.6; majority of the respondents agreed with the statements indicated by a mean of 4 across the statements.

Table 4.6: Management Structure and Fraud Risk

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total	Mean	Std Dev
There is work specialisation	2.80%	4.80%	2.80%	47.20%	42.40%	100%	4.22	0.923
The organisation structure is clear	1.20%	2.40%	2.80%	50.80%	42.80%	100%	4.32	0.75
Clear management has reduced fraud	4.00%	7.20%	2.00%	40.00%	46.80%	100%	4.18	1.052
There is appropriate span of control	1.20%	3.20%	4.40%	43.60%	47.60%	100%	4.33	0.805
Growth has led to more fraud risk	35.20%	27.60%	26.80%	7.20%	3.20%	100%	2.16	1.085
Formal operations and communications	2.40%	4.80%	2.40%	44.80%	45.60%	100%	4.26	0.906
Employees' roles are defined	2%	6%	2%	40%	50%	100%	4.3	0.927

4.6.2 Inferential statistics on the influence of management structure on fraud risk

From table 4.7 the correlation coefficient equal to 0.703 implies that management structure influences the level of fraud risk. The correlation of determination, R Square equal to 0.494 implies that management structure explain up to 49.4% of the variations in fraud risk at FMCGs SMEs in Nairobi County.

Table 4.7: Model summary

Statistic	Value
R	0.703
R Square	0.494
Adjusted R Square	0.489
Sig. (2-Tailed)	0.000

The coefficients in table 4.7 show that management structure contributes significantly to the model since their p-value of 0.000 is less than the 0.05 significance level. The positive coefficient equal to 0.467 is an indication that management structure move in the opposite direction with fraud risk. A 1 unit change in management structure leads to a decrease in fraud risk by 0.467 units. The model established hence becomes;

$$\text{Fraud Risk} = 0.668 - 0.467 \text{ Management Structure}$$

Table 4.8: Coefficients of Management Structure

Indicator	B	Std. Error	T	Sig.
Constant	0.668	0.208	3.211	0.000
Management Structure	-0.467	0.165	-2.830	0.000

4.7 Technology Adoption and Fraud Risk

4.7.1 Descriptive Statistics

To assess the contribution of technology adoption to the level of fraud risk at FMCG-trading SMEs in Nairobi County, the respondents were asked to indicate their ‘level of agreement’ to statements provided using a Likert 1-5 scale with 1 being ‘Strongly disagree’, 2 being ‘Disagree’, 3 being ‘Neutral’, 4 being ‘Agree’ and 5 being ‘Strongly agree’. As shown in table 4.8, majority of the respondents agreed with the statements indicated by a mean of 4 across the statements on the role of technology in mitigating fraud risks.

Table 4.9: Technology Adoption and Fraud Risk

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total	Mean	Std Dev
There is effective change management	1.20%	5.20%	4.00%	43.20%	46.40%	100%	4.28	0.862
There are uncontrolled system operations	25.60%	34.00%	8.80%	25.60%	6.00%	100%	2.52	1.281
Systems are formally implemented	2.40%	3.20%	2.00%	48.00%	44.40%	100%	4.29	0.853
Access to information is defined	1.60%	4.80%	2.80%	40.00%	50.80%	100%	4.34	0.873
We maintain audit trails	0.40%	2.00%	3.60%	44.00%	50.00%	100%	4.41	0.696
We manage system changeovers carefully	0.80%	5.60%	3.20%	44.40%	46.00%	100%	4.29	0.84

4.7.2 Inferential statistics on influence of technology adoption and fraud risk

From table 4.9, the correlation coefficient equal to 0.823 implies that technology adoption influence fraud risk. The correlation of determination, R Square equal to 0.677 implies that technology adoption explain up to 67.7% of the variations in fraud risk at FMCGs SMEs in

Table 4.9: Model summary

Statistic	Value
R	0.823
R Square	0.677
Adjusted R Square	0.672
Sig. (2-Tailed)	0.000

The coefficients in table 4.9 show that technology adoption contributes significantly to the model, since their p-value of 0.000 is less than the 0.05 significance level. The negative coefficient equal to 0.236 is an indication that technology adoption move in the opposite direction with fraud risk. A 1 unit change in technology adoption leads to a decrease in fraud risk by 0.236 units. The model established hence becomes;

Fraud risk = 1.332 - 0.236 technology adoption

Table 4.9: Coefficients of Technology Adoption

Indicator	B	Std. Error	t	Sig.
Constant	1.332	0.668	1.994	0.000
Technology Adoption	-0.236	0.165	-1.430	0.000

4.8 Risk Management Framework and Fraud Risk

4.8.1 Descriptive Statistics

To explore the contribution of the risk management framework on fraud risks among FMCG-trading SMEs in Nairobi County, the respondents were asked to indicate their 'level of

agreement' to statements provided using a Likert 1-5 scale with 1 being ' Strongly disagree', 2 being 'Disagree, 3 being 'Neutral', 4 being 'Agree' and 5 being 'Strongly agree'.

As shown in table 4.10, majority of the respondents agreed with the statements indicated by a mean of 4 across the statements on the role of risk management framework and fraud risks.

Table 4.10: Risk management framework and fraud risk

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total	Mean	Std Dev
There is a formal framework	0.80%	3.60%	6.80%	47.60%	41.20%	100%	4.25	0.798
There is a duty to identify and report	1.20%	3.20%	2.80%	47.20%	45.60%	100%	4.33	0.784
There is a regularly reviewed framework	2.00%	2.80%	3.20%	45.20%	46.80%	100%	4.32	0.832
Risks are reported to management	2.00%	3.20%	4.80%	40.40%	49.60%	100%	4.32	0.866
Fraud response plans exist	0.80%	3.60%	4.80%	46.40%	44.40%	100%	4.3	0.788
Employees know their anti-fraud role	0.40%	4.00%	3.20%	43.60%	48.80%	100%	4.36	0.765
There is an effective anti-fraud policy	2.00%	2.40%	7.60%	56.00%	32.00%	100%	4.14	0.81

4.8.2 Inferential statistics on the influence of Fraud Risk Management Framework on Fraud Risk

From table 4.11, the correlation coefficient equal to 0.776 implies that having a fraud risk management framework influences the extent of fraud risk. The correlation of determination, R Square equal to 0.776 implies that risk management framework explain up to 60.2% of the variations in fraud risk at FMCGs SMEs in Nairobi County.

Table 4.11: Model summary

Statistic	Value
R	0.776
R Square	0.602
Adjusted R Square	0.596
Sig.(2-Tailed)	0.000

The coefficients in table 4.11 show that a fraud risk management framework contributes significantly to the model since their p-value of 0.000 is less than the 0.05 significance level. The negative coefficient equal to 0.136 is an indication that risk management move in the opposite direction with fraud risk. A 1 unit change in fraud risk management framework leads to a decrease in fraud risk by 0.136 units. The model established hence becomes;

$$\text{Fraud Risk} = 0.467 - 0.136 \text{ risk management}$$

Table 4.12: Coefficients of Fraud Risk Management

Indicator	B	Std. Error	T	Sig.
Constant	0.467	0.235	1.987	0
Risk Management	-0.136	0.095	-1.432	0

4.9 Multiple Regression model without Moderating Variable

To find out the contribution of management structure, a risk management framework, technology adoption and capacity building on the level of fraud risk at FMCG-trading SMEs in Nairobi County, a joint model as indicated below was generated. From the regression table 4.12, the joint model influences the fraud risk. The correlation coefficient equal to 0.673 implies that the variables jointly influence the mitigation fraud risk. The correlation of determination, R Square equal to 0.453 implies that risk management framework, technology adoption, management structure and capacity building jointly explain up to 45.3% of the variations in fraud risk at FMCGs SMEs in Nairobi County. This implies that there are other factors that explain mitigation of fraud risks not covered in this study.

Table 4.13: Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.673 ^a	0.453	0.444	0.27986

Further review of the Anova table 4.13 indicates that the model is significant given the p value equal to 0.000 is less than the significance test of 0.05 used in this study.

Table 4.14: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.908	4	3.977	50.780	.000 ^b
Residual	19.188	245	0.078		
Total	35.096	249			

The coefficients in table 4.14 show that the joint model contributes significantly since their p-value of 0.000 is less than the 0.05 significance level. The negative coefficients equal to 0.122, 0.332, and 0.259 are an indication that management structure, technology adoption and risk management framework move in the opposite direction with fraud risk. A 1 unit change in management structure, technology adoption and risk management framework leads to a decrease in fraud risk by 0.122 and 0.332 units respectively. The joint model established hence becomes;

$$\text{Fraud Risk} = 7.557 - 0.122 \text{ Management Structure} - 0.332 \text{ Technology Adoption} - 0.259 \text{ Fraud Risk Management Framework.}$$

Table 4.15: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	7.557	0.257		29.346	0.000
Management Structure	-0.122	0.06	-0.128	-2.05	0.041
Technology	-0.332	0.063	-0.333	-5.281	0.000
Risk Management	-0.259	0.087	-0.21	-2.976	0.003

4.10 Multiple Regression model with Moderating Variable

To find out the contribution of the moderating variable (capacity building) on the relationship between management structure, technology adoption, fraud risk management framework and level of fraud risk at FMCG-trading SMEs in Nairobi County, a joint model as indicated below was generated. From the regression table 4.16, the joint model influences the fraud risk. The correlation coefficient equal to 0.742 implies that the with capacity building, variables jointly influence the mitigation fraud risk. The correlation of determination, R Square equal to 0.573 implies that when interacted with capacity building, a fraud risk management framework, technology adoption and management structure jointly explain up to 57.3% of the variations in fraud risk at FMCGs SMEs in Nairobi County. This implies that there are other factors that explain mitigation of fraud risks not covered in this study.

Table 4.16: Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.742 ^a	0.573	0.569	0.230463

The coefficients show that the joint model with moderating variable contributes significantly since the p-value of 0.000 is less than the 0.05 significance level. The negative coefficients equal to 0.214, 0.437 and 0.368 are an indication that management structure, technology adoption and fraud risk management framework when interacted with capacity building move in the opposite direction with fraud risk. A 1 unit change in management structure, technology adoption, and

fraud risk management framework leads to a decrease in fraud risk by 0.214, 0.437 and 0.437 units respectively. The joint model established hence becomes;

$$\text{Fraud Risk} = 6.652 - 0.214 \text{ Management Structure*Capacity Building} - 0.437 \text{ Technology Adoption*Capacity Building} - 0.368 \text{ Risk Management Framework*Capacity Building.}$$

Table 4.17: Coefficients

Model	B	Std. Error	t	Sig.
(Constant)	6.652	0.226	29.318	0.001
Management Structure*capacity building	-0.214	0.069	-3.08	0.001
Technology*capacity building	-0.437	0.069	-6.325	0.000
Risk Management*capacity building	-0.368	0.079	-4.674	0.000

4.11 Counter Fraud Measures

On the measures adopted by the FMCG SMEs to counter fraud, this study found that most of the SMEs are cost-conscious and have not invested in critical tools and technology to prevent, detect and eliminate fraud. From table 4.18 below, majority of the respondents standing at 41% have employed “lock and key” methods, 18% indicated that they have incorporated and prefer cashless sales with 11% indicating they have built capacity of their staff on fraud. This is a clear indication that SMEs in the FMCG sector have not prioritised tough measures to thwart fraud. Indeed a further review of table 4.28 indicates that very few SMEs have invested in technology to fight fraud. This implies that the SMEs in this sector will continue to struggle with fraud given that they have not employed strategic and proactive measures to prevent and detect fraud.

Table 4.18: Counter-Fraud Measurers

Counter-fraud measurers put in place by FMCG-trading SMEs in Nairobi County?	Frequency	Percentage
1 Clear segregation of duties	13	5%
2 Focus on cash management	2	1%
3 Training staff	25	11%

Counter-fraud measurers put in place by FMCG-trading SMEs in Nairobi County?

	Frequency	Percentage	
4	Implementing reporting financial systems	5	2%
5	Use of CCTV cameras and biometric access	20	8%
6	Cashless sales/ cash minimisation	46	18%
7	Periodic auditing	23	9%
9	Asset monitoring	3	1%
10	Close monitoring and tracking of stocks	10	4%
11	Locking up important documents	103	41%
	Total	250	100%

From the findings above, a combination of securing important documents, more digitisation and direct payment (rather than cash) and providing awareness to staff was found to be quite effective, with organisations having all three having these constitute 70% of their counter-fraud controls. Training was found helpful in checking against poor quality products, counterfeit money and potential fraud schemes (such as mobile money fraud schemes). Outsourcing financial procedures such as cash reconciliation was not popular and applied to the more established SMEs, potentially due to cash-flow limitations and the same arose for tagging of assets. An end-to end ERP to support the organisation's processes also ranked low as a counter-fraud measure, and this potentially arose due to the purchase and maintenance costs for such software.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study sought to evaluate the extent to which organisational factors contribute to the level of fraud risk faced by FMCG-trading SMEs in Nairobi County. The variables considered in this study included management structures, technology adoption, fraud risk management framework and capacity building. A summary of the study findings as well as recommendations are outlined in this chapter while suggestions for further studies are included as a way of filling the existing gaps in this area of study.

5.2 Summary of the Findings

Based on the research objectives, the responses from the respondents supported the study results as evidenced by measures of central tendency, percentages and frequencies. All the variables in this study were found to influence the level of fraud risk. Based on literature review and findings of the study, the researcher found out that all the respondents agreed that there were substantial fraud risks at FMCG trading SMEs, and that these are a concern that should be addressed. Despite the role played by SMEs in economies, a gap exists in helping the SMEs solve their existing problems, fraud risk being a key one. All of the factors that were studied were found to significantly affect fraud risk, with the contribution of each explained below. A key issue that was repeated by many respondents was that they had limited access to significant cash flow or know how on how to further reduce fraud risk; and they also confirmed that they considered the SME area to be riskier than more established businesses.

A review of the variables studied here in revealed that management structures explain up to 49.4% of the variations in fraud risk. This is in agreement with a study conducted by Possamai, Marschdorf & Stamler (2014) who found out that the level of fraud that an organisation faces is directly linked to its business structure. This finding further resonates with that of Vona (2012) who found that clear management structures and systems reduce the risk of fraud.

The study found out that technology adoption explains up to 52.7% of fraud risks in FMCG SMEs. This finding is in sync with that of Hall (2010) who found out that that the use of

technology to monitor and test compliance in organisations can improve adherence to operating policies and ensure minimal irregularity in operations. The findings are coherent with those of Zimbelman, Albrecht & Albrecht (2011) who found that migration by financial institutions assists in reducing potential fraud and theft and improving detection. These findings are further in agreement with those of Vona (2012) who found that given the contribution of electronic security system in guarding against fraud, investment in technology should be prioritised.

On the contribution of a risk management framework on fraud risk, the study found that it explains up to 60.2% of fraud risk at SMEs. These findings are in harmony with those of Spedding & Rose (2010) who found that risk management frameworks support an organisation through the development of policies, internal controls, procedures and structures to counter fraud. Ohando (2015) further affirmed the findings in this study in that he found that practices embedded on a risk management framework reduce fraud. Such practices include carrying out fraud risk assessments, establishment of strong internal controls and codes of conduct and related standards, employee and third party due diligence. On the same information relating to risk management and fraud risk, Treviño & Victor (1992) intimated that a strong risk management framework documents the responsibility for ensuring that the internal control environment is reassessed and for ensuring that the recommendations arising out of an assessment are implemented as a way of curbing fraud.

On the role of capacity building, capacity building alone may not necessarily curb fraud risk. The findings in this study resonate well with those of Dominic (2015) who found that organisations should build capacity of their staff in order to enable them report on frauds as well as mitigate possible chances of occurrence of frauds. These findings are also in agreement with those of Mbugua (2013) who found that capacity building in the financial sector deters and detects fraud but is a multiplying factor alongside other anti-fraud investments.

From the study results, the variables jointly explain up to 45.3% of the variations in fraud risk at FMCGs SMEs in Nairobi County.

5.3 Recommendations

Based on the study results, this study makes the following recommendations.

5.3.1 Contribution of management structures on level of fraud risk at FMCG-trading SMEs in Nairobi County

From the findings in this study, given that management structures significantly contribute to the fraud risks by up to 49.4%, it is recommended that FMCG SMEs should develop strong management structures that facilitate work specialisation, in order to create accountability and responsibility; thus deterring possible collusion among members of staff. A formal management structure that facilitates work specialisation (segregation of duties) was found to significantly affect the level of fraud risk at SMEs. It is noted that whereas formal structures may require additional investment in staff and roles, it is possible to achieve greater internal control through a careful assessment and transfer of sensitive responsibilities. Strong internal controls should therefore be effected across various areas of operation and operating structures should be formalised, communicated and be supported by clear job descriptions to enable members of staff to understand their roles and responsibilities. Further, the structures should outline the clear chain of command in with the primary investors having a role in critical decisions and should factor in an appropriate span of control for ease of staff and operations management.

5.3.2 Contribution of technology adoption on level of fraud risk at FMCG-trading SMEs in Nairobi County

This study found that technology adoption explains up 67.7% of fraud risk implying that technology plays a significant role in reducing the opportunities for fraud at SMEs. The key findings here were that a change in the financial/operating processes (and the knowledge on how to incorporate such change in the business) – even for basic adoption of mobile money payments, tends to create significant fraud risk; and therefore such processes should be well monitored. Technological innovations are plentiful and such systems get easier to use and cheaper to invest in day by day. A key role played by technology is in simplifying the reporting of financial transactions so that these can regularly be examined by management. Given the role played by technology, this study recommends that implementation of technology at SMEs should be well thought out and strongly controlled. Further, SMEs should implement commercially available systems to digitise their operations. The SMEs need to ensure that the technology rolled out has inbuilt internal controls with well managed override of exception and audit trails in all transactions.

5.3.3 Contribution of fraud risk management framework on level of fraud risk at FMCG-trading SMEs in Nairobi County

Given that fraud risk management frameworks explain up to 60.2% of fraud risk, this study recommends that all SMEs need to develop a fraud risk management framework that helps to identify risks affecting the SME operations and document them in a risk register. A counter-fraud risk framework need not be overly complicated and also need not factor in remote risks, but at a base level, the owners of the business should look into the likely sources of fraud and prepare a response plan on each potential fraud source, emphasising quick reaction and maintenance of evidence. The framework should have an evaluation criterion for prioritising fraud risks and also focus on deterrence through proactive measures. An effective fraud risk management framework will also factor in periodic sharing of information on fraud schemes, individual responsibility for fraud management and tested mitigation measures.

5.3.4 Contribution of capacity building on the mitigation of level of fraud risk at FMCG-trading SMEs in Nairobi County

The role of capacity building as a moderating variable was confirmed due to a 12.5% reduction in fraud risk across board when capacity building was assessed against management structure, technology adoption and risk management frameworks. The effect was strongest when capacity building was tied to the technology adoption, followed by risk management and finally management structure. This could be understood from the perspective of SME personnel being made aware of useful information, alongside implementing other measures to reduce fraud risk. The contribution of capacity building appears to be instrumental but it appears that SMEs have not focused on capacity building – evidenced by the lower focus on capacity building as a counter-fraud measure. This study recommends that SMEs need to develop specific fraud related training programs which dwell on potential sources of fraud (both internal and external) and is used to build up the risk management framework. Such approaches are common in more established businesses and will help in building organisational awareness.

5.4 Suggested Areas for Further Studies

This study focused on fraud risk at FMCG SMEs as a key challenge which is narrow compared to the myriad of challenges affecting SMEs. This study therefore suggests that future scholars should consider several insights. Firstly, a study linking maturity of the organisations to the fraud

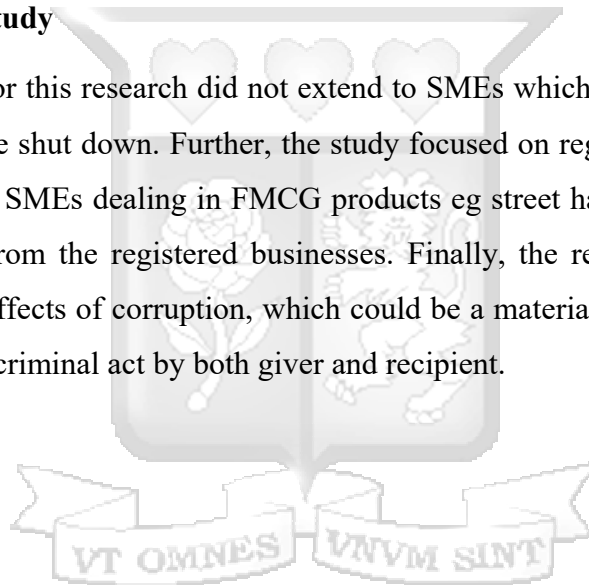
risks they have encountered and survived should be undertaken. This will enable entrepreneurs and policy makers to identify specific fraud related issues to look out for in each stage of the business lifecycle from establishment to maturity.

Secondly, there is a need to extend the research to those business ventures which have been so stricken by fraud that they have since shut down. Such research will assist entrepreneurs and policy makers to identify the fraud-related pitfalls that could have catastrophic consequences.

Other areas to consider include: The role of venture capital on growth of women-owned SMEs in Kenya and the Contribution of incubation programs on the performance of youth-owned SMEs in Kenya.

5.5 Limitations of the Study

The dataset considered for this research did not extend to SMEs which have been so affected by fraud that they have since shut down. Further, the study focused on registered businesses. There are numerous unlicensed SMEs dealing in FMCG products eg street hawkers, who may provide a different perspective from the registered businesses. Finally, the research did not involve a detailed analysis of the effects of corruption, which could be a material fraud risk but is delicate as it involves a potential criminal act by both giver and recipient.



REFERENCES

- Abdullahi, Mansor (2018). *Fraud prevention initiatives in the Nigerian public sector: Understanding the relationship of fraud incidences and the elements of fraud triangle theory*. Journal of Financial Crime, Vol. 25 Issue: 2, pp.527-544
- Abiola and Idowu (2009). *An assessment of fraud and its management in Nigeria commercial banks*. European Journal of Social Sciences, 2009
- Ajayi, O.A. (2002). *Development of Small-Scale Enterprises in Nigeria*. Being Paper Presented at Workshop on Grassroots Advocacy and Economic Development
- Albrecht, W. S., Albrecht, C. & Albrecht, C. C. (2008). Current Trends in Fraud and its Detection: A Global Perspective. *Information Security Journal* Vol.17. Retrieved from www.ebscohost.com on 11th June, 2014
- Albrecht, Williams and Wernz (1995), *Fraud: Bringing Light to the Dark Side of Business*, NCJRS Virtual Library
- Anamekwe, C. (2001). *Micro and Small-Scale Enterprises in Nigeria: Problems and Prospects*. Paper presented at Workshop on Grassroots Advocacy and Economic Development.
- Association of Certified Fraud Examiners (2010). Report to the Nations on Occupational Fraud. Retrieved May 26, 2014, <https://acfe.com/documents/2010RTTN.pdf>
- Auditing Standards Board (2002) Statement on Auditing Standards No.99: Consideration of Fraud in a Financial Statement Audit, American Institute of Certified Public Accountants (AICPA)

- Azende, T (2012). *Risk Management and Insurance of Small and Medium Scale Enterprises (Smes) in Nigeria*. Scientific & Academic Publishing
- Bailey, K (2008). *Methods of Social Research*. The Free Press
- Baker, T. L. (1994). *Doing social research (2nd ed.)*. New York, NY: McGraw-Hill, Inc
- Banks, E. (2003). *The Simple Rules of Risk: Revisiting the Art of Financial Risk Management*. West Sussex: John Wiley & Sons
- Berger, Allen N. & Udell, Gregory F. (2005). *A more complete conceptual framework for financing of small and medium enterprises*. Policy, Research working paper ; no. WPS 3795. Washington, DC: World Bank
- Bishop, T. J. (2004). *Preventing, deterring, and detecting fraud: What works and what doesn't*. Journal of Investment Compliance, Vol. 5
- Bowling, A. (1997). *Research Methods in Health*. Open University Press, Buckingham.
- Bradstreet, D. (2009). *Financial Risk Management*. New Delhi: Tata McGraw-Hill Education.
- Bryman, A. and Bell, E. (2007). *The ethics of management research: an exploratory content analysis*. British Journal of Management
- Bryman, A. and Cramer, D. (1997). *Quantitative data analysis with SPSS for Windows: A guide for social scientists*. New York: Routledge
- Burns, N. & Grove, S. (2003). *Understanding research 3rd Edition*. Philadelphia: WB Saunders Company
- Chartered Institute of Management Accountants. (2009). *Fraud Risk Management: A guide to good practice*

- Cheptumo, N. (2010) *Response strategies to fraud related challenges by Barclays Bank of Kenya*. University of Nairobi
- Chiezey, U., & Onu, A. J. (2013). Impact of fraud and fraudulent practices on the performance of banks in Nigeria. *British Journal of Arts & Social Sciences*, 15(1).
- Christoffersen, P. (2011). *Elements of Financial Risk Management*. Oxford: Academic Press.
- Cochran, W. (1977). *Sampling Techniques (3rd ed.)*. New York: John Wiley & Sons
- Cohen, Louis & Manion, Lawrence & Morrison, Keith. (2000). *Research Methods in Education*. London, Routledge
- Cooper, R. and Schindler, S. (2003). *Business research methods*. New York
- Cressey, D. R. (1953). *Other People's Money*. Montclair, NJ: Patterson Smith, pp.1-300.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.)*. Thousand Oaks, CA
- Cronbach, L. (1951). *Coefficient alpha and the internal structure of tests*. Springer
- Cunningham, L. and Rowley, C. (2008). *The development of Chinese small and medium enterprises and human resource management: A review*. Asia Pacific Journal of Human Resources
- Dawson, S., Breen, J. & Satyen, L. (2002). *The ethical outlook of micro business operators*. Journal of Small Business Management, 40(4):302-313
- Dixit, A. and Nalebuff, B. (1960). *Game theory*. Sweet & Maxwell Ltd London.
- Dominic, P. R. (2015). *The battle against fraud: do reporting mechanisms work?* John Molson School of Business, Concordia University, Montreal

- Dun, J. & S. Girma (2012). *Firm Size, Source of Finance, and Growth: Evidence from China*. International Journal of Economics of Business.
- E.H. Sutherland. (April. 1945. “Is ‘White Collar Crime’ Crime?” *American Sociological Review*, 10: 132-39).
- Gall, M. D. & Borg, W.R. (1996). *Educational Research: An Introduction* (6th ed). White Plains, NY: Longman Publishers USA
- Gee, S. (2014). *Fraud and Fraud Detection: A Data Analytics Approach*. New Jersey: John Wiley & Sons.
- Giles, S. (2012). *Managing Fraud Risk: A Practical Guide for Directors and Managers*. New Jersey: John Wiley & Sons.
- Githecha, D.K. (2013). The effect of fraud risk management on the financial performance of commercial banks in Kenya. *MSC Project*, University of Nairobi
- Glover, D. and Aono, J. (1995). *Changing the model for prevention and detection of fraud*. *Managerial Auditing Journal*, Vol. 10 Issue: 5, pp.3-9,
- Government of Kenya (2005). *Sessional Paper No. 2 of 2005 on Development of Micro and Small Enterprises for Wealth and Employment Creation for poverty reduction*. Nairobi: Government Printer
- Gwangwava, E. Manuere, F. Kudakwashe, G. Tough, C. & Rangarirai, F. (2014). *An Assessment of Risk Management Practices in Smes in Zimbabwe: A Review and Synthesis*. Chinhoyi University of Technology; School of business Sciences and Management
- Hall, J. (2010). *Information Technology Auditing*. Washington DC: Cengage Learning

- Heneman et al (2000). *Human Resource Management Practices in Small and Medium-Sized Enterprises: Unanswered Questions and Future Research Perspectives*. Entrepreneurship Theory and Practice
- Henschel, T. (2008). *Risk Management Practices of SMEs: Evaluating and Implementing Effective Risk Management Systems*. Berlin: Erich Schmidt Verlag GmbH & Co KG.
- Herbling, D. (2014). Price wars, fraud pushes 14 insurance firms into losses. The Business Daily Africa Newspaper.
- Hess, M. & Cottrell J. (2015). *Fraud Risk Management: A small business perspective*. Kelley School of Business, Indiana University
- Huang, S.Y. Lin, CC. Chiu, AA. et al (2016). *Fraud detection using fraud triangle risk factors*. Springer Science Business Media New York
- Idowu, A (2009). *An assessment of fraud and its management in Nigeria commercial banks*. European Journal of Social Sciences - Volume 10, Number 4
- Jack, B. & Clarke, A.M. (1998). *The purpose and use of questionnaires in research*. Edge Hill University
- Jessen, R. J. (1978), *Statistical Survey Techniques*. John Wiley and Sons, Inc
- Jiyaruth, C. Nabi, N.U. & Dornberger, U (2013). *The Effect of Technological Capability on the Performance of SMEs in Thailand*. The Macrotheme Review; A multidisciplinary journal of global macro trends
- Jorion, P. (2009), *Value at Risk*, McGraw Hill

- Kagwathi, S. Kamau, J. Njau, M. & Kamau, S. (2014). *Risks Faced and Mitigation Strategies Employed By Small and Medium Enterprises in Nairobi, Kenya*. IOSR Journal of Business and Management
- Kato, M. & Charoenrat, T. (2017). *Business continuity management of small and medium sized enterprises: Evidence from Thailand*. International Journal of Disaster Risk Reduction Volume 27, March 2018, Pages 577-587
- Kazooba, C. (2006). *Causes of Small Business Failure in Uganda: A Case Study from Bushenyi and Mbarara Towns*. African Studies Quarterly Volume 8, Issue 4
- Keren, M & Levhari, D (1979). *The Optimum Span of Control in a Pure Hierarchy*. Journal of Management Science. Vol 25 No.11
- Kiggundu, M. N. (1988). Africa. In R. Nath (Ed.), *Comparative management* (pp. 169-243). Cambridge: Ballinger
- Kiiru, W. K. (1991). *A review of the institutional lending to the jua kali and small enterprise sector in Kenya*, International Labour Organisation
- Kiragu, D. N., Wanjau, K. L., Gekara, M. & Kanali, C. (2013). Effects of bank growth on occupational fraud risks in commercial banks in Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1 (3), 469-480
- Klaus, H. & Oscar, K. (2008). *Design and analysis of experiments*. New York: John Wiley & Sons Inc
- Kombo, K. D. and Tromp, A. L. D. (2006). *Thesis writing: An introduction*. Nairobi: Pauline's Publication.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International

- Langseth, P., & Stapenhurst, R. (1977). *National Integrity System*. Washington DC: EDI
- Lanoué, N. & Dominic, PR (2015). *Cutting fraud losses in Canadian organizations*, Journal of Financial Crime, Vol. 22 Issue: 3, pp.295-304
- Lavrakas, P.J. (2008). *Encyclopedia of survey research methods*. Sage Publications, Inc., Thousand Oaks.
- M. Kilmer, & D. O’Leary (2001). *Choosing regularisation parameters in iterative methods for ill posed problems*. SIAM-J
- Lee, S. Lim, S. Pathak, R. Chang, D. & Li, W (2006). *Influences on students’ attitudes toward entrepreneurship: a multi-country study*. The International Entrepreneurship and Management Journal, 2(3): 351-366
- Longenecker, J. et al (2006). *Ethical Attitudes in Small Businesses and Large Corporations*. Journal of Small Business Management 2006 44(2), pp. 167–183.
- Mackevicius, J., & Giriunas, L. (2013). Transformational Research of the Fraud Triangle, ISSN Vol. 92(4) *EKONOMICA*, pp. 150-163.
- Mambula, C. (2002). Perceptions of SME growth constraints in Nigeria. *Journal of Small Business Management*, 40(1), 58-65.
- Man, M.M.K, and Wafa, S.A. (2008). *Distinctive Capabilities and The Performance of Small and Medium-Size Enterprises (SMEs) in Malaysia*. International Business & Economics Research Journal
- Marchetti, A. (2011). *Enterprise Risk Management Best Practices: From Assessment to Ongoing Compliance*. New Jersey: John Wiley & Sons.

- Marczyk, G. Dematteo, D. & Festinger, D. (2005). *Essentials of behavioral science series. Essentials of research design and methodology*. Hoboken, NJ, US
- Mbuguah, C. (2013). *Response strategies to fraud by the listed commercial banks in Kenya*. University of Nairobi
- Miller, K.D (1992). *Journal of International Business Studies* 23(2), 311-331.
- Miller, N.J., Besser, T.L., Gaskill, L.R., & Sapp, S.G. (2003). Community and managerial predictors of performance in small rural US retail and service firms. *Journal of retailing and consumer services*, 10(2003):215-230
- Mugenda, O. M. and Mugenda, A. G. (2003) *Research Methods, Quantitative and Qualitative Approaches*. ACT, Nairobi.
- Murray, J. G. E. (1958). *Some aspects of fraud, control and investigation*. The Journal of Criminal Law, Criminology, And Police Science, vol. 49, no. 1, pp. 78-88.
- Nairobi City Council, Business Licensing Department (2018). *Business list*. Retrieved from http://www.nairobi.go.ke/index.php?option=com_content&view=article&id=158&Itemid=295
- Newing, H. (2011) *Conducting research in conservation: a social science perspective*. Routledge, England
- Nieman, G. Hough, J. & Nieuwenhuizen, C., (2003). *Entrepreneurship: a South African perspective*. Pretoria: Van Schaik

Njagi, L. (2009), *Effectiveness of Know Your Customer (KYC) Policies Adopted by Commercial Banks in Kenya in Reducing Money Laundering and Fraud Incidences*. University of Nairobi

O' Bell, E. (2009). *5 Anti Fraud Strategies to Deter, Prevent and Detect Fraud*’, Corporate Compliance Insight (<http://www.corporatecomplianceinsights.com/2010/internal-control-checklist-deter-prevent-detect-fraud>)

Ogechukwu, A. D. (2011). *The role of small scale industry in national development in Nigeria*. Universal Journal of Management and Social Sciences

Ohando, R. (2015). *Relationship Between Fraud Risk Management Practices And Financial Performance Of Commercial Banks In Kenya*. University of Nairobi

Okech, B. Mitullah, W. V. & Atieno, R (2002). *Linkages between Small and Large Firms in the Kenyan Food Processing Sector*. Cheltenham

Olaniyan, T. O. and Kolapo, F. T. (2018). *The Impact of Fraud on the Performance of Deposit Money Banks in Nigeria*. International Journal of Innovative Finance and Economics Research

Perks, S. & Struwig, M. (2005). *Skills Necessary to Grow Micro Entrepreneurs into Small Business Entrepreneurs*. South African Journal of Economic and Management Sciences, N.S., 8(2):171-186

Polit, D. F. & Beck, C. T. (2003). *In Nursing Research: Principles and Methods*. Philadelphia: Lippincott Williams & Wilkins

Pop, J. (2002). *Confronting corruption. The elements of a national integrity system*. London: Transparency International

- Possamai, M., Marschdor, H., & Stamler, R. (2014). *Fraud Prevention and Detection: Warning Signs and the Red Flag System*. Florida: CRC Press.
- Pretorius, M., van Vuuren, J. J. & Nieman, G.H. (2005). Critical evaluation of two models for entrepreneurial education: An improved model through integration. *The International Journal of Educational Management*, 9(5):413-427 (Pretorius et al, 2005b).
- Raju, K., Kanaka, Murthi, K., Ramana. (2015). *Journal Of Business Management And Economics 3 : 2 February (2015) 14 -19*.
- Riley, R., & Rezaee, Z. (2009). *Financial Statement Fraud: Prevention and Detection*. New Jersey: John Wiley & Sons.
- Ruin, J. E. (2009). *Internal auditing: Supporting risk management, fraud awareness management and Corporate Governance*. Leeds Publications
- Rwigema, H. & Venter, R. (2004). *Advanced Entrepreneurship*. Cape Town: Oxford University Press.
- Sarndal, C. Swensson, B. & Wretman, J. (1992). *Model assisted survey sampling*, New York
- Saunders, M. Lewis, P. & Thornhill, A. (2009). *Saunders, Lewis & Thornhill*. Financial Times/Prentice Hall
- Schwab, D.P. (2005). *Research Methods for Organizational Studies (2nd ed.)*. Lawrence Erlbaum
- Sekaran, U. (2006). *Research methods for business: A skill building approach*. John Wiley & Sons.

- Shaio, Chi-Chen, An-An, Yen (2016). *Fraud detection using fraud triangle risk factors*. Information Systems Frontiers, Springer, vol. 0, pages 1-14
- Singleton T.W, Singleton A.J, Bologna G.J & Lindquist R.J (2006). *Fraud Auditing and Forensic Accounting*, 3rd ed, New Jersey, John Wiley & Sons.
- Small Business Administration. (2003). Definition of Small Business in the United S States: Frequently Asked Questions. *US Small Business Administration* (<http://www.sba.gov/faqs/>)
- Sow and others (2018). *Fraud prevention in Malaysian small and medium enterprises*: Journal of Financial Crime, Vol. 25 Issue: 2, pp.499-517
- Spedding, L., & Rose, A. (2010). *Business Risk Management Handbook: A Sustainable Approach*. Burlington: Elsevier.
- Sule, E.I.K. (1986). Small-Scale Enterprises in Nigeria: Concepts, Appraisals of some Government Policies and Suggested Solutions to Identified Problems. *Economic and Financial Review*. Central Bank of Nigeria, Vol. 24/4, pp.24.
- Sutherland, E.H. (1945). *Is "White Collar Crime" Crime?* American Sociological Review, 10, 132-139. Retrieved from <http://www.asanet.org/journals/asr/>
- Thomas, J.C. (2008). *Ethical Integrity in Leadership and Organizational Moral Culture*. SAGE Publications, 4 (4): 419-442
- Tomecko, J. and Dondo, A. (1992). *Improving the potential of small scale and informal sector*. Kenya Rural Enterprise Programme

- Treviño, L. K. & Victor, B. (1992). *Peer reporting of unethical behavior: A social context perspective*. Academy of Management Journal
- Turner, C. (2007). *Fraud Risk Management: A practical guide for accountants*. Burlington: Elsevier.
- Turyakira (2018). *Ethical practices of small and medium-sized enterprises in developing countries*. South African Journal of Economic and Management Sciences
- Tushabomwe-Kazooba, C. (2006). Causes of Small Business failure in Uganda: A Case Study from Bushenyi and Mbarara Towns. *African Studies Quarterly*, 8(4). Retrieved from <http://web.africa.ufl.edu/asq/v8/v8i4a3.html>
- Vilakazi & Roberts (2018). *Cartels as 'fraud'? Insights from collusion in southern and East Africa in the fertiliser and cement industries: Journal of the Review of African Political Economy December 2018*
- Vona, I. W. (2008). *Fraud Risk Assessment: Building a Fraud Audit Programme*: Hoboken, New Jersey: John Wiley and Sons.
- Vona, L. (2012). *Fraud Risk Assessment: Building a Fraud Audit Program*. New Jersey: John Wiley & Sons.
- Waneaba, M. (2010). *Strategies applied by Commercial Banks in Kenya to Combat Fraud*. Unpublished MBA project, University of Nairobi
- Wanjiku, L. N. (2009). *An investigation into management strategies affecting performance of micro, small and medium enterprises (MSMEs) in Kenya*. University of South Africa, Pretoria

Webster's New Collegiate Dictionary (1997, 1976, 1941).

Wells Joseph T. (2007). *Corporate Fraud Handbook – Prevention and Detection, 2nd Edition*,
John Wiley & Sons

Wells, J. T. (2005). Principles of fraud examination. Hoboken, N.J.: John Wiley & Sons Inc.

Wells, J. T. (2011). *Corporate Fraud Handbook: Prevention and Detection: 3rd Edition*:
Hoboken, New Jersey: John Wiley & Sons Inc.

Wesley, K. (2004). *The fraud management lifecycle theory: A holistic approach to fraud
management*. *Journal of Economic Crime Management*

Wilhelm K.W (2004). The Fraud Management Life Cycle Theory, a Holistic Approach to Fraud
Management. *Journal of Economic Crime Management*.

Wilson, I. (2007), Regulatory and institutional challenges of corporate governance in Nigeria
post consolidation. *Nigerian Economic Summit Group (NESG) Economic Indicators*,
April-June, Vol. 12, No 2

Wolfe, D., & Hermanson, D. R. (2004). The fraud diamond: Considering four elements of fraud.
The CPA Journal, 74 (12), 38-42.

Park, M. G. & Yang, M. (2008). *Ridge Regression Estimation for Survey Samples*.
Communications in Statistics-theory and Methods. DOI 37:4, 532-543

Yusuf, T. O. & Dansu, F. S. (2013). *SMEs business risks and sustainability in Nigeria*. *European
Journal of Business and Social Sciences*, Vol. 2 (9) pp 76 – 94.

Zikmund, W. G. Babin, B. J. Carr, J. C. & Griffin, M. (2010). *Business Research Methods (8th
ed.)*. Mason, HO: Cengage Learning.

Zimbelman, M., Albrecht, C., & Albrecht, C. (2011). *Fraud Examination*. Washington DC:
Cengage Learning.

Zuberi (2018). Analysis of employee and management fraud in Tanzania: University of Dar es
Salaam Business School



APPENDICES

Appendix I: Letter of Introduction



Appendix II: Questionnaire

