# INFLUENCE OF INTERNAL CONTROLS ON FINANCIAL PERFORMANCE OF MEDIUM ENTERPRISES IN FOOD MANUFACTURING SECTOR IN

NAIROBI COUNTY

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# A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS DEGREE IN BUSINESS ADMINISTRATION OF KENYA METHODIST UNIVERSITY

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# DECLARATION

I declare that this is my original work and that it has not been presented in any other university for examination purposes.

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# DEDICATION

To my mum Lucy Wambui Ngaruiya for her great role in managing our family business.

## ACKNOWLEDGEMENTS

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#### ABSTRACT

Businesses across the world are faced with the threat of failure with a majority of them not surviving their third anniversary. The majority of these challenges are fraud-related and could be avoided if a strong internal control system is put in place. The study's main aim was to establish how the financial performance of MEs in the food manufacturing sector in Nairobi County was influenced by internal control. The objectives of the study were to establish the influence of cash reconciliations, segregation of duties, inventory audit, cost management, and risk assessment on the financial performance of SMEs in the food manufacturing sector in Nairobi County. The study was descriptive, the study's target population included 95 MEs in the areas of the food processing sector. The sample for the population was 77 MEs obtained through the Yamane formula at a margin error of 5%. Data for the study was collected using a questionnaire through the in-person drop and pick method. The study obtained secondary data from the financial statements of the companies on revenues as well as net profit earned. Collected data was then analyzed through descriptive analysis and inferential analysis using SPSS. Presentation of the results was done on tables and narratives. Descriptive analysis revealed that the majority of food manufacturing companies in Nairobi carry out routine cash reconciliations, they keep proper cash reconciliation records and have real-time cash registers and bank alert messages on transactions as internal cash controls. The study also found that manufacturing companies in Nairobi County have allocated more than one person to authorize the payment. The study found that many companies in the manufacturing industry in Nairobi County carry out inventory audit regularly. The study also revealed that food manufacturing companies in Nairobi County have cost management internal control practices that involve budgeting and comparison of budgets with actual spending, besides the company outsources materials and services from the cheapest suppliers that have enabled them to save profound amounts. The study finally found that risk assessment as an internal control is carried out among food manufacturing companies in Nairobi County through the identification of risks, conducting risk evaluation, and analysis of risks to establish benefits. Regression analysis revealed a significant influence of cash reconciliation on financial performance; the study also revealed a significant influence of the segregation of duties on financial performance. Further, inventory audits were found to have a significant influence on financial performance. Besides, the study revealed that cost management significantly influenced the financial performance of food manufacturing companies in Nairobi County. Finally, the study revealed that risk assessment significantly influenced the financial performance of food manufacturing companies in Nairobi County. The study concluded that cash reconciliations, segregation of duties inventory audits, cost management, risk assessment as internal control practices had a positive and significant influence on the financial performance of food manufacturing companies in Nairobi County. The study recommended for the manufacturing MEs in Nairobi County to keep petty cash records for reconciliation, reconcile payment receipts and invoice records and conduct ad-hock cash checks. The study also recommended better communication of job responsibilities to the employees. The study further recommended an increase in the number of stock-taking times in a year. The study also recommended the introduction of cost budgetary reviews. The study finally recommended the allocation of an optimal amount of financial resources for resources assessment.

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# ABBREVIATIONS AND ACRONYMS

CCTV	<b>Closed Circuit Television</b>
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- **GDP** Gross domestic product
- ICS Internal control system
- ICT Information communication and technology
- MEs Medium enterprises
- MEs Medium enterprises
- USA United States of America

#### **CHAPTER ONE**

## **INTRODUCTION**

#### 1.1 Background of the Study

Internal controls of an organization are defined as the practices, policies, and behaviors that an organization instills to respond to the operational, business, compliance, and other forms of risks that an organization needs to take care of to effectively and efficiently carry on its business and remaining a performing business. For the ultimate purpose of safeguarding a company's assets, an organization needs to instill discipline through policies and a regulatory framework that safeguards loss through loss or fraud (Ewert & Wagenhofer, 2016). The efforts include maintaining proper books of accounts and creating accountability for any particular transaction including incurring liability, these efforts ensure compliance with the standard internal control policies set up by the firm's management. Internal control is part of management that ensures that an organization is always steered towards achieving its goals and objectives. However, there are chances always that there is the risk of the company staff not adhering to the policies resulting in financial loss or a company failing to undertake some projects as a result of financial misappropriation (Ewert & Wagenhofer, 2016).

The ultimate decision of internal controls rests on the management department. The management decisions come up with financial plans to attain achieve the objectives and goals of the organization. Controls assists in ensuring that the goals are smoothly achieved in the organizations by instilling checks and monitoring the progress of the plans. Controls in institutions are carried out through the introduction of ad-hock checks, carrying out appraisals to check on performances. Controls are mainly carried out to ensure that the

employees do not conduct unethical practices that can result in an organization losing its money or causing reputational issues (Asiligwa & Rennox, 2017).

Small and medium enterprises are in most cases left to the management that has been employed by directors to create wealth for them. However, this is not always the case because some managers pursue personal interests leading to financial losses, this is explained in detail under the agency theory. A weak internal control is evident where there lacks good segregation of duties, no register for cash reconciliation, lack of auditors, no budgets for expenditure, lack of stock-taking, and controls. Management of organizations also needs to put in place policies and practices geared towards safeguarding the assets of the company through proper bookkeeping. An organization that prepares financial statements and reports that are flawless and authentic in such a way that they cannot lead to the risk of financial loss through a misguiding financial statement among investors is a good practice of internal control guided by contingency theory (Ewert & Wagenhofer, 2016).

KPMG's Fourth Fraud Survey Report in Malaysia 2019 noted that incidences of frauds among Malaysian SMEs were likely to increase where internal controls were weak, among the survey 91 firms in manufacturing sectors noted that petty cash was mainly the form of fiancé most likely misappropriated by financial managers in these firms with vouchers claims on non –incurred expenses on transport and hospitality (Wen et al., 2019).

According to Chen et al. (2017), many SMEs in China, Germany, and the United States of America lacked appropriate risk detection mechanisms and response mechanisms. Many of the business lacks physical risk control and among 67% of the surveyed enterprises failed to acknowledge strengthening of internal controls as an important practice in ensuring sound financial performance in these organization, some of the surveyed institutions also lacked CCTV mechanism for human resource management on the control and monitoring of employees activities. Financial managers in the surveyed organizations noted that having effective internal control was an expensive affair that did not guarantee results (Ghafoor et al., 2019).

The United States of America (USA) noted that the presence of a having an internal control system that is weak or lacking the internal control system completely is the major cause for fraudulent financial reporting in both the private and public sectors. Processing fraudulent expenditure and lack of an internal control system on the procurement practices result in the loss of public fiancé or acquisition of projects that do not give value for the money in the public sector mainly referred to as corruption (Gee et al., 2019).

According to Ahmed et al. (2018) who studied the role of the orientation of entrepreneurship on the financial performance of South African SMEs noted that SMEs in South Africa were at the front in the provision of decent jobs among the citizen, they noted that out of 10 jobs created in the country 8 came from the private sector, therefore calling for the best entrepreneurial qualities including risk alertness in ensuring that the company was safe from both internal and external risk and aggression. 57% of the surveyed entrepreneurs revealed they had experienced some sort of fraud being commitment at some point in time by their employees including shoplifting or cooked financial statements.

Olufunmilayo and Hannah (2018) noted that at Cadbury in Nigeria back in 2006 the top management including the managing director and the chief fiancé officer were dismissed as a result of fraudulently declaring higher profits for the company that it was the case.

The misleading financial reporting was done before a foreign company acquired it meaning therefore that they were misled by the high profits declared. A company needs to have appropriate internal checks and controls that are regular so that the directors of a company and investors get the true position and financial picture before making key investment decisions. Adopting international financial reporting standards (IFRIS) that ensure proper verification procedures and accounting guidelines are followed to the letter ensures that a company instills appropriate good accounting practices including proper inventory controls, cash reconciliation well-segregated duties, and presence of a risk assessment and response procedures.

Agbenyo et al. (2018), noted that strong internal controls acted as deterrence to frauds and financial loss whereas in areas with weak internal controls this acted as avenues for frauds in small and medium enterprises in Ghana. The study noted that an internal audit department existed in these institutions however this did not have a direct positive effect on the financial performance of these enterprises, the available rules and regulations only helped in ensured that rules are followed in procurement guidelines but did not prevent financial misappropriation, it was also evident that despite the existence of the rules some people in the organization did not follow them.

In Kenya major companies have reported high financial losses and declining profits as a result of fraud, corruption and other financial irregularities among these companies are Kenya airways, Uchumi supermarkets, Mumias sugar companies, and others that have losses in billions and millions, on the other hand, banks including Eco bank, Dubai bank and imperial banks have completely collapsed as a result of fraudulent activities resulting from the presence of weak internal controls or complete absence of it (Koech, 2018).

Julie (2019) sought to determine how the financial performances of SMEs in Kisumu County were influenced by internal controls. It was revealed that the majority of the companies lacked an internal control department and if available they lacked personnel with adequate skills and competencies to prevent or respond to fraudulent activities, the departments also lacked financial resources to effectively respond to the challenges. The effect of the weak internal control department was possible collusion between employees to commit fraud, loss of collected revenues, and petty cash. Njiru (2016) noted that the financial performance of companies listed with the Nairobi stock exchange was positively and significantly influenced by strong internal controls. Through strong internal control, the companies were able to observe high levels of integrity, ethical values, risk assessment, monitoring, and evaluation, appraisal of projects, therefore, the improvement in financial performance.

Bett and Memba (2017) studied internal controls in the manufacturing sector in Kenya. The study noted that organizations with strong ethical values that allowed rules and regulations and had internal audit departments, and carried out frequent risk appraisals resulted in better financial performance, unlike the ones that had weak internal controls. Mogunde (2016) noted that cement manufacturing companies in Kenya deliberately lacked an audit team and where it existed the staff was ill-equipped which resulted in frequent fraudulent activities that resulted in the financial loss in the companies. Njiru and Bunyasi (2016) studying the influence of internal controls on the performance of water companies in revealed that a strong internal control environment, presence of internal auditors, and risk management department resulted in better financial performance.

According to the Kenya Economic Survey (2019), the manufacturing sector contributed to about 12.5% of the country's GDP. The sector recorded positive growth in number by about 5% which resulted from favorable legislative policies including exemption of value-added tax on imported raw materials and availability of capital allowances on imported heavy manufacturing machinery.

#### **1.1.4 Internal Controls**

Internal controls are mainly classified broadly into three major groups to include: preventive controls, detective controls, and corrective controls. Corrective controls include internal measures put in place to ensure that occurrence of errors and frauds are addressed before they happen including omissions or errors they can be addressed through avoidance or committing to carry out activities right included in this group are measures such as risk assessment and prevention also included is proper budgeting to avoid variances as well as segregation of duties to avoid a collision as well as to avoid putting all resources in an organization under the supervision of a single person (Gichana et al., 2016).

Detective controls are measures that are taken to make sure that an error or a fraud that has already taken place is addressed and necessary action is taken including disciplinary action, detection error is revealed through stock-taking controls, cash controls. Corrective controls are measures that are taken to make sure that improvements are done on detected errors (Wen et al., 2019).

#### **1.1.5 Financial Performance of Manufacturing Firms**

In manufacturing organizations, financial performance can be improved through the reduction of wastage in the production process. The critical success factors in a

manufacturing organization fall within the ability to be economical and efficient in the whole production line. Financial statements and reports prepared by the organization provide crucial information relating to performance, such information including sales revenues and profits levels are important in communicating key information that guides decision-making among investors (Gee et al., 2019).

Appraisal carried out by organizations helps in establishing whether the business is obtaining the value for the money it has invested in acquiring raw materials as well as investing in capital expenditures and investment. Shareholders need to be sure that their resources are utilized in the right way and that no acquisition of either inputs or equipment is done beyond its right desired market or intrinsic cost (Deno & Flynn, 2018).

### **1.1.1 Internal Controls and Financial Performance**

Internal controls are key ingredients in assuring better financial performance in an organization. Through strong internal controls, organizations can account for all money in the organization with proper bookkeeping. Investors also keep on getting assured that they are investing in an organization that keeps the book in a true and fair view. The Appraisal of proper financial management is guided by the kind of financial statement preparation. Where frauds have detected a weakness in internal control is also evident, therefore a call to strengthen the internal controls to safeguard business assets (Ghafoor et al., 2019).

An organization that has in place a strong internal control whereby laid down policies and procedures are followed to the letter is a guarantee to a company meeting its financial return projections s all loose ends of frauds are sealed. Management efficiency is portrayed through the strength of internal controls (Ahmed et al., 2018)

#### 1.1.2 Manufacturing Sector in Kenya

The manufacturing sector in Kenya has remained a key player in the economic growth of the economy. The manufacturing sector contributes about 25% of the country's GDP and also provides about 12% of jobs in the country. The manufacturing sector has continued to improve drastically as a result of good power supply, good tax policies that included removal of duties on the importation of raw materials, allowance on capital expenditure, and also tax holidays on first few years of operation to encourage exports and boost to the manufacturing sector (Kenya National Bureau of Statistics [KNBS], 2019).

Agriculture remains a key sector in Kenya since independence. The food manufacturing sector contributes 11% of the countries gross domestic product (GDP), with this sector being the major contributor to industrial realization. Food manufacturing further employs more than 13% of the total country's employment sector. There are more than 1200 companies in Kenya producing food and beverages. Main products include fish, cereals, and beverages (Were, 2016).

Food processing in Kenya has remained the backbone of the economy since independence and contributes 33.4% of jobs in the sector of manufacturing. The food processing covers foods and beverages which are further broken down into dairy, nuts vegetable oil, grain milling, fruits and vegetables, beverages, baking, and confectionery, meat, fish, mushrooms, nuts, and honey. The industry controls 27.5% of the manufacturing sector in Kenya (Odhiambo, 2016).

#### **1.2 Statement of the Problem**

Internal control plays a crucial role in the assurance of relevant and accurate financial statements for an organization (United Nations Industrial Development Organization

[UNIDO], 2020). The rapid changes in the economic and the competitive world have resulted in the organization restructure and adopt new changes which have resulted in the strengthening and renewal in managing internal controls. At all levels of the organization, all employees need to be well informed on how to handle risks to enable the company to realize its financial and non-financial goals (Alzeban & Sawan, 2017).

However, the expectations of good internal controls are not always realized. Many organizations have even collapsed as a result of few employees pursuing selfish interests such as awarding their close relatives and friends' contracts for the supply of raw materials at unreasonably high prices causing financial loss to companies. The implication of such canvassing has resulted in a high cost of production and low profits. Other incidences involve loss of stock while in the warehouse which in most cases has been an inside job. Besides, the financial managers have in most instances failed to carry out proper planning such preparing budgets such as purchases budgets resulting in the manufacturing companies paying more than normal market rates (Ghafoor et al., 2019). Ghafoor et al. (2019), revealed that 67% of companies in Malaysia failed due to fraud-related activities among emerging markets which have return resulted in more enforcement practices.

The debate on internal controls and the financial performance of medium firms has continued to yield contradicting results. Koech (2018) revealed that cost management and segregation of duties did not significantly influence how consulting firms in Kenya perform. Bett and Memba (2017) revealed that cash control and assessment of risk measures were significant in the performance of medium enterprises in the construction industry, firms' characteristics as mediating variables did not reveal any significant intervention. Akimana (2019) revealed that medium enterprises in the textile industries

considered internal controls (cash controls, cost management, and segregation of roles) as significant influencers of their financial performance. Ngari (2017) who sought to determine how the financial performance of Kenyan microfinance institutions was affected by internal controls revealed that some internal controls including cash reconciliation and segregation of duties significantly influence the financial performance. It is, therefore, clear that no single study points out in a single direction the influence that components of internal controls have on the financial performance of medium enterprises as there is yet no generalization of the influence of internal controls on the performance of medium enterprises. Due to the nature of manufacturing companies outsourcing raw materials for production, purchase orders are manipulated or stock is lost at go-downs and warehouses without a proper tracking record of at which stage it disappeared. On the other hand, petty cash on small transactions relating to the purchase of stationery and running of errands is another cash- cow for people handling cash (Odhiambo, 2016). It is therefore important to reveal the internal controls therein manufacturing and the influence they have on the financial performance of manufacturing medium enterprises in Nairobi County. The current study, therefore, sought to answer the question: Which are the internal factors influencing the financial performance of manufacturing medium enterprises in Nairobi County?

#### **1.3 Research Objectives**

#### **1.3.1 General Objective**

To establish the influence of internal controls on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county

## **1.3.2 Specific Objectives**

- i. To establish the influence of cash reconciliations on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county
- To assess the influence of segregation of duties on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county
- iii. To establish the influence of inventory audit on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county
- iv. To determine the influence of cost management on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county
- v. To assess the influence of risk assessment on the financial performance of medium enterprises in the food manufacturing sector in Nairobi county

#### **1.4 Research Hypotheses**

HO1: Cash reconciliations do not significantly influence the financial performance of medium enterprises in the food manufacturing sector in Nairobi County?

HO2: Segregation of duties does not significantly influence the financial performance of medium enterprises in the food manufacturing sector in Nairobi County?

HO3: Inventory audits do not significantly influence the financial performance of medium enterprises in the food manufacturing sector in Nairobi County?

HO4: Cost management does not significantly influence the financial performance of medium enterprises in the food manufacturing sector in Nairobi County?

HO5: Risk assessment does not significantly influence the financial performance of medium enterprises in the food manufacturing sector in Nairobi County?

#### **1.5 Significance of the Study**

The current study is of great significance to future scholars and management and policymakers in the manufacturing businesses in Nairobi County.

#### **1.5.1** Finacial managers in food manufacturing firms

The study was of value to financial managers on the best practices and policies to adopt on the internal control system to ensure that the manufacturing companies introduce best practices to prevent fraud and also respond effectively.

#### **1.5.2 Future Scholars**

The study is also significant among future scholars since they can use the empirical findings of the current study to build on their studies in the same line of study on internal controls.

#### **1.6 Scope of the Study**

Five internal control aspects were considered for this study, i.e., cash reconciliations, segregation of duties, inventory audit, cost management, and risk assessment. The study focused on manufacturing medium enterprises carrying out food production within Nairobi City County: Flour Milling, cooking oil, and milk processing. Besides, the study was conducted within six months as guided by the University.

#### 1.7 Limitations and Delimitation of the Study

The study was carried out during a time when the world is grappling with COVID-19. Some of the respondents were not allowing visitors to their premises, therefore the researcher was not able to collect data from all the respondents as was anticipated. However, the researcher was able to collect a substantial amount of data from the field by observing all the COVID-19 issued by the Ministry of Health including; wearing of mask when in public all the time, sanitizing, and keeping of social distance, by doing so the respondents were encouraged to participate in the study.

Some of the respondents also did not want to give us an audience because they suspected we could use the information collected from their business to give to the employees or a competitor. However, the respondents were assured by the researcher that the information collected was only for academic purposes, the researcher besides produced a letter from NACOSTI and from the school to build confidence among the respondents who feared that the information might give an advantage to competitors or people with intention of sabotaging their internal controls.

## **1.8 Definition of Key Terms**

#### **Internal controls**

Internal controls refer to a set of rules, practices, and procedures designed by the board of directors, top management, and employees of a particular organization to achieve some set goals, compliance with the set guidelines such as accounting policies to effectively and efficiently run an organization including routine rotational of duties, arithmetic checks, financial recording, segregation of duties and regular reconciliations (Ewert & Wagenhofer, 2016).

#### **Segregation of duties**

Refers to the assigning of roles to several people to complete a single transaction, the main goal is to avoid manipulation by adhering to checks (Ewert & Wagenhofer, 2016).

## **Cash Reconciliations**

Refers to the arithmetic check on the cash at hand cash at bank balances at the end of a transaction or on regular basis, such practices require an independent person to do it to

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avoid collusion between employees in an organization. Withdraws of money from the banks should be authorized by a party different from the custodian of such cash and rotation of duties to avoid the possibility of collusion (Wen et al., 2019).

#### **Inventory control**

Inventory controls refer to procedures that ensure that stock levels are right at any particular time, the procedures involve physical controls to avoid possible theft as well as having a computerized check by the auditor that should always add up with the physical and manual tally procedures (Gee et al., 2019).

# **Financial performance**

Financial performance indicates what the organization has achieved in terms of profitability, liquidity (ability to meet short-term liabilities), and operational efficiency (Ewert & Wagenhofer, 2016).

## **Medium Enterprises**

According to Wen et al. (2019), a medium enterprise refers to businesses whose turnover in a given year ranges between 5 million and 800 million and employs between 50 and 99 employees.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

Chapter two contained the theoretical review, past empirical review, research gaps, and critical review of documented literature, conceptualization, and operationalization of the research variables.

#### **2.2 Theoretical Orientation**

A theory is a statement or a principle that is used in explaining a certain phenomenon. A theory is derived from results that have been consistently tested and still lead to a particular result, therefore a similar experience in the future can be explained using the existing evidence, which in this case is the theory (Thagard, 1978). In this study, the institutional theory, signaling theory economic theory, and agency theory was used in explaining phenomena, which in this case is the influence of internal controls on the financial performance of manufacturing SMEs in Nairobi County.

#### 2.2.1 Agency Theory

Agency Theory was pioneered by Jensen and Meckling (1976). The theory postulated that in any institution or organization, there exists a relationship between the employees of an organization and the owners of those organizations. In most cases, the owners of the organization are directors whereas, on the other hand, the employees are management of the organizations who share close relationships and activities of either side effects the other. Managers are tasked by directors to make critical decisions in organizations on behalf of the director such as tightening loose ends so that money for the company does not get lost. Besides, the managers should ensure that the company realizes better financial performance. These decisions may be on an operative basis or long-term basis. Directors of organizations are most interested in increasing their shareholding value whereas the managers, on the other hand, make decisions that mainly are geared towards maximizing their profits or advancing selfish interests. Such actions cause conflicts of interest in organizations between these two teams (Pouryousefi & Frooman, 2017).

The theory on agency desires that both managers and directors work on the same page by managers availing necessary information due to their high access to critical information regarding the institution's activities. This, however, creates an asymmetry of information where managers withdraw critical information and thus keeping the directors always in darkness and unable to have control of important matters relating to the business. To avoid such unfortunate incidences it is only important to have managers revealing critical details about the business such as areas that would lead to financial losses through strengthening the internal controls (Panda & Leepsa, 2017).

The theory on the agency is specifically important to this study because costs such as borrowing costs have huge financial implications for businesses. Lack of appropriate costs management on materials might expose the institution to bankruptcy due to low profits. On the other hand, directors need to have internal audits that give opinions on the true affairs of a company at any particular time and therefore safeguarding the interests of directors.

#### **2.2.2 Signaling Theory**

The signaling theory was pioneered by Irving Fisher in 1930. Fisher (1930) noted that perfect people at some time make irrational decisions depending on market operatives/forces. He gives a case of citizens in a certain country presumed that their

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currency was fixed, however, it was not the case because the currency was being influenced by exchange rates of the currency between that state and others.

Rao et al. (2018) who also contributed to the theory noted that in institutions or organizations there are agents who serve the purpose of passing critical information to the principal, the principal in return makes the major decision regarding the direction to take based on the information given. Cash reconciliations daily act as a basis through which management makes judgments on whether the company is doing well financially or not. In case of consistent loss of money from petty cash and daily sales, then the management is signaled to instill internal controls that would ensure that there is no loss of such funds. Besides, where a company publishes information relating to the financial status of a company such as a share value and profitability, this information is used by prospective stakeholders including prospective buyers of shares to make or avoid investing in such a corporation. Likewise in organization managers pass important information to directors regarding the business of financial models that they have, effective communication and analysis of models help top management and owners to make risk management decisions either of avoidance of uncertainty, being neutral, or remaining optimistic in pursuing novel situations that implication in either the near or future of the company (Xu et al., 2019). Loss of funds on daily basis from unregistered sales as well as a decline in profits is an indication that the managers need to come up with innovative procedures to curb wastages and therefore enhance financial performance.

The theory on signaling is therefore important to this study since it helps in using indicators such as cash ratios, cash cycle, and return on investment to make decisions that help in controlling costs or management of risks of the company.

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#### **2.2.3 Contingency Theory**

Contingency theory was pioneered by Donaldson (2001). Contingency theory is among the theories on organizational behavior. The theory is mainly used to predict explain behavior patterns in organizations based on changes in its external environment changes in technology and the culture of people within and without the organization. The theory opines that an organizational structure cannot be predictable or stable always but keeps on responding to cultural changes, market trend changes, and technology changes thus a technology that was most updated today will become absolute tomorrow (Gunarathne & Lee, 2021).

Contingency theory is practical in use especially in an organization that utilizes internal auditing to ensure correct financial statement reporting. In this case, a well-reported financial statement that encompasses risk assessment through the provision of risk identification mechanism, analysis of the risk as well as appropriate response to risk avoids making the wrong decision while making financial plans for a business (Safari & Saleh, 2020).

For consideration of contingencies (changes in technology and external environment) organizations mainly carry out technical, environmental, and technological feasibility for purpose of cautioning themselves against shocks. Financial risk management is one of the contingencies measures that organizations use as internal controls to enhance financial performance.

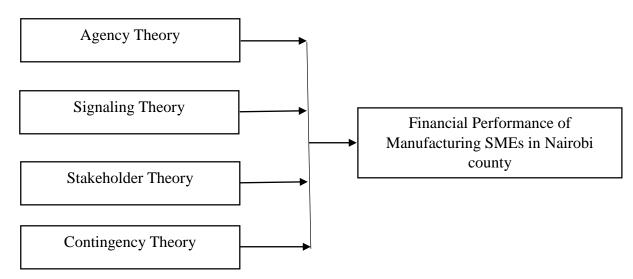
#### 2.2.4 Stakeholders Theory

According to Friedman and Miles (2006) who postulated stakeholders' theory, stakeholders are all individuals who are directly or indirectly influenced by the organization's activities. Such stakeholders include the government, directors, and

employees of the organization, customers, suppliers, and the general public. It is, therefore, the responsibility of the organization management to manage the interests of the different groups' influence by the organization. The different interests may include compliance with labor laws for employees, compliance with environmental laws or corporate tax laws or policies by the government, or compliance with the set quality standard for services provided or products provided for consumption by customers, it is, therefore, necessary to ensure adherence to stipulated standards to avoid conflict between the institution and its stakeholders (Albasu & Nyameh, 2017).

Good stakeholder provides that internal operations of a company be conducted in the right way due to its implication to the stakeholders. Internal controls such as segregation of duties ensure that conflicts are minimized and everyone does what is required of him /or her and that accountability is upheld to ensure that stakeholders' interests are protected.

## Figure 2.1:



Theoretical Framework

#### **2.3 Empirical Review**

#### 2.3.1 Cash Reconciliations and Financial Performance

Ibrahim et al. (2017), carried out a study on the influence of internal controls on the financial performance of Insurance companies in Ghana. The study was conducted among 97 companies obtained through stratified and random sampling. The questionnaire for the study included structured questions on the existence of Petty cash records, countersigning of daily cash collections by more than one officer, surprise cash checks during the daily weekly as well as monthly, availability of cash management software to check available bank balances in real-time. The study also included profitability and liquidity as measures for financial performance. The study established through inferential statistics that there was a strong positive relationship between cash management practices of reconciliation and the profitability of the companies.

Akimana (2019) studied the influence of internal cash management policies as internal controls on the financial performance of agribusiness enterprises in Nairobi County. The study comprised 161 firms in the daily sector, value addition in fruits, and food processing. The study used a questionnaire as the major tool of data collection where adoption of ICT in real-time conciliation and segregation of duties in reconciliation was considered as cash management practices. The study considered profitability and liquidity as major measures of financial performance in the companies. The study established through correlation and regression analysis that there was no significant relationship between cash reconciliation as management practices and financial performance in these studies.

Alzeban and Sawan (2015) carried out a study on the influence of investing in routine cash checks on the financial performance of hospitals in the United Kingdom offering only

outpatient services. The study was conducted among 152 stratified sampled health centers. The data for the study was emailed to the companies where the financial managers were targeted for the study. Regression analysis conducted among the costs of routine cash checks and profitability revealed a significant negative relationship between reconciliation costs and profitability of these hospitals. The study, however, recommended only standard surprise checks on cash reconciliation to avoid the higher financial implication of budget that in turn leads to a negative effect on the profitability of the health centers.

#### **2.3.2 Segregation of Duties and Financial Performance**

Abdi (2015) researched how the internal control system influenced the performance of Mogadishu private banks financially. The study was carried out through a descriptive research design. Among them, 12 banks only five studies were considered for the study through judgmental sampling techniques. The study collected data among chief accountants, branch managers, tellers, and cash handling officers through the use of questionnaires. The study established through regression analysis that cash was best controlled when there were effective duties segregation and job description, in consequence, led to better cash management and therefore better performance, thus the two variables, i.e., segregation of duties and liquidity of the banks had a significant positive relationship.

Mukopi and Iravo (2015) sought to establish the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya. The study was a casual effect relationship study. The study collected both primary and secondary data among financial managers, cashiers, and procurement department officers. Primary data collected was on the control system for

payment to suppliers and other creditors on the other hand secondary data collected were on the liquidity status of the company. The study established that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

Machira (2016) carried out a study on how the performance of insurance companies in Kenya was affected by internal controls. The nature of the study was descriptive. Primary data was collected among insurance sales managers and financial managers of 2 major insurance companies in Kenya issuing public service vehicle insurance (XPLICO and direct line). The study collected data using questionnaires for primary data .key among variables in the interest were on segregation of duties between sales-people and cash collection managers and the profitability of these companies. The study results revealed that there was an insignificant relationship between the segregation of duties and the profitability of the companies in the insurance sector.

Ngari (2017) sought to determine how the performance of Kenyan microfinance institutions is influenced by internal controls. The study population was 11 microfinance institutions. The study used interviews as major tools for data collection. The study, therefore, sought to establish whether segregation of duties in small businesses influences the profitability of small businesses. The study considered all the businesses to study as a sample. The study's findings indicated that segregation duties did not affect the profitability of microfinance institutions.

#### **2.3.3 Inventory Audits and Financial Performance**

Wagdi et al. (2019) focused on the influence of internal controls including risk assessment, internal audit function on the financial performance of Egypt's food processing firms. The study was carried out among 114 sampled companies through stratified and random sampling. The study used semi-structured questionnaires as the main research tools for data collected through emails. The study revealed that internal audits involve assets audits and liabilities audits. Assets audited included stock, cash fixed assets available. On the other hand creditors and accruals are also audited. The study revealed that audit functions on inventory especially in fast-moving consumable goods are carried out on a routine basis to avoid shoplifting, fraud detection within an organization, and effective stock movement to avoid dead stock. The functions of auditing stock were found to have a positive effect on the profitability of fast-moving consumable goods.

Kithinji (2015) studied the influence of monitoring stock movement on the profitability of supermarkets in Kenya. The study's main aim was to establish the influence of internal audits carried out on inventory on regular basis to find out if they impact the profitability of the firms and also the effect it has on the liquidity of the firms. The study used regression analysis to achieve its objectives. The study's findings indicated that inventory control practices and financial performance are positively correlated with major benefits revealed in ensuring that the company has cash at all times as well as avoidance of frauds through the stealing of stocks in shelves and warehouses. The study recommended the implementation of information communication and technology equipment such as CCTV and also an inventory control system that reveals stock status on a real-time basis which

makes it easy to track stock from purchases to point when sales are made, it also lessens the burden of physical stock control.

Okike et al. (2015) studied the determinants of an effective internal control system of multinational telecommunication corporations in Nigeria. The study was conducted among four major telecommunication companies including Mtn Nigeria, Globacom, Ntel, and Airtel Nigeria. The study data was collected using interviews as well as questionnaires. The study revealed that the age of a firm, nature of the business, security needs are major determinants for the implementation of an internal control system. Firms that handle huge transactions on daily basis need a more elaborate internal control system covering sales, cash management, inventory management whereas ones with less frequent would not need such. On the other hand, new enterprises need an internal control system more than old ones due to a lack of familiarity with practices in such businesses. Telecommunication businesses were found to require elaborate internal control due to the nature of business including purchase of data, voice airtime, and bundles. Therefore an ICT-enabled control system is a must in that case due to the risks anticipated.

Omwenga (2018) studies the influence of inventory control on effective procurement practices in construction companies in Nairobi County. The study involved sampled 115 companies through stratified and random sampling procedures. The study data was collected mainly through semi-structured questionnaires designed mainly for procurement officers in these companies. The study used regression and correlation in analyzing the data collected. The study revealed that good practices in the management of the inventory positively influenced procurement that resulted in compliance with legal requirements on

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procurement as provided by acts on public procurement and disposal activities as well as enabling strategic procurement alliance with companies.

Alzeban and Sawan (2017) studied the implication of the board of directors and the audit committee independence, financial expertise, and size of the board on how Kenyan firms in the NSE perform financially. The study data was collected through questionnaires and interviews. The analysis of the collected data was through both inferential and descriptive analysis. The study's results indicated that there was a positive relationship between how firms perform financially and the audit committee independence, financial expertise large size of the audit committee. On the other hand board independence and having top management that lacks duality compromise enhanced financial performance and better safeguards for company assets.

#### **2.3.4 Cost Management and Financial Performance**

Gitau (2019) studied how strategies in cost management influence Kenyan agribusiness enterprises' financial performance. The study variables included supply chain management, labor cost management, and inventory costs management. The targeted population was 86 firms carrying out value addition and agro-processing. The study was a casual effect relationship in nature and therefore involved multivariate linear regression analysis using SPSS. The study revealed that there was a strong relationship between the variables of the study. Of importance, the study noted that ensuring that there is the efficient management of stock levels ensures the reduction of high warehousing charges and tying much capital on stock, on the other hand, stock deliveries to and outside stock should be done through efficient logistical operations that ensures minimum costs. On the other hand, a company should ensure minimal costs on labor by hiring competent staff that reduces redundancies as well as replication of responsibilities by having job descriptions that are clearly defined.

Drury (2018) focused on hospitality companies in Rome, Italy. The study sought to determine how the performance of these companies financially was affected by strategies involved in cost management. The study was conducted among 342 firms having hotels and tourism and travel services. The study variables included cost management practices on direct material cost (food), direct labor, administrative cost management practices, and marketing cost management practices. The study's dependent variable financial performance was measured through net profits. The study carried our regression analysis and T-statistics for hypothetical tests. The study revealed that there was a positive and significant relationship between cost management practices and financial performance. In this case marketing costs overheads and administration costs, overhead management was found to have more effect on profitability if well managed. The use of internet marketing and hiring workers on a contract performance basis ensured higher productivity through cost reduction and higher profitability.

Nyabwanga and Ojera (2018) studied the influence of cost management practices on the financial performance of building contractors in Kasarani constituency, Nairobi County. The study evaluated cost management in procurement and outsourcing of services in maintaining the rental status of rental buildings. The study sampled purposefully 52 contractors who had provided services in maintenance at Kasarani constituency. The study revealed that ensuring procurement practices such as the supply of materials including sand, cement, ballast, and wood materials ensured that the cost of maintenance was low which enhanced the profitability of these companies. Inferential statistics also revealed

that appropriate outsourcing practices were positively and significantly related to the performance of construction companies.

# 2.3.5 Risk Assessment and Financial Performance

Muhwezi et al. (2018) carried out a study on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies. The study objectives were to identify the internal control practices, the influence of internal control on the performance of the projects, and the challenges facing the effective implementation of internal controls. Structured questionnaires emailed to the project managers who were samples at 82 were used as the main data collection instrument. Descriptive analysis and inferential statistics carried out on collected data revealed that the construction companies have in place an internal control system that involves these activities: monitoring, control activities, information communication and communications, assessment of risk, control environment, and information technology. The study also revealed a strong positive relationship between internal controls and project success. Among the challenges faced in effective integration of the internal controls were lack of technical capacity among employees to fully utilize ICT practices and lack of project management skills, also financial support was not adequately provided by the top management. Whereas some of these control practices were missing these lead to ineffectiveness in project management from faulty internal controls that result in losses for lack of providing for contingencies in these projects.

### **2.4 Conceptual Framework**

In the current study, the relationship is between internal controls which are the independent variables whereas the financial performance of manufacturing companies is

the dependent variable. The independent variable in the study will include the segregation of duties, inventory audits, cash reconciliations, cost management, and risk assessment, whereas the dependent variable will be financial performance. The relationship is shown in the conceptual framework in figure 2.2 below.

# **2.4.1 Cash Reconciliations**

In any organization, there is a need to instill a strong internal control system that ensures that there are accurate arithmetical and accurate mathematical computations for summing up numbers as were as reconciliations. It is therefore important to utilize trial balances for accuracy purposes and properly recording numerical figures to avoid errors in the past. On the other hand, the organization needs to carry out physical controls that involve safeguarding the assets of the company by having safes for keeping cash and having an accountable person who accesses that finance. Other reconciliations done on cash involves verification of amount to be paid for purchases by an appointed authority to avoid fraud through payment for non-existence goods or services, in this case, local purchase orders and invoices are verified before payments are done (Ramamoorti et al., 2017).

## **2.4.2 Segregation of Duties**

For effective internal control of operations of the organization, organizations have organization charts that define the organizational structure. Such structures show clearly the flow of authority and responsibilities or duties. In an organization separation of duties is important in decision making to show how decisions are made and how such decisions are expected to be implemented by other staff, in this case, a single activity is given to various people to effect a single transaction e.g. payment where financial managers cannot pay without such payment being signed by the head of a particular department (Rentor et al., 2017).

#### 2.4.3 Inventory Audit

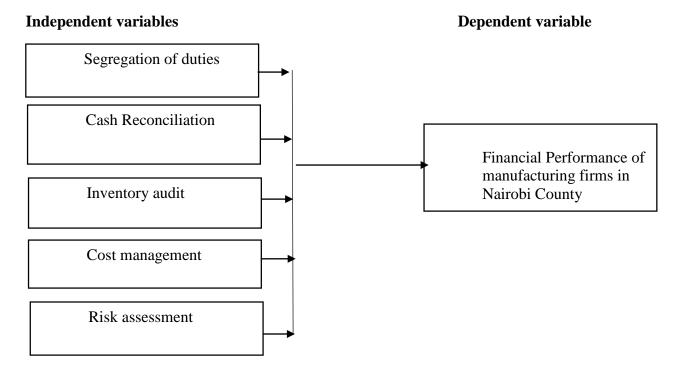
In an organization especially for organizations dealing with goods, employees and customers are attempted to shoplift goods especially food commodities or other consumables. It is, therefore, necessary to have controls that ensure that stock is always to make sales to the company directly, the way of ensuring such is carrying out inventory audits. Inventory audits help companies in doing routine as well as surprise stock controls and check to avoid loss of stock. Carrying also physical stock count is more real and gives double assurance coupled with automated stock controls such as pharmacy in chemists for control of drugs (Malviya et al., 2020).

#### 2.4.4 Risk Assessment

Risk assessment in an organization is the prudence activity in preparation of financial statements that ensures a true and fair view is depicted on the true nature of the company to handle creditors' risks assessment, staff fraud assessment, customers' risks assessment, and operational risk assessment. In this case, credit risk assessment is a procedure that involves risk identification, risk evaluation, and responding to a particular risk. Companies should, therefore, be able to identify various forms of risks in the organization such as detection of fraud, carry out analysis on them, and take actions such as termination or transfers in case it is a staff fraud on the operations management (Slovic et al., 2016).

# Figure 2:2:

## Conceptual Framework



Source: Friedman and Miles (2006).

The conceptual framework illustrates the relationship between the variables in the study that included the independent and the dependent variables. The independent variables included: cash reconciliations, segregation of duties, inventory audits, cost management, and risk assessments. On the other hand, the dependent variable was the financial performance of medium enterprises in Nairobi County conducting the manufacturing of foods. The dependent variable will only change as a result of changes in the independent variables.

### **2.5 Operationalization Framework**

The purpose of coming up with the operationalization of variables is to indicate how different variables were measured through their corresponding indicators or constructs.

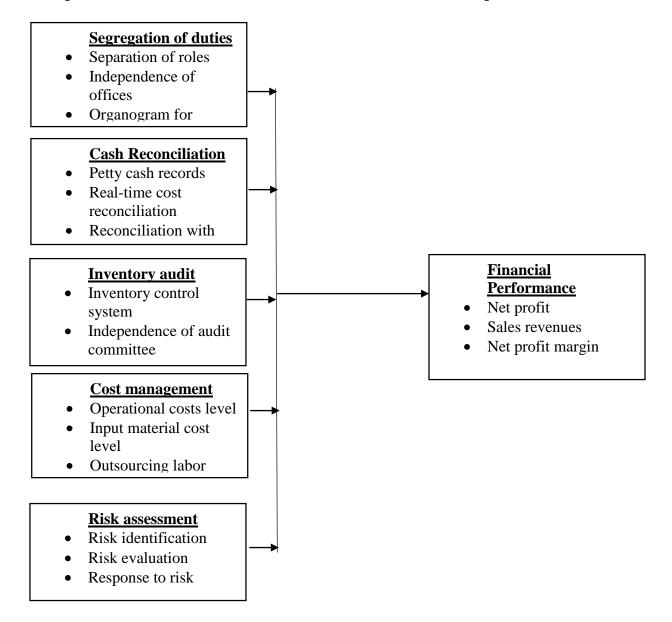
Segregation of duties was measured by clear defined roles, independence of offices, and organization flow chart. Cash reconciliation was measured by petty cash records, real-time cost reconciliation, and reconcile with receipts ad invoices. Inventory audit was measured by the inventory control system, independence of audit committee, and frequency of audit. Cost management was measured by supply chain management, overhead cost management, material cost management, and labor cost management. Risk assessment was measured by risk identification, risk evaluation, and response to risk. Financial Performance was measured through net profits, sales, and net profit margin. Figure 2.3 below illustrates the nature of the relationship.

# Figure 2:3:

# **Operational Framework**

# **Independent Variables**

# **Dependent variable**



# 2.6 Research Gaps

The literature reviewed on empirical and theoretical review posited mixed reactions on how the performance of companies financially is influenced by internal controls. Whereas some proved that indeed internal controls including segregation of duties, inventory audit, cash reconciliation, cost management, and risk management have a positive effect on financial performance whereas some proofed that there existed no relationship at all. The existing empirical studies had limitations that such as most studies focused on countries that are already developed such as the United Kingdom, China, the United States of America, and Malaysia which are faced with different micro as well as macro environment. Findings in developed countries cannot be generalized as similar scenarios in developing countries. Whereas developed countries have a well-built infrastructure in mega-corporations on internal controls developing countries rely on the manual and bureaucratic system, It is therefore only important to go ahead and carry out a study that gives the true nature of the typical case of internal control in manufacturing in this case medium enterprises in Nairobi county.

Theories on internal controls such as legitimacy theory and agency theory presume that people will comply based on norms and values. However, some organizations have employed staff who end up carrying out selfish interest that leads to loss of funds in organizations. It is therefore important to provide evidence for each case separately by revealing how operations are conducted in the manufacturing sector among small businesses in Nairobi County.

Besides, empirical studies were conducted in different sectors of the economy some being in the service sector such as construction and hospitality. Abdi (2015) researched how the internal control system influenced the performance of Mogadishu private banks financially and Omwenga (2018) researched the relationship that exists between the management of construction risk and the internal factors of an organization where the study focused on construction companies in Nigeria. Ngari (2017) sought to determine

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how the performance of Kenyan microfinance institutions is influenced by internal controls. It would be interesting therefore to carry out a study on other sectors of the economy such as in manufacturing.

Finally, some of the studies employed simple analysis like descriptive analysis and used interview schedule as the main data instrument, Ngari (2017) sought to determine how the performance of Kenyan microfinance institutions is influenced by internal controls using interview schedules. Okike et al. (2015) studied the determinants of an effective internal control system of multinational telecommunication corporations in Nigeria who also used interviews to collect data. It would, therefore, be interesting to establish the nature of the relationship between these variables with financial performance and their relevance in internal control to improve financial performance by conducting both inferential (correlation and regression analysis) and descriptive statistics.

# **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

# **3.1 Introduction**

The chapter explains the research design that guided the study, the study's target population, the sampling technique, and the study's sample size, in the chapter, was a description of the research instrument for the study, method of collecting data, the data analysis techniques, and presentation. In addition, the chapter explained the ethical issues considered while carrying out the study.

# 3.2 Research Design

The study adopted a descriptive research design to unearth the situation on the influence of internal controls on the financial performance of medium enterprises in Nairobi County. The research design was adopted due to its nature of reporting situation as it is in the field with no interference on the findings, also the descriptive research design allowed for the building of hypothesis, and therefore, inferences on the data was done easily. Similarly, other scholars in the same area of study including McNichols and Stubben (2018) used the descriptive research design.

# **3.3 Study Population**

Food processing in Kenya has remained the backbone of the economy since independence and contributes 33.4% of jobs in the sector of manufacturing. The food processing covers foods and beverages which are further broken down into dairy, nuts vegetable oil, grain milling, fruits and vegetables, beverages, baking, and confectionery, meat, fish, mushrooms, nuts, and honey. The population includes all the prospective respondents in a particular line of study. According to the Kenya Associaton of Manufacturers (2020), there are 95 medium enterprises in the food industry in Nairobi County carrying out the manufacturing of foods and beverages. Nairobi County is a manufacturing center and therefore the study sought to collect data where there is a high number of food manufacturing companies within one region. Therefore, the study sought to collect data from the 95 accountants/ financial managers who were considered as the target population. The researcher is aware of where the medium enterprises are located and therefore convenient to collect data.

# **Table 3.1:**

# Target Population

Sector	Number
Foods	64
Beverages	31
Total	95

Source: United Nations Industrial Development Organization (2020)

# **3.4 Sampling Technique and Size**

Fowler (2018) postulated that a sample is considered enough if reliable analysis can be carried out on the data and also allows the process of testing the significance of the estimates differences. The size of a sample depends on the area of concern of the study, its aim, credibility, usefulness as well as the time and resources allocated to the study. The sample size for the study was 77 respondents.

The study used the Yamane formula to determine the sample size.

Yamane Formula,  $n = \frac{N}{1 + N(e^2)}$ 

Where n is the correct sample size, e is the margin of error, N is the target population. Therefore, the sample size was determined as follows.

Within a margin error of 5%, the formula gave a sample size of 77 respondents. A random sampling procedure was also done to ensure an equal chance of respondents being selected (Fowler Jr, 2018).

n=95/[1+95(0.05\*0.05)] = 95/1.2375=76.76 which is 77 to nearest figure. The sample

was proportionately distributed as follows:

Food manufacturing: 64/95\*77=52

Beverages: 31/95\*77=25

# **Table 3.2:**

Sample Distribution

Sector	Number	Ratio	Sample size
Food	64	0.67	52
Beverages	31	0.33	25
Total	95	1	77

Source: Research (2021)

#### **3.5 Data Collection Technique**

The study's data was collected using a questionnaire as the main instrument. This is supported by Orodho (2009) who noted that the researchers' influence, as well as bias, should be avoided in obtaining information using questionnaires thus ensuring that this information is valid and also accurate. The questionnaire had seven sections that sought respondents' opinions about the study variables section I sought data on background information, section II on the influence of segregation of duties, section III on the influence of audit inventory, section V

on the influence of cost control, section vi on the influence of risk management and finally section vii on financial performance.

Collection of the study's data was done through drop and pick method of the questionnaire assistant of two research assistants, the respondent explained first the study's aim to the respondents and then went ahead to leave the questionnaires that were filled within 10 days by the respondent, this ensured that respondents have adequate time to fill the questionnaire and also seek for clarity on any matter on the questionnaire. After the 10 days, lapsed the researcher visited once more the premises and agreed through the phone with the respondents on pick-up points if outside the premise. In case a respondent has not filled the questionnaire, an extension of 4 days was given to enhance a high response rate. The study also considered the financial statements of the comprehensive income statement as sources of secondary data to get data on sales as well as net profit earned between the financial years of 2015 and 2019.

# **3.6 Pilot Study**

A pilot study also referred to as a pre-test is conducted to make sure that the instrument of data collection is suitable for further data collection in the analysis (Taherdoost, 2016). The two main objectives of conducting a pilot study are to ascertain the research instrument's reliability and viability. In the current study pilot study was conducted among seven SMEs which was supported by Taherdoost (2016) where he noted that 10% of the target population is enough pretest sample size. The results of the study were however not included in the main findings.

# **3.6.1 Validity of Research Instruments**

A validity test involves an examination of the research tool to ensure that it captures the required data. There are two approaches to enhancing the validity of an instrument which include logical and statistical approaches (Taherdoost, 2016). To test validity the researcher sought supervisors and experts in areas of customs clearance to help in improving the instrument and ensure it captured the right questions on the study based on the logical link between the wording of the questions and the research objectives.

Face validity, construct validity and content validity are the main types of validity tests Face validity is a subjective measure that seeks to make sure whether what an instrument is measuring is actually what it was meant to, content validity tests the representativeness of an item in the questionnaire as related to the whole population. Finally, construct validity measures the adequacy of indicators/factors and the scale used in the instrument of collecting data (Mohajan, 2017). To overcome the validity challenge the researcher adopted previously used questions/constructs by a former researcher in similar research to overcome construct validity. Construct validity was measured through Bartlett's Test of sphericity and the Kaiser-Meyer-Olkin (KMO) test of sample adequacy was done to test for construct validity on the suitability of data for detection. According to Mohajan (2017), a KMO is a value that can be used to show the variance proportion in the study's variables which is likely caused by underlying factors. A value that is closer to 1 is better and shows the usefulness of the analysis of factors; our study took a score above 0.7 and drops the others which did not meet the criteria. On the other hand, Bartlett's test of sphericity seeks to test the hypothesis that the matrix of correlation in the study is an identity matrix and would show whether it is appropriate for structure detection if the study's variables are

not related. Smaller values that are less than 0.05 level of significance indicate that factor analysis was useful for further study.

### 3.6.2 Reliability

Reliability involves testing for consistency of finding on the administration of a research instrument (Haynes et al., 2016). To test reliability, the researcher used Cronbach ( $\alpha$ = 0.7) whereby the indicators in the questionnaire score should always be above a set limit of 0.7. To achieve reliability of the research instrument the researcher used a skilled research assistant who follows research guidelines and giving room for the respondent to give an independent opinion. This ensured that if the data collection procedures are to be followed the data collected the second time would be similar to the first time results of data collected.

#### **3.7 Data Analysis and Presentation**

Data for the study was mainly quantitative. On the quantitative data coming from the closed end, questions were analyzed through descriptive research design and inferential statistics using a statistical package for social analysis (SPSS). Descriptive statistics carried out included frequency distribution, percentages, mean and standard deviation. After analysis data was presented on tables and interpreted narratively. Inferential statistics were carried through multiple linear regression analysis and correlation analysis using SPSS. The multiple linear regression model used was of the following form:

 $\mathbf{Y} = \beta_0 + \beta_1 \mathbf{X}_1 + \beta_2 \mathbf{X}_2 + \beta_3 \mathbf{X}_3 + \beta_4 \mathbf{X}_4 + \beta_5 \mathbf{X}_5 + \boldsymbol{\varepsilon}$ 

Where:

Y was the financial performance of food manufacturing firms in Nairobi City County  $\beta_0$  is a constant,

 $\beta_1$  to  $\beta_5$  are the regression Pearson coefficients

 $X_1$  is the cash reconciliation  $X_2$  is the Segregation of duties  $X_3$  is the inventory audit  $X_4$  is the cost management  $X_5$  is the risk assessment  $\epsilon$  is the error term

The study carried out diagnostic tests to ascertain assumptions of linear regression which included: linearity, normality tests, auto-correlation, tests on multicollinearity, and heteroscedasticity. Results of the study were presented in tables and figures.

# **3.8 Research Ethics**

The current study was conducted under strict confidentiality of reassurance among its respondents. First, the researcher introduced herself and then went ahead to present a research permit letter from the university and NACOSTI as authorization to collect data on the research topic. In addition, the researcher assured the respondents the collected data was not disclosed to any other party and would be used strictly for academic pursuit.

# **CHAPTER FOUR**

# **RESULTS AND DISCUSSIONS**

# 4.1 Introduction

Chapter four of this study comprised of the findings that were backed up by discussions of past scholars. The findings were guided by the five research objectives that included the influence of cash reconciliations on the financial performance; the influence of segregation of duties on the financial performance; how the inventory audit influences the financial performance; the influence of cost management on the financial performance; how the risk assessment influences the financial performance of food manufacturing medium enterprise in Nairobi county.

### 4.1.1 Response Rate

77 respondents who include financial managers or accountants in food manufacturing medium enterprises in Nairobi County were used in the collection of the study's data. The study managed to collect both primary and secondary data from 54 companies. This response represents a 70.12 % response rate. According to fowler (2014) response of 50% is good and adequate, besides a response of 70% and above is excellent and adequate to analyze the findings. Table 4.1 shows the findings.

### **Table 4. 1:**

#### Response Rate

Response	Frequency	Percentage (10%)
Responded	54	70.12
No response	23	29.88
Total	77	100

Source: Research Data (2021)

# 4.1.2 Reliability and Validity tests

The study conducted both validity and reliability tests on the piloted questionnaires. The results are discussed below under the headings of reliability and validity tests.

# **4.1.2.1 Reliability Tests**

Reliability tests were conducted on the instruments of data collection to ascertain constructs' internal consistency. To carry out the task Cronbach's alpha ( $\alpha$ ) at 0.7 was used in the study. The findings of the study are indicated in table 4.2.

# **Table 4. 2:**

Variable	Cronbach's Alpha Value	Number of Items measured
Cash reconciliation	0.831	7
Segregation of duties	0.726	9
Inventory audits	0.836	5
Cost management	0.775	6
Risk assessment	0.894	5
Financial management	0.798	3
Total		35

Reliability Tests

Source: Research Data (2021)

Table 4.2 above revealed that the Cronbach alpha score for cash reconciliation was 0.831 with 7 items or indicators. This score is considered adequate to carry out further study. An example of the question sought was 'how many times on average in a week is cash reconciled?

The Cronbach alpha score for segregation of duties was 0.726 with 9 indicators. This score is considered adequate to carry out further study. An example of the question sought was 'how many employees are required to effect payment on a purchase?

The Cronbach alpha score for inventory audit was 0.836 with 5 items or indicators. This score is considered adequate to carry out further study. An example of the question sought was 'how many times is stock-taking done annually?'

The Cronbach alpha score for cost management was 0.775 with 6 items or indicators. This score is considered adequate to carry out further study. An example of the question sought was 'what are the annual costs saving on both expenses and purchases Ksh on budget vs. actual?'

The Cronbach alpha score for risk assessment was 0.894 with 5 indicators. This score is considered adequate to carry out further study. An example of the question sought was 'What is your annual budgetary allocation for risk management Kshs?'

Finally, the Cronbach alpha score for risk assessment was 0.798 with 3 indicators. This score is considered adequate to carry out further study. An example of the question sought was 'What is your profit margin. Similarly, Haynes et al. (2016) used Cronbach's alpha score to establish reliability.

# 4.1.2.2 Validity Tests

Validity tests were conducted to ascertain construct validity through KMO and Bartlett's tests. The results are shown in Table 4.3.

# **Table 4. 3:**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure o	f Sampling Adequacy.	0.825
Bartlett's Test of Sphericity	Chi-Square	42.213
	df	6
	Sig.	0.003

# **Construct Validity Tests**

Source: Research Data (2021)

The table above 4.3 shows that the Kaiser-Meyer-Olkin score was 0.825 which is considered adequate, According to Guay (2019) the KMO value runs between 0 and 1, the closer the value is towards one(1) the better. On the other hand, Bartlett's *p*-value was 0.003 which is lower than 0.05 and therefore considered significant, and that the instrument is adequate for further study. Taherdoost (2016) similarly used KMO and Bartlet test to ascertain the research instrument's validity.

#### 4.2 Demographic Analysis Of the study

The study carried out background information characteristics of the respondents that included the age of the respondents, work experience, and the level of education of the workers.

#### **4.2.1 Age of the Respondents**

This section sought to determine the study's respondents' age. Table 4.4 below indicates the results of the study.

#### **Table 4. 4:**

Age Category

Age category	Frequency	Percent
18-30 years	8	14.8
31-40 years	17	31.5
41-50 years	23	42.6
Above 51 years	6	11.1
Total	54	100.0

Source: Research Data (2021)

The Table 4.4 above show that the majority of the respondents are between the age of 41 and 50 years as shown by 42.6%, this was followed by respondents who were aged between 31 and 40 years as shown by 31.5%, which was followed by respondents who were between 18 and 30 years as shown by 14.8% and finally only 11.1% of the

respondents were above 51 years. The study revealed that employees were of good age and experience to explain matters that touch on internal controls in their organization.

### **4.2.2 Education Level of the Respondents**

This section of the questionnaire sought to establish the respondent's level of education.

Table 4.5 below shows the findings of the study.

# **Table 4. 5:**

Education Level
-----------------

Education level	Frequency	Percent
Certificate	7	13.0
Diploma level	15	27.8
Graduate	28	51.9
postgraduate	4	7.4
Total	54	100.0

Source: Research Data (2021)

Table 4.5 above shows that a large percentage of the respondents were graduates as shown by 51.9% (28), followed by 27.8% (15) of the respondents who had attained diploma as their highest level of education qualification, followed by 13%(7) of the respondents who had certificate as the highest level of education, only 7.4% (7) of the respondents had postgraduate education. These findings revealed that the respondents are were educated on accounting control measures and therefore of great use in responding to the study questions. Rentor et al. (2017) revealed that education is key in making managerial judgments and therefore useful in ensuring internal controls.

# 4.2.3 Work Experience

This part of the questionnaire sought to determine for how long each respondent has been in the workforce in terms of their work experience. Findings are shown in Table 4.6 below.

#### **Table 4.6:**

Work Experience

Work experience	Frequency	Percent
Less than 5 years	7	13.0
6-10 years	23	42.6
11-15 years	21	38.9
15 years and above	3	5.6
Total	54	100.0

Source: Research Data (2021)

Table 4.6 above revealed that the majority of the respondents had worked in the organization for a period between 6 and 10 years as shown by 42.6% (23), followed by employees who had worked in the organization for a period between 11 and 15 years as shown by 38.9% (21), followed by workers who had worked in the manufacturing companies for less than 5 years as shown by 13% (7) whereas only 5.6% (3) respondents had worked in the organizations for a period above 15 years. The study revealed that the employees had worked for substantial time and therefore can help in explaining internal controls in their organizations.

### **4.3 Descriptive Statistics of the Study**

This part of the study sought to establish practices under the different variables and subvariables on frequency, percentages standard deviation and, mean and maximum. Results are given in the sub-headings below.

# 4.3.1 Cash Reconciliations

#### 4.3.1.1 Petty cash records

This part of the question sought whether the respondents kept petty cash records for reconciliation. The results of the study are shown in table 4.7.

#### **Table 4.7:**

#### Petty Cash Records

Response	Frequency	Percent
yes	51	94.4
No	3	5.6
Total	54	100.0

Source: Research Data (2021)

Table 4.7 above revealed that the majority of the respondents as shown by 94.4% (51) already kept petty cash records for reconciliation only 5.6% (3) of the respondents did not keep petty records for their companies. Petty cash is very sensitive and requires special records because many firms lose money in small bits which in summation results in huge financial loss. Similar findings were revealed by Ibrahim et al. (2017) who carried out a study on the influence of internal controls on the financial performance of Insurance companies in Ghana. The practices of internal controls included the existence of Petty cash records, countersigning of daily cash collections by more than one officer, surprise cash checks during the daily weekly as well as monthly, availability of cash management software to check available bank balances in real-time. The study also included through inferential statistics that there was a strong positive relationship between cash management practices of reconciliation and the profitability of the companies.

#### 4.3.1.2 Real-Time Cash Reconciliation Register

This part of the questionnaire sought from the respondents whether they had real-time cash reconciliation registers in their companies. The results are shown in Table 4.8 below.

# **Table 4.8:**

# Real-Time Cash Reconciliation Register

Response	Frequency	Percent
yes	39	72.2
no	15	27.8
Total	54	100.0

Source: Research Data (2021)

Table 4.8 above revealed that the majority of the companies in the manufacturing sector had a real-time reconciliation register as shown by 72.2% (39); whereas only 27.8% (15) did not have a real-time cash reconciliation register. Similarly, Amponsah et al. (2017) emphasized the importance of petty cash records, countersigning of daily cash collections by more than one officer, surprise cash checks during the daily weekly as well as monthly, availability of cash management software to check available bank balances in real-time.

# 4.3.1.3 Do You Reconcile Payment Receipts and Invoice Records

This part of the questionnaire sought whether the manufacturing firms reconciled payment receipts and invoice records. The results of the study are shown in Table 4.9 below.

# **Table 4.9:**

Reconciliation of Payment Receipts and Invoice Records

Response	Frequency	Percent
yes	52	96.3
no	2	3.7
Total	54	100.0

Source: Research Data (2021)

Table 4.9 above revealed that the majority of the manufacturing companies reconciled payment receipts and invoice records as shown by 96.3% (52) whereas only 3.7% (2) did not conduct a reconciliation of payment receipts against invoice records. Ramamoorti et al. (2017) concurred that reconciliations done on cash involve verification of amount to

be paid for purchases by an appointed authority to avoid fraud through payment for nonexistence goods or services, in this case, local purchase orders and invoices are verified before payments are done.

# 4.3.1.4 Ad hoc Cash Checks

This part of the questionnaire sought to establish whether the manufacturing firms carried out ad hoc cash checks. The findings of the study are shown in Table 4.10 below.

# Table 4. 10:

Ad Hoc Cash Checks

Response	Frequency	Percent
yes	44	81.5
no	10	18.5
Total	54	100.0

Source: Research Data (2021)

Table 4.10 above shows that the majority of the manufacturing companies carried out Ad hoc cash checks as shown by 81.5% (44) only 18.5% (10) of the manufacturing did not conduct ad hoc cash checks. Similar findings by Amponsah et al. (2017) carried out a study on the influence of internal controls on the financial performance of Insurance companies in Ghana. Noted the importance of surprise cash checks on a daily weekly as well as a monthly basis to enhance financial performance.

# 4.3.1.5 Bank alert Messages

This part of the questionnaire sought to establish the existence of alert bank transaction messages. The results of the study are shown in Table 4.11 below.

# Table 4. 11:

## **Bank Alert Messages**

Response	Frequency	Percent
Yes	34	63.0
No	20	37.0
Total	54	100.0
	001)	

Source: Research Data (2021)

Table 4.11 above shows that the majority of the manufacturing companies had a message alert on bank transactions as shown by 63.0% (34) whereas only 37% (20) of the manufacturing companies lacked a message alert. Alert messages are critical in an instant alert on the nature of a transaction such as a deposit or withdrawal to cushion against cash at bank loss. Amponsah et al. (2017) concurred on the relevance of internal controls on the financial performance of Insurance companies in Ghana through providing cash management software to check available bank balances in real-time. The study also included profitability and liquidity as measures for financial performance. The study established through inferential statistics that there was a strong positive relationship between cash management practices of reconciliation and the profitability of the companies.

### **4.3.1.6** Nature of your cash control system

This part of the questionnaire sought to find out from respondents the nature of cash control in their companies. The results of the study are shown in Table 4.12 below.

# Table 4. 12:

Nature of Cash Control System

Cash control system	Frequency	Percent
Real-time	29	53.7
Manual system	25	46.3
Total	54	100.0

Source: Research Data (2021)

Table 4.12 above shows that the majority of the manufacturing companies in the food sector had a real-time cash control system as shown by 53.7(29) only 46.3% (25) of the manufacturing companies had manual cash control practice.

Similar findings were revealed by Amponsah et al. (2017) who carried out a study on the influence of internal controls on the financial performance of Insurance companies in Ghana. The study emphasized the importance of the availability of cash management software to check available bank balances in real-time.

# **4.3.1.7** Number of times cash is reconciled weekly

This part of the questionnaire sought to establish the number of times cash was reconciled weekly. The results of the study are shown in Table 4.13 below.

# Table 4. 13:

Number of Times Cash Is Reconciled Weekly

Cash reconciliation		Minimum	Maximum	Maan	Std.
	IN	winnum	Maximum	wrean	Deviation
times on average in a week is cash	54	3	8	5.58	1.252
reconciled					
Source: Research Data (2021)					

Table 4.13 above revealed that most of the manufacturing companies carried out about 6time cash reconciliations as shown by a mean of 5.58. The company that had carried out the highest number of cash reconciliation weekly did 8 times whereas the company that did the least number of cash reconciliation weekly did 3 times. Similar findings by Amponsah et al. (2017) on the influence of internal controls on the financial performance of Insurance companies in Ghana revealed that routine cash checks during the daily weekly as well as monthly impacted positively on the financial performance of insurance companies.

## 4.3.2 Segregation of Duties

This part of the study presented Practices on segregation of duties among food manufacturing companies in Nairobi County.

### 4.3.2.1 Clearly defined roles for every staff

The part of the questionnaire sought to establish if at the manufacturing companies in Nairobi County there are clearly defined roles for every staff at your place of work. The results of the study are shown in Table 4.14 below.

# Table 4. 14:

Clearly	Defined	Roles for	Every Staff

Response	Frequency	Percent
yes	53	98.1
no	1	1.9
Total	54	100.0

Source: Research Data (2021)

Table 4.14 above shows that the majority of the manufacturing companies in Nairobi County had clearly defined roles for every staff as shown by 98.1% (53) of the respondents only 1.9% (1) had no clearly defined roles. Similar findings by Mukopi and Iravo (2015) who studied the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# 4.3.2.2 Communication of Job Responsibilities to the Employees

This part of the questionnaire sought to establish whether in the manufacturing companies in Nairobi County there are job responsibilities well communicated to the employees. The results of the study are shown in Table 4.15 below.

# Table 4. 15:

Communication of Job Responsibilities to the Employees

Response	Frequency	Percent
yes	50	92.6
no	4	7.4
Total	54	100.0
	001)	

Source: Research Data (2021)

Table 4.15 above shows that the majority of the companies in Manufacturing in Nairobi County communicate the job responsibilities to their employees as shown by 92.6% (50); only 7.7% (4) of the manufacturing companies had not communicated job responsibilities to the staff. Similar findings by Mukopi and Iravo (2015) revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately communicated, segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

#### **4.3.2.3** Jobs Delegation to Other Employees by the seniors

The part of the questionnaire sought to establish whether in food manufacturing companies in Nairobi county jobs are delegated to other employees by the senior to the junior employees. The results of the study are shown in Table 4.16 below.

### Table 4. 16:

#### Jobs Delegation to Other Employees by the seniors

Frequency	Percent
49	90.7
5	9.3
54	100.0
	49 5

Source: Research Data (2021)

Table 4.16 above shows that the majority of manufacturing firms in Nairobi County have a delegation of responsibility by the seniors to their juniors as shown by 90.7% (49) whereas only 9.3% (5) of the manufacturing companies did not have a delegation of responsibilities as shown by 9.3% (5). Similar findings by Mukopi and Iravo (2015) who studied the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# **4.3.2.4 Documented Work Policy**

The part of the questionnaire sought to establish whether the manufacturing companies in Nairobi County had a well-documented work policy. The results of the study are shown in table 4.17 below.

# Table 4. 17:

Response	Frequency	Percent
yes	43	79.6
no	11	20.4
Total	54	100.0

Documentation of Work Policy

Source: Research Data (2021)

Table 4.17 above shows that the majority of the manufacturing companies in Nairobi county had a well-documented work policy as shown by 79.6% (43) whereas only 20.4 (11) of the manufacturing companies did not have a well-documented work policy. Similar findings by Mukopi and Iravo (2015) who studied the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# **4.3.2.5** Service Charter for the Organization

The part of the questionnaire sought to establish if the manufacturing companies in Nairobi County had service charter for their organization. The results are shown in Table 4.18 below.

### Table 4. 18:

# Service Charter for the Organization

Response	Frequency	Percent
yes	41	75.9
no	13	24.1
Total	54	100.0
C = D = 1 D + (0)	001)	

Source: Research Data (2021)

Table 4.18 above shows that the majority of the manufacturing companies in Nairobi county had a service charter for their organizations as shown by 75.9% (41) only 24.1 (13) manufacturing companies did not have a service charter. Similar findings by Mukopi and Iravo (2015) revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately defined to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# 4.3.2.6 Departments Independence

This part of the questionnaire sought to establish whether the manufacturing companies in Nairobi County had independent departments. The results are shown in Table 4.19 below.

# Table 4. 19:

Response	Frequency	Percent
yes	46	85.2
no	8	14.8
Total	54	100.0

Source: Research Data (2021)

Departments Independence

Table 4.19 above shows that the majority of the manufacturing companies in Nairobi County had independent departments as shown by 85.2% (46) only 14.8% (8) of the companies had no independence among their departments. Similar findings by Mukopi

and Iravo (2015) who studied the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# 4.3.2.7 Accessibility of crucial information

This part of the questionnaire sought to establish whether a sole employee can have access to all crucial information. The results of the study are shown in Table 4.20 below.

#### **Table 4. 20:**

# Accessibility of Crucial Information

Frequency	Percent	
12	22.2	
42	77.8	
54	100.0	

Source: Research Data (2021)

Table 4.20 above shows that in the majority of the companies a sole employee can have exclusive right to access all information as shown by 77.8% (42); only in 22.2% (12) of the manufacturing, an employee had sole exclusive access to all crucial information of the company.

# **4.3.2.8** Organogram for Your Organization

This part of the questionnaire sought to establish whether the manufacturing companies in Nairobi County had an organizational structure. The results of the study are shown in the table below.

# Table 4. 21:

# Organogram for Your Organization

Response	Frequency	Percent
yes	51	94.4
no	3	5.6
Total	54	100.0
$\Omega_{\text{respective}}$ Denote the Determined	001)	

Source: Research Data (2021)

Table 4.21 above shows that in the majority of the food manufacturing companies in Nairobi County there was an organogram/organization structure as shown by 94.4% (51); only 5.6% (3) of the manufacturing companies lacked an organogram. Organizational structure is crucial in showing a flow of responsibilities and seniority at the workplace. Similar findings by Mukopi and Iravo (2015) who studied the influence of accounting controls on the financial performance of public limited companies in sugar manufacturing and processing companies in western Kenya revealed that different officers from the department of procurement and finance carried out interdependent functions that were adequately segregated to avoid conflicting interests that lead to positive liquidity of the firm was revealed through regression analysis.

# 4.3.2.9 Number of People Required To Process a Payment to Purchase

This part of the questionnaire sought to establish the number of people that are required to process a payment to purchase. The results of the study are shown in table 4.22 below.

# **Table 4. 22:**

Number					Std.
	Ν	Minimum	Maximum	Mean	Deviation
Number of people are required to	54	2	5	3.35	0.649
process a payment to purchase					
Source: Research Data (2021)					

Number of People Required To Process a Payment to Purchase

Table 4.22 above shows that the majority of the manufacturing companies in the manufacturing sector have on average about three (3) employees who can process a payment as shown by a mean of 3.35. The results indicate that the companies with the highest number of people processing payments were 5 whereas the minimum was 2. Authority to process payment should not be left with an individual to process payment a few employees are required to sign and effect payment to avoid loss of funds.

#### **4.3.3 Inventory Audits**

# 4.3.3.1 An inventory control system

This section of the study sought to establish whether the manufacturing companies had an inventory control system. The results of the study are shown in table 4.23 below.

# Table 4. 23:

Inventory	Control	System
-----------	---------	--------

Response	Frequency	Percent
yes	49	90.7
no	5	9.3
Total	54	100.0

Source: Research Data (2021)

Table 4.23 above shows that the majority of the manufacturing companies in the food sector in Nairobi County have an inventory control system as shown by 90.7% (49); there were only 9.3% (5) manufacturing companies that did not have an inventory control system in Nairobi County. A similar study by JShahwan (2015) was carried out on the influence of internal controls including risk assessment, internal audit function on the financial performance of food processing firms in Egypt. The study revealed that internal audits involve assets audits and liabilities audits. Assets audited included stock, cash fixed assets available. On the other hand, creditors and accruals are also audited. The study

revealed that audit functions on inventory especially in fast-moving consumable goods are carried out on a routine basis to avoid shoplifting, fraud detection within an organization, and effective stock movement to avoid dead stock. The functions of auditing stock were found to have a positive effect on the profitability of fast-moving consumable goods.

# 4.3.3.2 Counting and Inspection of Materials Before Storage

This part of the questionnaire sought whether the manufacturing companies in Nairobi County were inspecting the received materials from the suppliers before they were stored or entered in the inventory registers. The findings of the study are shown in Table 4.24 below.

#### Table 4. 24:

Counting and Inspection of Materials before Storage

Response	Frequency	Percent	
yes	51	94.4	
no	3	5.6	
Total	54	100.0	

Source: Research Data (2021)

The study revealed from the majority of the respondents as shown in table 4.24 above that indeed inspection of the materials was done as shown by 94.4%(51) only 5.6% (3) of the respondents did not inspect materials that were received from suppliers before entering them in the inventory records or stored. A similar study by Omwenga (2018) on the influence of inventory control on effective procurement practices in construction companies in Nairobi County. The study revealed that good practices on inventory management had a positive effect on the procurement that resulted in compliance with

legal requirements on procurement as provided by acts on public procurement and disposal activities as well as enabling strategic procurement alliance with companies.

# 4.3.3.3 Number of stock-Taking annually

This part of the questionnaire sought to establish the number of times that the manufacturing companies carried out stock-take annually. The results of the study are shown in Table 4.25 below.

#### Table 4. 25:

*Number of Stock-Taking Annually* 

	Ν	Minimum	Maximum	Mean	Std. Deviation
How many times do you do stock-	54	6	16	12.26	2.578
taking in a year					
Source: Research Data (2021)					

Table 4.25 showed that the majority of the companies carried out stock-taking around 12 times as shown by a mean of 12.26. The findings revealed that almost monthly the companies in the manufacturing sector do stock taking. The study also revealed that the companies that did the highest number of stock-taking carried out stock-taking 16 times whereas the companies that did the least times of stock-taking carried out 6 times annually. The study, therefore, noted that stock-taking was done adequate times to ensure that stock does not get lost. A similar study by JShahwan (2015) revealed that audit functions on inventory especially in fast-moving consumable goods are carried out on a routine basis to avoid shoplifting, fraud detection within an organization, and effective stock movement to avoid dead stock. The functions of auditing stock were found to have a positive effect on the profitability of fast-moving consumable goods.

#### **4.3.3.4** Reconciliation of inventory control system with the physical stock taken

This part of the questionnaire sought to establish whether the firms that owned the inventory control system reconciled such with the actual physical stock taken. The results of the study are shown in Table 4.26 below.

#### Table 4. 26:

Reconciliation of Inventory Control System with the Physical Stock Taken

Response	esponse Frequency	
yes	49	90.7
no	5	9.3
Total	54	100.0

Source: Research Data (2021)

Table 4.26 above shows that the majority of the manufacturing companies reconciled the physical stock taken with the inventory control system records as shown by 90.7% (49) only 9.3% (5) which did not own an inventory control system never reconciled inventory control system records with actual physical count records. A similar study by Okike et al. (2015) on the determinants of an effective internal control system of multinational telecommunication corporations in Nigeria revealed that Telecommunication businesses were found to require elaborate internal control due to the nature of business including the purchase of data, voice airtime, and bundles. Therefore, an ICT-enabled control system is a must in that case due to the risks anticipated.

# 4.3.3.5 Release of stock from store or warehouse

The study also sought to establish whether the manufacturing companies in Nairobi County released stock only after proper verification of request documents was done. The results of the study are shown in Table 4.27 below.

#### Table 4. 27:

## Release of Stock from Store or Warehouse

Frequency	Percent	
52	96.3	
2	3.7	
54	100.0	
	52 2	

Source: Research Data (2021)

The results in Table 4.27 show that majority of the respondents believe that manufacturing companies in Nairobi county only release stock from stores or warehouses after proper documents verification as shown by 96.3% (52) only 3.75 (2) revealed that the manufacturing companies do not carry out documents verification to release stock from store or warehouses. A similar study by Omwenga (2018) revealed that the influence of inventory control on effective procurement practices in construction companies in Nairobi County. The study revealed that good practices on inventory management resulted in compliance with legal requirements on procurement as provided by acts on public procurement and disposal activities as well as enabling strategic procurement alliances with companies.

# 4.3.4 Cost Management

# 4.3.4.1 Budget reviews on actual expenditure vs budgeted expenditure

The part of the questionnaire sought to establish the respondents whether their department has budget reviews where actual expenditure is compared with budgeted expenditure on the variance control system. The results of the study are shown in Table 4.28 below.

# Table 4. 28:

Response	Frequency	Percent
yes	50	92.6
no	4	7.4
Total	54	100.0
$\Omega$ D 1D ( $\Omega$	001)	

Budget Reviews on Actual Expenditure Vs Budgeted Expenditure

Source: Research Data (2021)

Results of the study as shown in table 4.28 above revealed that the majority of the manufacturing companies in the food sector in Nairobi County carried our budgetary reviews to compare actual expenditure with budgeted expenditure as shown by 92.6% (50) only 7.4% (4) of the manufacturing companies in Nairobi County did not conduct budgetary reviews. A similar study by Gitau (2019) on the influence of cost management strategies on the financial performance of agribusiness enterprises in Kenya focused on variables that included supply chain management, labor cost management, and inventory costs management revealed that there was a strong relationship between the study variables

## 4.3.4.2 Management of Operational and Overhead Costs

The part of the questionnaire sought to establish whether the operational or overhead costs were well managed in the food manufacturing companies in Nairobi County. The findings of the study are shown in Table 4.29 below.

#### Table 4. 29:

Management of Operational and Overhead Costs

Response	Frequency	Percent
yes	44	81.5
no	10	18.5
Total	54	100.0

Source: Research Data (2021)

Table 4.29 above revealed from the majority of the respondents that operational and overhead costs were well managed in as shown by 81.5% 944) only 18.5% did not find operational and overhead costs to be well managed in their manufacturing companies. Gitau (2019) concurred that when focusing on cost management important variables to

consider are supply chain management, labor cost management, and inventory costs management revealed that there was a strong relationship between the study variables.

## 4.3.4.3 Outsourcing of Raw Materials Costs

The part f the questionnaire sought from the respondents whether the manufacturing companies they worked for outsourced raw material from the cheapest suppliers. The results of the study are shown in Table 4.30 below.

#### Table 4. 30:

#### **Outsourcing Of Raw Materials Costs**

Response	Frequency	Percent
yes	38	70.4
no	16	29.6
Total	54	100.0

Source: Research Data (2021)

Table 4.30 above shows that the majority of the food manufacturing companies in Nairobi county sourced materials from the cheapest supplies available as shown by 70.4%(38) only 29.6 (16) of the respondents revealed that their manufacturing companies did not source materials from suppliers at lowest costs. A similar study by Nyabwanga and Ojera (2018) studied the influence of cost management practices on the financial performance of building contractors in Kasarani constituency, Nairobi County. The study noted that ensuring procurement practices such as the supply of materials including sand, cement, ballast, and wood materials ensured that the cost of maintenance was low which enhanced the profitability of these companies. Inferential statistics also revealed that appropriate outsourcing practices had a positive significant relationship with the financial performance of construction companies.

# 4.3.4.4 Check System to Ensure No Incurring Of Expenditure in Excess Allocated Funds

The part of the questionnaire sought from respondents to whether the manufacturing companies in Nairobi County had a check system to ensure that the business does not incur expenditure in excess allocated funds. The results of the study are shown in Table 4.31 below.

# Table 4. 31:

## Check System Excess Expenditure against Budget

Response	Frequency	Percent	
yes	47	87.0	
no	7	13.0	
Total	54	100.0	

Source: Research Data (2021)

Table 4.31 above shown from the majority of the respondents that the manufacturing companies in Nairobi County had a check system to ensure the businesses do not incur expenditure in excess allocated funds as shown by 87.0% (47) whereas only 13.0% (7) of the respondents revealed that their companies did not have Check system to ensure any incurring of expenditure in excess allocated funds. Gitau (2019) concurred that when focusing on cost management important variables to consider are supply chain management, labor cost management, and inventory costs management revealed that there was a strong relationship between the study variables.

# 4.3.4.5 Nature of Your Cost Control

The part of the questionnaire sought to establish from respondents the nature of the cost control system in the manufacturing companies in Nairobi County. The results of the study are shown in table 4.32 below.

#### Table 4. 32:

Nature of Your Cost Control

Category	Frequency	Percent
Control based on Historical	25	46.3
costs		
Control based on Future	15	27.8
forecast		
Hybrid	14	25.9
Total	54	100.0

Source: Research Data (2021)

Table 4.32 above show that the majority of food manufacturing companies in Nairobi county controlled their costs based on historical costs as shown by 46.3% (25) respondents; followed by 27.85 (15) of the respondents who controlled the companies costs based on future costs; only 25.9% 914) of the manufacturing companies controlled their costs through a mix of both future and historical costs (hybrid system). A similar study by Nyabwanga and Ojera (2018) studied the influence of cost management practices on the financial performance of building contractors in Kasarani constituency, Nairobi County. The study noted that ensuring procurement practices such as the supply of materials including sand, cement, ballast, and wood materials ensured that the cost of maintenance was low which enhanced the profitability of these companies. Inferential statistics also revealed that appropriate outsourcing practices had a positive significant relationship with the financial performance of construction companies.

# 4.3.4.6 Annual costs saving on both expenses and purchases

The part of the questionnaire sought from the respondents the annual costs saving on both expenses and purchases Kshs in M from cost control in the manufacturing companies in Nairobi County. The results of the study are shown in Table 4.33 below.

#### Table 4. 33:

#### Annual Costs Saving On both Expenses and Purchases

Cost-saving					Std.
Cost-saving	Ν	Minimum	Maximum	Mean	Deviation
annual costs saving on both expenses and purchases kshs in M from cost	54	4	24	10.17	4.775
management					

Source: Author (2021)

Table 4.33 above shows that the majority of the manufacturing companies in Nairobi County on average saved kshs10.17 million annually from practices of cost management. It was also revealed that the company which saved the highest amount from practices of cost management was kshs 24 million whereas the amount least cost saved was kshs 4 million. A similar study by Nyabwanga and Ojera (2018) studied the influence of cost management practices on the financial performance of building contractors in Kasarani constituency, Nairobi County. The study noted that ensuring procurement practices such as the supply of materials including sand, cement, ballast, and wood materials ensured that the cost of maintenance was low which enhanced the profitability of these companies. Inferential statistics also revealed that appropriate outsourcing practices had a positive significant relationship with the financial performance of construction companies.

# 4.3.5 Risk Assessment

# 4.3.5.1 Identification of Internal Control Risks

The part of the questionnaire sought to establish from respondents whether their manufacturing companies carried out the identification of different internal control risks. The results of the study are shown in Table 4.34 below.

# Table 4. 34:

#### Identification of Internal Control Risks

Frequency	Percent	
53	98.1	
1	1.9	
54	100.0	
	53 1	

Source: Research Data (2021)

Table 4.34 is shown from the majority of the respondents that their manufacturing companies carried out risk identification on internal controls as shown by 98.1% (53) only 1.19% (1) of the respondent revealed that their company did not have internal control risk identification mechanism. A similar study by Muhwezi et al. (2018) on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies revealed through descriptive analysis that the construction companies have in place an internal control system that has embraced the use of information technology, conducts frequent risks audits as well as monitoring accounting activities.

# 4.3.5.2 Risk Analysis of Potential Benefits

The part of the questionnaire sought from the respondents whether their food manufacturing companies carried out the analysis of internal control Risks and potential benefits. The findings of the study are shown in Table 4.35 below.

# Table 4. 35:

Risk Analysis of Potential Benefits

Frequency	Percent	
46	85.2	
8	14.8	
54	100.0	
	46 8 <b>54</b>	

Source: Research Data (2021)

Table 4.35 above shown from the majority of the respondents that their manufacturing companies carried out a risk analysis on potential benefits as shown by 85.2% (46) whereas only 14.8% (8) of the manufacturing companies did not analyze risks and potential benefits. A similar study by Muhwezi et al. (2018) on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies revealed through descriptive analysis that the construction companies have in place an internal control system that has embraced the use of information technology, conducts frequent risks audits as well as monitoring accounting activities.

# 4.3.5.3 Risk Evaluation of Internal Control Risks

The part of the questionnaire sought to establish from respondents whether their food manufacturing companies carried out an evaluation of risk on the internal controls. The results of the study are shown in table 4.36.

# Table 4. 36:

Risk Evaluation of Internal Control Risks

Response	Frequency	Percent
yes	49	90.7
no	5	9.3
Total	54	100.0

Source: Research Data (2021)

Table 4.36 above shows that the majority of the companies in the food manufacturing sector evaluated the internal control risks as shown by 90.7% (49) only 9.3% (5) did not evaluate internal control risks. A similar study by Muhwezi et al. (2018) on the integration

of internal control on project success in Kampala, Uganda amongst the big five construction companies revealed through descriptive analysis that the construction companies have in place an internal control system that has embraced the use of information technology, conducts frequent risks audits as well as monitoring accounting activities.

# 4.3.5.4 Response to Risk

The part of the questionnaire sought to establish whether the manufacturing companies in Nairobi County responded to identified internal control risks. The findings of the study are shown in Table 4.37 below.

### Table 4. 37:

Response to Risk

Frequency	Percent
50	92.6
4	7.4
54	100.0
	50 4

Table 4.37 above shows that the majority of manufacturing companies responded to identified risks as shown by 92.6% (50) of the companies; only 7.4 %( 4) f the manufacturing companies did not respond to internal control risks. A similar study by Muhwezi et al. (2018) on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies revealed through descriptive analysis that the construction companies have in place an internal control system that has embraced the use of information technology, conducts frequent risks audits as well as monitoring accounting activities.

# 4.3.5.5 Annual Budgetary Allocation for Risk Management

The part of the questionnaire sought to establish the amount of money that was allocated for purposes of risk management in the manufacturing companies in Nairobi County. The results of the study are shown in Table 4.38 below.

#### **Table 4.38:**

#### Annual Budgetary Allocation for Risk Management

Budget allocation					Std.
	Ν	Minimum	Maximum	Mean	Deviation
annual budgetary allocation for risk	54	3	9	5.62	1.161
management in Kshs (M)					
Source: Research Data (2021)					

Table 4.38 above shows that majority of the firms allocated on average kshs 5.62 M as shown by a mean score of 5.62. The manufacturing company which had the highest budgetary allocation for risk management was kshs 9M whereas the company with the lowest allocation amount for risk management was kshs 3M. A similar study by Muhwezi et al. (2018) on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies revealed through descriptive analysis that the construction companies have in place an internal control system that has embraced the use of information technology, conducts frequent risks audits as well as monitoring accounting activities.

# 4.3.6 Financial Performance

The part of the data collection form in the questionnaire sought to establish the financial performance of the food manufacturing companies in Nairobi County through sales revenues, net profits, and profit margins. The findings of the study as shown in table 4.39 below.

# Table 4. 39:

Descriptive	<b>Statistics</b>	on Financial	Per	formance

Financial Measure	Ν	Minimum	Maximum	Mean	Std. Deviation
Average profit (M)	54	33.90	149.32	90.9412	33.87956
Average sales(M)	54	109.0	534.0	271.648	105.9343
Profit margin (%)	54	19.595	48.424	33.97582	5.055909
	(0.0.0.1)	\ \			

Source: Research Data (2021)

Table 4.39 shown that the majority of the manufacturing companies had an average profit of kshs 90.94 Million as shown by a mean of 90.94, the company with the highest profit had kshs149.32 Million whereas the manufacturing company with the lowest annual profit was kshs 33.90 million. The study also revealed that the majority of the manufacturing companies in Nairobi county made annual average sales of kshs 271.64 million as shown by a mean of 271.648, the company with the highest sales had 534.0 million whereas the one with the lowest sales made 109.0 Million.

On the net profit margin, the study revealed that the majority of the manufacturing companies in Nairobi County had a profit margin of 33.97% as shown by a mean of 33.976; manufacturing companies with the highest profit margin had 48.424 whereas the companies with the lowest profit margin registered a 19.59%. The profit margin indicates the difference in companies' efficiencies of the internal controls that are in place. The company with the highest profit margin also had better internal controls. A similar study by Gee et al. (2019) revealed that in manufacturing organizations, financial performance can be improved through the reduction of wastage in the production process to improve on profit margin and operation efficiency margin. The critical success factors in a manufacturing organization fall within the ability to be economical and efficient in the whole production line. Financial statements and reports prepared by the organization provide crucial information relating to performance, such information including sales

revenues and profits levels are important in communicating key information that guides decision-making among investors.

# 4.4 Results Of Hypothesis Tests

In this part of the study, both assumptions of the linear regression analysis and results of regression analysis were presented. The diagnostic tests that were carried out to determine whether the data was fit for multiple linear regression included tests for linearity, normality tests, auto correlation, tests on multicollinearity, and heteroscedasticity.

#### 4.4.1 Heteroscedasticity

Heteroscedasticity refers to a situation where one witnesses an unequal distribution in variance on the residuals in data. In regression analysis, the assumption is that residuals are obtained from an entire population that has got constant residuals. The results of regression may be invalid if the scatter of the residuals is not equal. The study used the Glesjer test to test for the heteroscedasticity as shown in table 4.40.

# Table 4. 40:

### Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta	-	
(Constant)	0.739	0.226		3.270	.0019
Cash reconciliations	0.759	0.274	0.691	2.770	.0079
Segregation of duties	0.703	0.299	0.64	2.351	.0229
Inventory audit	0.596	0.282	0.542	2.113	.0398
Cost management	0.798	0.256	0.726	3.117	.0031
Risk assessment	0.829	0.253	0.754	3.277	.0019

a. Dependent Variable: Financial performance

Source: Research Data (2021)

The findings reveal that there is no heteroscedasticity problem since the sig. values of the variables obtained were less than 0.05. The null hypothesis of Breusch-Pagan/ Cook-Weisberg was also used to test heteroscedasticity

# Table 4. 41:

Test for Heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity				
chi2(1)	0.81			
Prob > chi2	0.3451			

# Source: Research Data (2021)

In this study, measurement errors were very small because the variance in the data set was minimal and there existed no subpopulation differences between manufacturing medium enterprises in Nairobi County. Since the p-value is 0.3451 and is, greater than 0.05 we accept the null hypothesis that there was no heteroscedasticity.

# 4.4.2 Normality Test

Tests of normality are done to ascertain whether the sample data was drawn from normally distributed data. The data set should not be skewed on one side, however, it should be a normal distribution. To test for the presence of normality in the data both Kolmogorov-Smirnov and Shapiro-Wilk tests were carried out. Besides probability plots, graphs were used. The results are presented in table 4.42 (McNichols & Stubben, 2018).

# **Table 4.42:**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cash reconciliations	.070	53	.028	.987	53	.009
Segregation of duties	.067	53	.040	.991	53	.027
Inventory audit	.085	53	.002	.983	53	.023
Cost management	.060	53	.020	.992	53	.038
Risk assessment	.073	53	.018	.988	53	.011

Tests of Normality

\*. This is a lower bound of true significance.

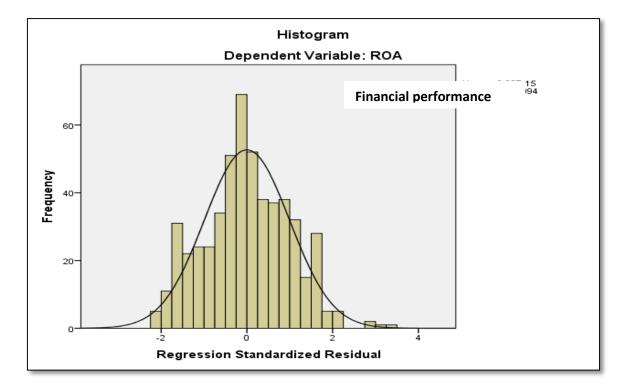
a. Lilliefors Significance Correction

Source: Research Data (2021)

From Table 4.42, it is shown that both tests resulted in p-values that were lesser than 0.05 which was the level of significance. The results, therefore, revealed that the data was normally distributed and that the sample results would not give invalidated results. Figure 4.2 revealed normal distribution from the plots on the histograms which indicated that there was no violation of the rule.

# Figure 4.1:

## Normality Test



Source: Research Data (2021)

# 4.4.3 Autocorrelation Test

Tests for auto correlation are conducted to ascertain that the errors are independent and not as a result of others. Durbin Watson scale is used to test for auto correlation. The values should fall between 1.5 and 2.5 if there is no presence of auto correlation. The results are shown in Table 4.43. Results revealed a value of 2.036 which revealed that the error was not auto correlated.

# Table 4. 43:

#### Model Summary

Model	Durbin-Watson
1	2.036

Source: Research Data (2021).

# 4.4.4 Test for Multicollinearity

The variables are supposed to be independent in a linear regression relationship. However, variables may be inter correlated therefore lacking independence of variable, whereby a change in one independent variable results in the change of the other independent variable (Taherdoost, 2016). Both tolerance and VIF tests were conducted. Values for VIF that are above 10 show very serious multicollinearity. Tolerance is the reciprocal of VIF. The results are shown in Table 4.44.

# Table 4. 44:

# Coefficients

Model	Collinearity Statistics			
	Tolerance	VIF		
(Constant)				
Cash reconciliations	0.927	1.079		
Segregation of duties	0.466	2.146		
Inventory audit	0.603	1.658		
Cost management	0.638	1.567		
Risk assessment	0.776	1.289		

a. Dependent Variable: Financial performance

The VIF values were below 10 therefore the independent variable did not suffer from multi-collinearity and therefore the results were very reliable.

# **4.5.5 Correlation Analysis**

Correlation analysis was conducted among the variables to establish the direction of the relationship and the strength of the relationship. The results of the study are shown in Table 4.45 below.

# Table 4. 45:

# Correlation Analysis

		Cash reconciliat ion	Segregat ion of duties	Invent ory audit	Cost managem ent	risk assessm ent	Financial performa nce
Cash reconciliat ion	Pearson Correlat ion Sig.	1					
Segregatio n of duties		.723 .435	1				
Inventory audit	Pearson Correlat ion Sig.	.829 .176	.823 .433	1			
Cost managem ent	Pearson Correlat ion Sig.	.644* .049	.712* .016	.570 .109	1		
Risk assessmen t	Pearson	.613 .061	.879 .098	775 .103	.961* .028	1	
Financial performan ce	Pearson Correlat ion Sig.	.827* .025	.766* .031	.650* .016	.870* .010	.904* .012	1

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

Source: Author (2021)

Table 4.44 shown that Cash reconciliation and segregation of duties had a positive but insignificant relationship (*p-value*=0.435 greater than 0.05, r= 0.723); cash reconciliation and inventory management had a positive but insignificant relationship (*p-value*=0.176 greater than 0.05; r=.829); cash reconciliation had a positive and significant relationship with cost management (*p-value*=0.049 less than 0.005<sup>,</sup> r= 0.644); cash reconciliation had

a positive but insignificant relationship with risk management (*p-value*=0.061 greater than 0.05 r=0.613) cash reconciliation had a positive and significant relationship with financial performance (*p-value*=0.025 less than 0.005 r=0.827).

Segregation of duties and Inventory audit had a positive but insignificant relationship (*p-value*=.433 greater than 0.05; r=0.823); Segregation of duties and cost management had a positive and significant relationship (*p-value*=.016 less than 0.05; r=0.712); Segregation of duties and risk assessment had a positive but insignificant relationship (*p-value*=.098 greater than 0.05; r=0.879), finally, Segregation of duties and financial performance had a positive and significant relationship (*p-value*=.031 less than 0.05; r=0.776).

Inventory audit and cost management had a positive but insignificant relationship (*p*-*value*=.109 greater than 0.05; r=0.570); Inventory audit and risk assessment had a negative but insignificant relationship (*p*-*value*=0.103 greater than 0.05; r= -0.775), finally Inventory audit and financial performance had a positive and significant relationship (*p*-*value*=.016 greater than 0.05; r=0.650).

Cost management and risk assessment had a positive and significant relationship (*p-value*=0.028 less than 0.05; r= 0.916); Cost management and financial performance had a positive and significant relationship (*p-value*=.010 less than 0.05; r= 0.870).

Finally risk assessment had a positive and significant relationship with financial performance (*p*-value=0.012 less than 0.05; r= 0.904).

A similar study by Okike et al. (2015) on the determinants of an effective internal control system of multinational telecommunication corporations in Nigeria revealed that Firms that handle huge transactions on daily basis need a more elaborate internal control system covering sales, cash management, inventory management whereas ones with less frequent

would not need such. On the other hand, new enterprises need an internal control system more than old ones due to a lack of familiarity with practices in such businesses. Telecommunication businesses were found to require elaborate internal control due to the nature of business including purchase of data, voice airtime, and bundles. Therefore, an ICT-enabled control system is a must in that case due to the risks anticipated.

## 4.5.6 Regression Analysis

Regression analysis was used to establish if there exists a relationship between the independent and dependent variable and the strength of the relationship if it exists and the direction of the relationship. The results of the study are presented and discussed under the model summary, ANOVA, and regression coefficients

## 4.6.1 Model Summary

The coefficient of determination R square is used to explain the variation of the dependent variable as a result of the independent variables. The model summary results are presented in Table 4.46 below.

#### **Table 4.46:**

#### Model Summary

 Model	R	<b>R</b> Square	Adjusted R Square	Std. Error of the Estimate
 1	0.917	0.842	0.825	1.985

Source: Author (2021)

Table 4.45 above shown an R square of 0.842 which can be explained that the independent variables (Cash reconciliation, Segregation of duties, Inventory audit, Cost management, and risk assessment) can explain about 84.2% of the variations of the dependent variable (financial- performance). Other factors not included in the model explain about 15.8% of the variation of financial performance.

# 4.6.2 ANOVA

ANOVA was conducted to determine the overall significance of variables in the model.

The results are presented in Table 4.47 below.

# **Table 4. 47:**

# ANOVA

Moo	del	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1089.8	5	217.960	51.040	0.000
	Residual	204.98	48	4.270		
	Total	1294.78	53			

a. Predictors: (Constant), Cash reconciliation, Segregation of duties, Inventory audit, Cost management, Risk assessmentb. Dependent Variable: Financial Performance

Source: Author (2021)

Table 4.46 above shows that the F ratio value of 51.040 is associated with a p-value of

0.001. The results of the study, therefore, revealed that the overall model was significant

in predicting the financial performance of manufacturing companies in Nairobi County.

# 4.6.3 Regression Coefficients

Multi-linear regression analysis was conducted to determine the nature of the relationship

between the independent variables and the dependent variables. The results of the study

are shown in Table 4.47 below.

#### **Table 4. 48:**

# **Regression Coefficients**

Model			Standardize		
	Unstandardized Coefficients		d Coefficients		
	(Constant)	0.739	0.226		3.270
Cash reconciliation	0.759	0.274	0.691	2.770	.0079
Segregation of duties	0.703	0.299	0.64	2.351	.0229
Inventory audit	0.596	0.282	0.542	2.113	.0398
Cost Management	0.798	0.256	0.726	3.117	.0031
Risk assessment	0.829	0.253	0.754	3.277	.0019

a. Dependent Variable: Financial Performance

Source: Author (2021)

Table 4.47 above shown above revealed a constant where  $\beta$ =0.739, t=3.270 and associated a *p*-value =.0019 which is less than 0.05 and therefore constant had a significant relationship with financial performance. The results, therefore, revealed that holding other factors constant the financial performance of the food manufacturing companies in Nairobi was 0.739.

The table above shown that cash reconciliation had a positive and significant influence on financial performance ( $\beta = 0.759$ , t=2.770, *p*- *value*= 0.0079 which is less than 0.05). An increase by one unit of cash reconciliations which is significant results in a 0.759 increase in the financial performance of food manufacturing companies in Nairobi County. Ibrahim et al. (2017) were in agreement with the study findings that internal controls significantly contributed to the better financial performance of Insurance companies in Ghana. The study established through inferential statistics that there was a strong positive relationship

between cash management practices of reconciliation and the profitability of the companies. Divergent views were revealed by Akimana (2019) who studied the influence of internal cash management policies as internal controls on the financial performance of agribusiness enterprises in Nairobi County. The study established through correlation and regression analysis that there was no significant relationship between cash reconciliation as management practices and financial performance in these studies. The study, therefore, noted that every sector of the economy studied had divergent findings and therefore no need for generalization.

The results showed that segregation of duties had a positive and significant influence on financial performance ( $\beta = 0.703$ , t=2.351, *p-value*= 0.0229 which is less than 0.05). An increase in individuals on segregation of duties which is significant by one unit results in an increase in the financial performance of food manufacturing companies in Nairobi County by 0.703. Similar findings by Abdi (2015) who carried out a study on the effect of internal controls on the financial performance of private banks in Mogadishu established through regression analysis that cash was best controlled when there were effective duties segregation and job description, in consequence, led to better cash management and therefore better performance, thus a positive and significant relationship between the two variables on segregation of duties and liquidity of the banks was established.

Divergent views were noted by Ngari (2017) who carried out a study on the effect of internal controls and the performance of the effect of internal controls on the financial performance of microfinance institutions in Kenya. The study revealed that segregation duties did not have any effect on the profitability of this microfinance. Therefore, different sectors have unique findings.

Inventory audits had a positive and significant influence on financial performance ( $\beta$ = 0.596, t=2.113, *p-value*= 0.0398 which is less than 0.05). A unit increase in inventory audit which is significant results in a 0.596 increase in the financial performance of food manufacturing companies in Nairobi County. Inventory audit had the highest influence and significance on financial performance. A similar study by JShahwan (2015) revealed that audit functions on inventory especially in fast-moving consumable goods are carried out on a routine basis to avoid shoplifting, fraud detection within an organization, and effective stock movement to avoid dead stock. The functions of auditing stock were found to have a positive effect on the profitability of fast-moving consumable goods.

Similar findings were revealed by Kithinji (2015) who studied the influence of monitoring stock movement on the profitability of supermarkets in Kenya. The study carried out a regression analysis to establish the nature of the relationship between internal controls and financial performance. The study revealed that there existed a significantly positive relationship between inventory control practices and financial performance with major benefits revealed in ensuring that the company has cash at all times as well as avoidance of frauds through the stealing of stocks in shelves and warehouses.

Cost Management had a positive and significant influence on the financial performance of food manufacturing companies in Nairobi County ( $\beta$ = 0.798, t=3.117, *p-value*= 0.0031 which is less than 0.05). Therefore, a unit increase in cost management which is significant results in a 0.798 unit increase in financial performance. A similar study by Gitau (2019) on the influence of cost management strategies on the financial performance of agribusiness enterprises in Kenya whose variables included supply chain management, labor cost management, and inventory costs management revealed that there was a strong relationship between the study variables. Of importance, the study noted that ensuring that there is the efficient management of stock levels ensures the reduction of high warehousing charges and tying much capital on stock, on the other hand, stock deliveries to and outside stock should be done through efficient logistical operations that ensures minimum costs. On the other hand, a company should ensure minimal costs on labor by hiring competent staff that reduces redundancies as well as replication of responsibilities by having job descriptions that are clearly defined.

A risk assessment had a positive and significant influence on the financial performance of food manufacturing companies in Nairobi County ( $\beta$ = 0.829, t=0.3277, *p-value*= 0.0019 which is less than 0.05). An increase of risk assessment allocation which was significant by one unit results in financial performance by 0.829 units.

Muhwezi et al. (2018) carried out a study on the integration of internal control on project success in Kampala, Uganda amongst the big five construction companies. The study revealed that the construction companies have in place an internal control system that involves among these activities: control environment, risk assessment, control activities, information communication and communications, monitoring, and information technology. The study also revealed a strong positive relationship between internal controls and project success.

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# **CHAPTER FIVE**

# SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

## **5.1 Introduction**

This section of the study presented a summary of the study's findings, the conclusions are drawn from these findings as well as the recommendations made.

## **5.2 Summary of Findings**

# **5.2.1 Cash Reconciliations**

The study found that the majority of food manufacturing companies in Nairobi carry out routine cash reconciliations about 6 times a week, they keep proper cash reconciliation records and have real-time cash registers and bank alert messages on transactions as internal cash controls.

## 5.2.2 Segregation of Duties

The study also found that manufacturing companies in Nairobi County have allocated more than one person to authorize the payment with about three (3) people authorizing payment and also the organizations have organization charts and service charter that have clearly defined roles of the employees to avoid role conflicts as internal controls.

#### **5.2.3 Inventory Audits**

The study found that many companies in the manufacturing industry in Nairobi County carry out inventory audit regularly about 12 times a year and have inventory control systems and proper documentation for both entry and release of stock.

#### **5.2.4 Cost Management**

The study also revealed that food manufacturing companies in Nairobi County have cost management internal control practices that involve budgeting and comparison of budgets with actual spending, besides the company outsources materials and services from the cheapest suppliers that have enabled them to save profound amounts.

#### 5.2.5 Risk Assessment

The study finally found that risk assessment as an internal control is carried out among food manufacturing companies in Nairobi County through the identification of risks, conducting risk evaluation, and analysis of risks to establish benefits.

#### 5.3 Conclusions of the Study

#### **5.3.1 Cash Reconciliations**

The study concluded that cash reconciliation and financial performance of food manufacturing medium enterprises in Nairobi County have a positive and significant relationship. Increasing the number of weekly cash reconciliations increases financial performance such as net profit margin.

#### **5.3.2 Segregation of Duties**

The study also concluded that segregation of duties has a positive and significant influence on the financial performance of food manufacturing medium enterprises in Nairobi County. Increasing the number of people approving payment results in an increase in financial performance such as net profit margin.

#### **5.3.3 Inventory Audits**

The study concluded that inventory audits positively and significantly influenced the financial performance of food manufacturing medium enterprises in Nairobi County. Increasing the number of annual stock takes results in an increase in financial performance such as net profit margin.

#### **5.3.4 Cost Management**

The study also concluded that improving cost management control strategies had a positive and significant influence on the financial performance of food manufacturing medium enterprises in Nairobi County. Managing costs such as outsourcing from cheapest suppliers resulted in better financial performance such as net profit margin.

#### 5.3.4 Risk Assessment

Finally, the study concluded that risk assessment as an internal control practice had a positive and significant influence on the financial performance of food manufacturing medium enterprises in Nairobi County. Allocation of more funds in risk management and assessment resulted in higher financial performance such as net profit margin.

# **5.4 Recommendations of the Study**

#### **5.4.1 Policy Recommendations**

#### **5.4.1.1 Cash Reconciliations**

The study recommended for the medium enterprises' companies in Nairobi County to keep petty cash records for reconciliation, have a real-time cash reconciliation register, reconcile payment receipts and invoice records, conduct ad-hock cash checks, have alert messages on bank transactions, introduce a real-time cash control system and ensure many times as possible on cash reconciliation on weekly basis to enhance internal control which will in effect enhance financial performance.

#### **5.4.1.2 Segregation of Duties**

The study also recommended a clear definition of roles for every staff at the workplace, better communication of job responsibilities to the employees, the introduction of a welldocumented work policy, the introduction of a service charter at the organization, control access of information, and ensuring adequate people for authorization of payment as internal controls that will ensure better financial performance.

#### 5.4.1.3 Inventory Audits

The study further recommended for introduction of an inventory control system, counting, and inspection of raw materials entering the storeroom, verification of documents before store leaves warehouse and store, increasing the number of stock-taking times in a year, and reconciling records from the inventory control system and actual physical stock.

#### 5.4.1.4 Cost Management

The study also recommended for the introduction of reviews on the budget to compare the budgeted expenditure with the actual one on the variance control system, sourcing of materials from cheapest sources around, and introduction of more to do with a hybrid cost control system where both future cost management practices and cost management based on historical costs judgments.

#### 5.4.1.5 Risk Assessment

The study finally recommended the introduction of risk assessment practices of internal controls that included: risk identification, carrying out analysis of risks and potential benefits, carrying out risk evaluation, and optimal allocation of funds for risk management to enhance financial performance.

### **5.4.2 Recommendations for further Studies**

The study recommended for another study to be conducted where more factors of internal controls are included; our study model could only predict 86.4% of the dependent variable's variation as a result of the five independent variables included in the model

other variables accounting for 13.4% can be added to improve the specification of the model.

Another study can also be conducted on the moderating effect of organizational characteristics on the relationship between internal controls and the financial performance of food manufacturing companies in Nairobi County.

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## **APPENDICES**

#### **Appendix I: Introduction Letter**

### THE FINANCE DEPARTMENT

Dear Sir/ Madam

### **<u>REF: COLLECTION OF DATA</u>**

I am a student at Kenya Methodist University pursuing a Master Degree course. I am currently undertaking a research project on "INFLUENCE OF INTERNAL CONTROLS ON FINANCIAL PERFORMANCE OF MEDIUM ENTERPRISES IN MANUFACTURING SECTOR IN NAIROBI COUNTY." which is a requirement for the award of the degree. I am therefore seeking your assistance in filling the questionnaire attached.

All the information given will be held in confidentiality and will only be used for educational purposes.

Thank you and I look forward to your assistance.

Yours faithfully,

Charity Maina

0725511801

# **Appendix II: Research Questionnaire**

# **Instructions (Tick appropriately)**

# **SECTION A: Background Information**

1. Age:

- □ 18-30 years
- □ 31-40 years
- □ 41-50 years
- $\Box$  Above 51 years

## 2. Education level

- □ Certificate
- □ Diploma level
- □ Graduate
- D Postgraduate
- 3. Working experience
  - $\Box$  Less than 5 years
  - □ 6-10 years
  - □ 11-15 years
  - $\Box$  15 years and above

## Section B: Influence of Cash Reconciliation on Financial Performance

. Do you keep petty cash records for reconciliation Yes ( )		No ( )
5. Does your organization have a real-time cash reconciliation regi	ster? Yes ()	
No ( )		
6. Do you reconcile payment receipts and invoice records?	Yes ()	No ( )
7. Do you conduct ad hock cash checks?	Yes ()	No ( )
8. Does your organization have alert messages on bank transaction	s? Yes ()	No()
9. What is the nature of your cash control system?		
Real-time ()		
Manual system ( )		
10. How many times on average in a week is cash reconciled	?	

### Section C: Influence of Segregation of Duties on Financial Performance

11. Do you have clearly defined roles for every staff at your place of work?

Yes ( ) No ( )

12. Are job responsibilities well communicated to the employees?

Yes ( ) No ( )

13. Are jobs delegated to other employees by the senior to the junior employees?

Yes ( ) No ( )

14. Do you have a well-documented work policy?

Yes ( ) No ( )

15. Do you have a service charter at your organization?

Yes ( ) No ( )

16. Would you say your departments are independent?

Yes ( ) No ( )

17. Can one have access to all valuable information without the consent of other staff? Yes ( ) No ( )

18. Do you have an organogram for your organization? Yes ( ) No ( )

19. How many people are required to process a payment to purchase? .....

# Section D: Influence of Audit inventory on Financial Performance

20. Does your organization have an inventory control system? Yes () No ()
21. Are materials received from suppliers counted and inspected before entry to the storeroom/entered in inventory records? Yes () No ()

22. How many times do you do stock-taking in a year?

.....

23. If you own an inventory control system do you reconcile that with the physical stock taken?

Yes ( ) No ( )

24. Stock from the store is only released after proper verification of request documents

Yes ( ) No ( )

# Section E: Influence of Cost control on Financial Performance

25. Would you that your department has budget reviews where actual expenditure is

compared with budgeted expenditure on variance control system?

Yes ( ) No ( )

26. Would you say that your operational costs/overheads are well managed?

Yes ( ) No ( )

27. Would you say that your business sources materials from the cheapest sources around?

Yes ( ) No ( )

28. Would you say that you have a check system to ensure that the business does not incur expenditure in excess allocated funds? Yes ( ) No ( )

29. What is the nature of your cost control?

Control based on Historical costs ()

Control based on Future forecast ()

Hybrid

30. What are the annual costs saving on both expenses and purchases kshs on budget vs actuals .....

### Section F: Influence of risk management on Financial Performance

()

31. Do you carry out Risk identification	Yes	() No()
32. Do you carry out an Analysis of Risks and potentia	l benefits Yes	() No()
33. Do you carry out Risk evaluation	Yes ()	No ( )
34. Do you carry out Response to risk	Yes ()	No ( )

35. What is your annual budgetary allocation for rik management Kshs.....

In Millions	2016	2017	2018	2019	Average
Net profits					
revenues					
Profit margin					

# **Appendix III: Secondary Data Collection Schedule**

#### Appendix IV: List of Manufacturing Medium Enterprises in Nairobi County

- 1. African Nut company- industrial area Nairobi
- 2. Al-mahra industries limited- industrial area Nairobi
- 3. Almasi beverages limited- industrial area Nairobi
- 4. Alpha fine foods ltd- industrial area Nairobi
- 5. Alpha Grain Millers -industrial area Nairobi
- 6. Arax mills limited- industrial area Nairobi
- 7. Bakemark limited- industrial area Nairobi
- 8. Baraka Flour Mills- industrial area Nairobi
- 9. Belfast mill ltd capel food ingredients
- 10. Belfast millers' ltd- industrial area Nairobi
- 11. Biofood production ltd- industrial area Nairobi
- 12. Bizkard ltd- industrial area Nairobi
- 13. Blends of nature ltd- industrial area Nairobi
- 14. Buyline industres ltd- industrial area Nairobi
- 15. C.czamikow sugar (EA) ltd- industrial area Nairobi
- 16. C.dormans ltd- industrial area Nairobi
- 17. Candy Kenya ltd- industrial area Nairobi
- 18. Capel food ingredients- industrial area Nairobi
- 19. Chemraw EA ltd- industrial area Nairobi
- 20. Coca-cola east Africa ltd- industrial area Nairobi
- 21. Confini ltd- industrial area Nairobi
- 22. Daima Milk and Dairy Product- industrial area Nairobi
- 23. Dalcom Kenya ltd- industrial area Nairobi
- 24. Deeking Kenya ltd- industrial area Nairobi
- 25. Desbro Kenya ltd- industrial area Nairobi
- 26. East African sea foods ltd- industrial area Nairobi
- 27. Edible oil products ltd- industrial area Nairobi
- 28. Elekea ltd- industrial area Nairobi
- 29. Elex products ltd- industrial area Nairobi
- 30. Elida industries ltd- industrial area Nairobi
- 31. Ellams products- industrial area Nairobi
- 32. Eriken manufacturing industries ltd
- 33. Farmers' choice ltdfunkidz limited
- 34. Genjoy Food Products LtdLocation: Embakasi
- 35. Gillanis supermarket ltd industrial area Nairobi
- 36. Golden Africa (K) Ltd- industrial area Nairobi
- 37. Golden Harvest Mills- industrial area Nairobi
- 38. Greenforest foods ltd- industrial area Nairobi
- 39. Groove ltd- industrial area Nairobi
- 40. Henkel kenya ltd- industrial area Nairobi
- 41. Ingredion Holding LLC- industrial area Nairobi

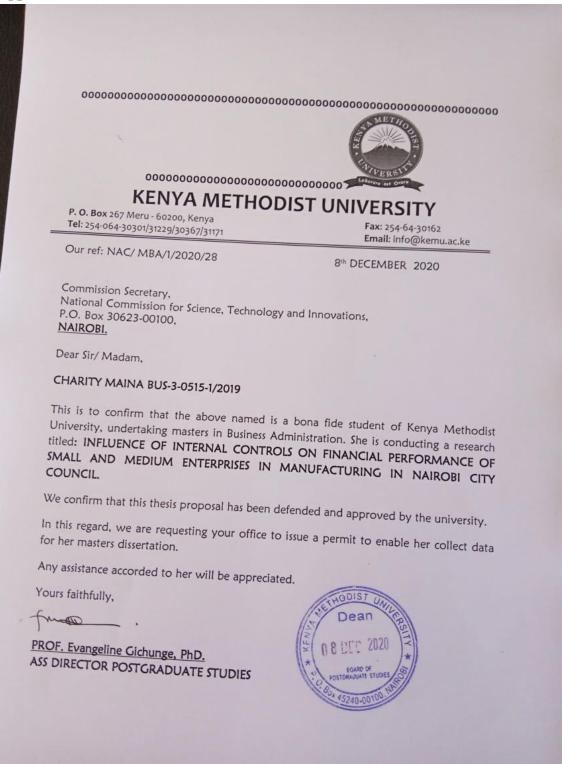
42. Italian geleti and food products ltd- industrial area Nairobi

- 43. Joeliz Bone Meal Ltd- industrial area Nairobi
- 44. Jotarp Enterprises- industrial area Nairobi
- 45. Kabansora Millers Ltd- industrial area Nairobi
- 46. Kamili packers ltd- industrial area Nairobi
- 47. Kanku kenya ltd- industrial area Nairobi
- 48. Kapa Oil Refineries Ltd- industrial area Nairobi
- 49. Kenafric industries ltd- industrial area Nairobi
- 50. Kenbro industries ltd- industrial area Nairobi
- 51. Kenchai Trading Limited- industrial area Nairobi
- 52. Kenchic ltd- industrial area Nairobi
- 53. Kenya sweets limited- industrial area Nairobi
- 54. Kenya wine agencies ltd- industrial area Nairobi
- 55. Kibo africa- industrial area Nairobi
- 56. Kirinyaga flour millers- industrial area Nairobi
- 57. Manji food industries ltd- industrial area Nairobi
- 58. Mibisco Limited- industrial area Nairobi
- 59. Midrow kenya ltd- industrial area Nairobi
- 60. Mills industries ltd- industrial area Nairobi
- 61. Mini bakereries (nbi) ltd- industrial area Nairobi
- 62. Mosara ltd- industrial area Nairobi
- 63. Nairobi Flour Millers Ltd- industrial area Nairobi
- 64. Nairobi Flour Millers Ltd- industrial area Nairobi
- 65. Nairobi flour mills ltd- industrial area Nairobi
- 66. Nairobi java house ltd- industrial area Nairobi
- 67. New Italycor LtdFlamingo Grain Millers Ltd
- 68. Norda Industries Limited- industrial area Nairobi
- 69. Omega apparel ltd- industrial area Nairobi
- 70. Oriental mills ltd- industrial area Nairobi
- 71. Oriental mills ltd- industrial area Nairobi
- 72. Panesar's kenya ltd- industrial area Nairobi
- 73. Paras indstries ltd- industrial area Nairobi
- 74. Patco industries ltd- industrial area Nairobi
- 75. Patken ltd- industrial area Nairobi
- 76. Pembe flur mills ltd- industrial area Nairobi
- 77. Polybrend ltd- industrial area Nairobi
- 78. Premier Flour Mills Ltd- industrial area Nairobi
- 79. Premier foods industries ltdrafiki millers ltdroyal swiss bakery bakery ltd
- 80. Premier industries ltd- industrial area Nairobi
- 81. Prosel ltd- industrial area Nairobi
- 82. Prosoya Kenya Limited. industrial area Nairobi
- 83. PZ Cussons East Africa Ltd- industrial area Nairobi
- 84. Rafiki Millers Ltd- industrial area Nairobi

- 85. Sameer agriculture and livestock (kenya ) ltd
- 86. Soy Afric Ltd -Peafoods Processing CompanyLocation: Off Enterprise Road, Nairobi
- 87. Top Food (EA) Ltd- industrial area Nairobi
- 88. Tri Clover Industries (K) Ltd- industrial area Nairobi
- 89. Uchumi Grain Millers EA Ltd- industrial area Nairobi
- 90. Unga group ltd- industrial area Nairobi
- 91. Uniliver kenya ltd- industrial area Nairobi
- 92. Ustawi grain millers ltd- industrial area Nairobi
- 93. Uzuri industries ltd- industrial area Nairobi
- 94. Weetabix east Africa- industrial area Nairobi
- 95. yocean group ltd- industrial area Nairobi

Source: Kenya association of manufacturers (2020).

#### **Appendix V: Research Letter**



# **Appendix VI: Research License**

NACONI NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Ref No: 897524 Date of Issue: 15/December/2020 RESEARCH LICENSE This is to Certify that Miss.. Charity Wairimu Maina of Kenya Methodist University, has been licensed to conduct research in Nairobi on the topic: INFLUENCE OF INTERNAL CONTROLS ON FINANCAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MANUFACTURING IN NAIROBI CITY COUNTY for the period ending : 15/December/2021. License No: NACOSTI/P/20/8205 bo 897524 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & Applicant Identification Number INNOVATION Verification QR Code NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.