# EFFECT OF COST MANAGEMENT STRATEGIES ON THE FINANCIAL PERFORMANCE OF MANUFACTURING COMPANIES LISTED ON THE NAIROBI SECURITIES EXCHANGE

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# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN FINANCE, UNIVERSITY OF NAIROBI

NOVEMBER, 2014

# **DECLARATION**

This research project is my original work and has not been submitted for examination in any other University.

Signature: .....

Date: .....

CAROLINE WANJIKU GICHUKI

D63/76293/2012

This research project has been submitted for examination with my approval as a university Supervisor.

Signature: ..... Date: .....

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# **DEDICATION**

I dedicate this work to my parents; Mr. and Mrs Gichuki; for whom I thank the almighty God because they are the foundation of my success and achievement. May the glory of the almighty God be restored upon them. I also appreciate the effort of my husband, lecturers and classmates for the financial, moral and academic support. Be blessed. Thank you all.

# ACKNOWLEDGEMENT

I thank the almighty God for the gift of life and the potential he has given me for the development of this research project. I appreciate the effort made by my Supervisor; DR. JOSIAH ADUDA; in his ever willing drive in guiding me step by step till completion of this research project. It is through his detailed comments and advice that this work has come to completion.

# ABSTRACT

A number of cost management strategies have been studied before to understand their effects on financial performance. This study sort to find the effects of selected strategies namely; supply chain management, labour management and stock management and their effects on financial performance of manufacturing companies.

The study use causal research design specifically multi – variance linear regression model. It studied effects of various variables on another and the extend of causation was documented. Study population was six out of eight manufacturing companies listed, on Nairobi security exchange. The two were accepted due to inaccessibility of data.

The variables were positively related to financial performance of the manufacturing companies. The study recommended of the management focused on managing cost of distribution, cost of labour and cost of stock. That is ensuring just enough stock is available, the supply chain is reasonable and labour is minimal and efficient.

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# **ABBREVIATIONS**

CPA	-	Certified Public Accountant
EST	-	Efficiency Structure Theory
EOQ	-	Economic order quantity
JIT	-	Just in Time
KAM	-	Kenya Associates of Manufacturers
KIDRI	-	Kenya Industrial Research and Development Institute
NSE	-	Nairobi Securities Exchange
RBV	-	Resource Based View
ROA	-	Return on Assets
ROE	-	Return on Equity

# CHAPTER ONE INTRODUCTION

#### **1.1Background of the study**

Cost management often refers to cost cutting and it's commonly approached that firm managers use to respond to the decreasing sustainable profitability (Anderson, 2007). The most important managerial tools are cost management strategies (Zengin and Ada, 2010), and cost management strategies are considered as critical factors to increase revenue for the success of manufacturing companies (Kumar and Shafabi, 2011).

Cost management strategy supports decision making and improves competitive advantage that results in a better resource allocation (Ellram and Stanley, 2008). In addition, cost management may be an integral feature of overall businesses' management effectiveness and facilitate to determine accurately estimated cost before process starting and can help to forecast cost occurrence in the future. Cost management strategy effectiveness helps to finish the task with the spending of limited allocated resources and makes valuable to firms such as working capital invested reduction, lower cost per unit, and better quality of the process and product (Groth and Kinney, 1994.

Limited resource and apparent continuous competition influence firms to better managing cost of production by implementing standard costing, budget system, monitoring cost information, and focusing on value added activities by eliminating non-value added activities through supplier coordination, and emphasizing on cost structure by analyzing cost and finding the way to reduce costs in the stage of pre-production. Firms with cost management strategy implementation are able to know when the amount of cost will incur in the future if they have current and future cost information. Thus, managers can make better decision which will positively improve the financial performance of manufacturing companies.

#### **1.1.1Cost Management Strategies**

Traditional cost systems were based on controlling costs and quality and balancing them temporary, and also focus on internal efficiency. On the contrary, cost management is a process of quality planning and cost decreasing that manages the costs before their occurrence. A well planned cost management system will provide improvements in quality, cost/price and functionality of a product .Manufacturing companies use modern cost management techniques in their daily operations which has a great impact on their financial performance.

Although cost management has been researched on before, few of prior research studied cost management of three dimensions. The present research fills this niche, therefore the purpose of this research is to study cost management strategy of three dimensions which are cost containment, cost avoidance, and cost reduction. Cost containment focuses on constraining future fixed cost or unit variable cost increases, cost avoidance refers to the eliminated activities that generate costs of non-added values and cost reduction refers to an attempt to attain lower current fixed costs and variable costs associated with an essential activity (Groth and Kinnery, 1994). The three dimensional cost management strategies are applied in three areas which are: managing cost of stock, cost of labor and cost of sales and distribution.

# **1.1.2 Financial Performance**

Financial performance is the single most important factor in assessing growth potential, earnings capacity and overall financial strength (Richardson, 2002). The business dictionary (n.d) defines financial performance as measuring results of a firm's policies and operations in monetary terms and these results are reflected in firm's return on investments, return on assets, return on equity, liquidity and solvency.

Nelly (2010) observed that financial performance measures mainly serve three purposes. One they serve as a tool of financial management, two they serve as major objectives of business and three they serve as a mechanism for motivation and control in an organization. Various researchers have used different financial performance measures. Doyle (1994) says that profitability is the best most commonly used measure of performance in Western companies.

### **1.1.3 Effect of Cost Management Strategies on Financial Performance**

The expected relationship between cost management strategies and financial performance is as follows: The researcher anticipates either a positive of negative relationship of cost management strategies and financial performance. One school of thoughts argues that there is a positive relationship in that cost management strategies are considered as critical factors to increase revenue for the success of manufacturing companies (Kumar and Shafabi, 2011).

Another positive relationship is that cost containment techniques such as standard costing, sourcing and budget system limit the highest cost that could be incurred and as a result for the same level of income, the expenses are lower which results to increase in profitability.

Cost reduction which refers to an attempt to attain lower current fixed costs and variable costs associated with an essential activity (Groth and Kinnery, 1994). As a result of this total output of assets is low compared to the resulting income generated. These results to rising of (ROA) ration hence increase in profitability.

Cost avoidance which refers to the eliminated activities that generate costs of non-added values has a positive impact on profitability in that costs which increase expenditure with no future income generation are done away with hence reducing the negative impact on income. Positive elevation of Income leads to increase in (ROA) and in profitability as well which is the measure of financial performance in this study.

Another approach which indicates a negative relationship of cost management to financial performance measurement advocates for supplementing traditional cost accounting measures with a diverse mix of non-costing measures that are expected to capture key strategic performance dimensions that are not accurately reflected in short-term accounting measures. Brancato (1995) and Fisher (1995a) indicate that many firms believe that cost accounting measures are too historical and "backward-looking," lack predictive ability to explain future performance, reward short-term or incorrect behavior, provide little information on root causes or solution problems, and give inadequate consideration to difficult to quantify "intangible" assets such as intellectual capital. As a result, many firms are supplementing cost accounting metrics with a diverse set of non-cost performance measures that are believed to provide better

information on financial progress and success.

# 1.1.4 Nairobi Securities Exchange

In Kenya, dealing in shares and stocks started in the 1920's when the country was still a British Colony. However, the market was not formal as there were no rules and regulations to govern stock broking activities. In 1951, an Estate Agent by the name of Francis Drummond established the first professional stock broking firm, and in July 1953, The London Stock Exchange recognized the setting up of the Nairobi Stock Exchange as an overseas of stock exchange. In 1954 the Nairobi Stock Exchange was then constituted as a Voluntary Association of Stockbrokers registered under the Societies Act. Since Africans and Asians were not permitted to trade in securities, until after the attainment of independence in 1963, the business of dealing in shares was confined to the resident European Community. In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited. The change of name reflected the strategic plan of the Nairobi Securities Exchange to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments. As of March 2012, the Nairobi Securities Exchange became a member of the Financial Information Services Division (FISD) of the Software and Information Industry Association. https://www.nse.co.ke/about-nse/history-of-organisation.html. As at date there are eight manufacturing companies listed on the NSE.

#### **1.2 Research problem**

Various researches carried out bring about mixed findings on the relationship between cost management strategies and the financial performance. Some argue that cost management is an efficient way of improving financial performance of a firm while others argue that cost management is old fashioned and based on past information hence it can't on its own greatly impact on financial performance of a company.

A study conducted by Omar (2013) investigating the impact of selected firm characteristics on the financial performance of firms listed under the Agricultural Sector. In his study he measures financial performance using ROA and the study clearly elaborates that a collection of firm characteristics end up affecting the financial performance of manufacturing companies. Waithaka (2010) also deed a related study and investigated the relationship between working capital management practices and financial performance of agricultural companies listed at the NSE. In her study the variables were firm leverage, firm size and fixed financial ratio. This study also concentrated on firms characteristics. Hence these approaches used in previous related studies are wide based contrary to the current study which only focuses on a modern three dimension cost management strategy.

A research done by Ondiek (2010) investigating on the relationship between capital structure and financial performance of firms listed at the NSE. She did her analysis using multivariate regression analysis and used various variables. However in her regression models she established that the firm size and sales growth were positively related to profitability.

A research done by Kaplan (1984) stated that measurement systems for today's manufacturing operations must consider quality, inventory, productivity, innovation and work force. In summary, financial measures which are generated by traditional cost accounting systems provide and inadequate summary of a company's manufacturing operations. The current global competition requires that non-financial measures such as mentioned previously to be used in the evaluation of a company's financial performance. Companies that achieve satisfactory financial performance but show stagnant or deteriorating performance on nonfinancial indicators are unlikely to become or long remain world-class competitors. Present cost accounting and management control systems rest on concepts developed almost a century ago when the nature of competition and the demands for internal information were very different from what they are today. After all developments and changes, in order to survive and make profit in global competitive environment, manufacturing companies have started to question their traditional and cost management systems with the aim of adaptation to global competition and supplying quick-changing demands and expectations of consumers. Traditional cost management and cost plus pricing strategies have also lost their influence in this new competitive environment. Because most of the costs are determined in projection and development phase, traditional cost management approaches which consider only the costs in production phase and

disregard the other costs in production life cycle have lost their importance.

(Sakurai and Scarbrough, 1997: 39) states that cost management is certainly not a system that determines only product cost. Cost management can be conceptually categorized as; cost decreasing (cost planning) and cost control. Traditional cost systems are based on controlling costs and quality and balancing them temporary, and also focus on internal efficiency. On the contrary, cost management is a process of quality planning and cost decreasing that manages the costs before its occurrence (Ansari et al,1997:6).Limited resource and apparent continuous competition influence firms to better managing cost of production by implementing standard costing, budget system, monitoring cost information, and focusing on value added activities by eliminating non-value added activities through supplier coordination, and emphasizing on cost structure by analyzing cost and finding the way to reduce costs in the stage of pre-production. Firms with cost management strategy implementation are able to know when the amount of cost will incur in the future if they have current and future cost information. So far no local research which determines the direct impact of cost management strategies on financial performance of manufacturing companies has been done. As a result, this research fills in that gap and evaluates the direct impact on one variable by another.

### **1.3 Research Objectives**

The objectives of the study are to establish the following:

- i) To establish the cost management strategies used by manufacturing companies in Kenya.
- ii) To establish the effect of cost management strategies on the financial performance of manufacturing companies in Kenya.

# **1.4 Value of the Study**

Theoretical contribution of this study is providing knowledge for management accounting literature about management of cost of Inventory, cost of Labor and cost of sales and distribution.

Managerial Contribution in that the results of this study provide important implications for firms' executive as they indicate the positive relationships among cost management strategy and

financial performance of the firm. To utilize the knowledge, firms can achieve goals and attain better performance when they implement cost management strategy. Therefore, these results help firms' executives specify and consider the cost management strategy for implementation.

The study shall provide grounds for further research by other scholars who may want to broaden their understanding on cost management strategies and their financial implication not only to manufacturing companies but also to other sectors like the Banking industry and others. The study will contribute to the existing body of knowledge in the impact of cost management strategies on the financial performance of manufacturing companies.

The study will be of great importance to the manufacturing industry as it provides information on a simplified three dimension approach to cost management strategies and the financial impact the strategies have on manufacturing companies. Manufacturing companies will be in a position to boost their financial performance by using the findings of the research.

# CHAPTER TWO LITERATURE REVIEW

# **2.1 Introduction**

This chapter presents a review of literature on cost management strategies and their financial implications on manufacturing companies. The relationship between cost management strategies and their impact on financial performance of manufacturing companies is elaborately investigated. This chapter will look into the various theoretical frameworks advanced, empirical studies conducted as well as summary of the research gap.

#### **2.2 Theoretical Review**

The selected sub topics will look into the general theory relating to cost management strategies and their impact on financial performance of manufacturing companies.

#### 2.2.1 Portfolio Theory

Modern portfolio theory was introduced by Harry Markowitz with his paper "Portfolio Selection" which appeared in the 1952 Journal of Finance. Thirty eight years later he shared a Nobel Prize with Merton Miller and William Sharpes for what has become a broad theory for portfolio selection.

The theory of portfolio management describes the resulting risk and return of a combination of individual asset. A primary objective of the theory is to identify asset combinations that are efficient. Here efficiency means the highest expected rate of return on an investment for a specific level of risk. This simply means that they will not consider a portfolio with more risk unless it is accompanied by a higher expected rate of return.

Modern Portfolio theory was largely defined by the work of Markowitz (1952) in a series of articles published in the late 1950s. This theory was extended and refined by Sharpes (1963), Linter (1949), Tobin (1941) and others in the subsequent decades. Portfolio theory integrates the process of efficient portfolio formation to the pricing of individual assets. It explains that some sources of risk associated with individual assets can be diversified by holding a proper combination of assets.

Prior to Markowit'z work, investors focused on assessing the risks and rewards of individual

securities in constructing their portfolios. Standard investment advice was to identify those securities that offered the best opportunities for gain with the least risk and then construct a portfolio from these. Markowitz has detailed the mathematics of diversification and proposed that investors focus on selecting portfolios based on their overall risk –reward characteristics instead of merely compiling portfolio from securities that each individually has attractive risk-reward measures.

#### **2.2.2 Resource Based View Theory**

Pearce 11 and Robinson (2011) define the resource-based view (RBV) as a method of analyzing and identifying a firm's strategic advantages based on examining its distinct combination of assets, skills, capabilities and intangibles as an organization. This theory views the firm-specific factors and their effect on performance. (Grant,1991), Views the firm as a bundle of resources which are combined to create organizational capabilities which it can use to earn above average profitability. Firms develop competencies from these resources and when they are well developed, these become the source of the firm's competitive advantage. Penrose (1959) explains the importance of resources including organizational processes, assets, capabilities, information and knowledge controlled by the firm. (Daft 1995) these resources improve efficiency and effectiveness that will lead to higher financial performance of firms.

The desire to understand the effect of firm's characteristics on financial performance has been so controversial in the research field. One side argues that the firm financial performance is influenced by structural characteristics of the industry (Bain, 1954-1959) and on the other hand others argue that it is influenced by firm specific resources. Recently much focus has been given to firms level characteristics as opposed to the industry level characteristics since it forms the basis upon which the firms compete. For the purpose of this study cost management strategies will be the main focus since they are part of structural characteristics of firms. The theory which explains the effect of firm's characteristics which are internal factors to the organization with respect to financial performance is the resource-based view (RBV).In this study we shall look at cost management strategies and their impact on the financial performances of manufacturing companies. However the criticism put across on the use of RVB is that researchers only concentrate on one resource type: that is, intangible assets within a single industry and examine

its effect on firm's performance (Kapelko, 2006).

# 2.2.3 Efficiency Structure Theory (ES)

The ES hypothesis states that firms earn high profits because they are more efficient than others. There are two distinct approaches within the ES; the X-efficiency and scale-efficiency hypothesis. According to the X-efficiency approach, more efficient firms are more profitable since they have lower costs. Such firms tend to gain larger market shares, which may manifest in higher levels on market concentration, but without any causal relationship from concentration to profitability (Athanasoglou et al., 2006). The scale approach emphasizes economies of scale rather than differences in management or production technology. Larger firms can obtain lower unit cost and higher profits through economies of scale. This enables large firms to acquire market share, which may manifest in higher concentration and then profitability.

#### **2.3 Empirical Review**

Another approach to strategic performance measurement is supplementing traditional financial measures with a diverse mix of non-financial measures that are expected to capture key strategic performance dimensions that are not accurately reflected in short-term accounting measures. Brancato (1995) and Fisher (1995a) indicate that many firms believe that financial measures are too historical and "backward-looking," lack predictive ability to explain future performance, reward short-term or incorrect behavior, provide little information on root causes or solution problems, and give inadequate consideration too difficult to quantify "intangible" assets such as intellectual capital. As a result, many firms are supplementing financial metrics with a diverse set of non-financial performance measures that are believed to provide better information on strategic progress and success.(Kaplan and Johnson 1987) have stated that cost accounting is the number one enemy of productivity. There are three principal shortcomings of traditional accounting systems, i.e., 1) irrelevant and harmful to a business; 2) expensive to maintain; and 3) divert the accountary sattention from more important matters (Maskell 2009).

(Horngren 1991) argue that cost management must not be isolated from other managerial functions and should play a key role in the implementation of the company strategies. It is reported that less than 10% out of nearly five million finance function professionals in the United States are involved in audit, tax, and external financial reporting (Sharman2007). It takes more people to do the work than to check the work. Most people are believed that what an "accountant" does are taxes or working at a CPA firm. The cause of this imbalance is the proliferation of accounting laws and regulation themselves. Looking at the role plays by cost management in construction industry, it is reported that in the case of cost estimating in construction industry, the information produced has the additional drawback that it is remotely related to the way costs are incurred.

### **2.4 Determinants of Financial Performance**

Salter (1995) suggested that performance measurement of corporate and business unit has three dimensions: (1) effectiveness, (2) efficiency, and (3) adaptability. Some indicators of three dimensions are returns on investment, sales growth, and new product success, respectively. Furthermore, Salter (1995) argued that relative performance measures appropriate surrogates for objective measures in the single-industry sample. Morgan (2012) suggested that business performance consists of two aspects: market performance and financial performance. Market performance relates to customer behaviors. Higher sales volume, customer satisfaction increases, customer loyalty, and growth of market shares are indicators of market performance as a goal achievement and financial performance that are indicated by the net income goal achievement, sales amount and market share increases, the better return on investment, and the growth and continuance of overall performance (Chai-Amonphaisal and Ussahwanitchakit, 2010).

Business operation focus on highest potential profit and a common approach is a cost control that is expected to produce the greatest overall financial performance (Healthcare Financial Management Association, 2012). Cost management strategy implementation success might generate value to the firm, for example, the greater control production activities results in better quality of procedure and lowers the unit cost of goods and cost variance. In addition, the consequence of the cost management success is firm value increasing and profit improvement that positively affects firms' value greater than pricing (Groth and Kinney, 1994). Therefore, it can be expected that cost management implementation will increase firm performance.

Financial performance measures are intended to evaluate the effectiveness and efficiency by which manufacturing companies use financial and physical capital to create value for shareholders. The key recommended measures for financial analysis include: profitability, liquidity and solvency (Zenion et al.1999). Profitability measures the extent to which a business generates a profit from the factors of production: labor, management and capital. Profitability is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Copisarow, 2000). Four useful profitability ratios and measures are the return on assets (ROA), return on equity (ROE), operating profit margin and net income. The ROA measures the returns to all assets and is often used as an overall index profitability and the higher the value, the more profitable the business. ROE measures the rate of return on the owners equity employed in the business. It is useful to consider ROE in relation to ROA to determine if the firm is making profitable returns on their borrowed money. Operating profit margin measures the returns to capital per unit of gross revenue. Net income comes directly off the income statement and is calculated by matching revenues with the expenses incurred to create those revenues, plus the gain or loss on the sale of capital assets (Zenios et al. 1999).

Liquidity measures the ability of the business to meet its financial obligations as they come due, without disrupting the normal, ongoing operations of the business. It is measured by Current ratio which is current assets over current liabilities.

Solvency measures provide an indication of the business ability to repay all its debts if all of the assets were sold. It is measured using Debt to Asset ratio, Equity to Assets ratio and Debt to equity ratio. In our study whatsoever we are going to focus on profitability.

# 2.5 Conclusion from Literature Review

From the previous empirical studies done it can be conclude that most researches done relating to this study are done in a general manner. Mainly it is the impact of cost management on the entire firm's performance or various firms' traits and their impact on financial performance. In this study the dependent and Independent variables are limited, specific and they directly impact on each other.

This study will focus on the manufacturing industry and evaluate all studies previously done so as to have a clear understanding of the modern cost management strategies and their impact on financial performance.

# CHAPTER THREE RESEARCH METHODOLOGY

# **3.1 Introduction**

This chapter has provided details of the methodology that was adopted for this study. It describes the research design, sampling design, target population, data collection procedures and data analysis techniques.

#### **3.2 Research Design**

The quantitative approach to research involved numerical data and quantitative approach involves textual data. A third method of research that utilized elements from both the qualitative and quantitative approaches was categorized as mixed methods (Symonds & Gorard, 2010). The study quantitative approach was used for its suitability to the purpose of developing research questions and is appropriate for the type of numerical data required in the study (Schweitzer, 2009). Creswell (2009) stated that the quantitative approach was most appropriate for the analysis of numerical data.

This study also used causal research design and precisely used multi variant linear regression model. Causal research studies the effect of one variable on another or on various variables.

# **3.3 Population**

The population was a complete set of individuals, cases or objects with the same observable characteristics (Mugenda, 2003). The target population of this study was consisting of manufacturing companies which were registered with the Kenya Associate of Manufacturers. Currently it has 700 member firms involved in manufacturing in Kenya (http://www.kam.co.ke/index.php/about -us).

#### **3.4 Sample Design**

The sample included six of the eight manufacturing companies listed on the Nairobi Securities Exchange. Purposive sampling was used which is a sampling technique that allows a researcher to use cases that have the required information with respect to the objective of the study.

#### **3.5 Data Collection**

Data was sourced from both primary and secondary sources namely audited financial statements which enabled researcher to compute the relevant ratios and questionnaire. A questionnaire survey was used to collect the data from all the listed manufacturing companies. To test potential of non-response bias and to consider possible problems with non-response errors, a comparison of the first and the second wave data was recommended by Armstrong and Overton (1977). The results showed no significant differences between early and late respondents. As a result, non-response was not a problem in this study.

## 3.6 Data Analysis

In the study, descriptive statistics such as mean, standard deviation and the like were used. The study also used multi-variant regression analysis to see the extent of relationship of the various cost management strategies in explaining variations in firm financial performance. Several significance tests were applied to the variables and model under study to evaluate the significance of the variables and the fitness of the overall model. Correlation analysis was also used in the study to evaluate the direction and effect of various cost management strategies (R squared) to explain how much the model explained the changes in the dependent variable, which is ROA.

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \boldsymbol{\xi}$$

Where;

Y is the ROA as the measure of firm performance.

ROA = (Profitability measure)

Computed as ROA= <u>Net Income</u>

Total assets

 $\beta$  = Constant term (intercept)

 $X_I$  = Cost of Inventory; which is the mean of all the inventories recorded at the end of each year for the last five years

 $X_2$  = Cost of labour ; which is the mean of all labor expenses incurred for each

year for the last five years

 $X_3$  = *Cost* of sales/distribution: Which is the mean of all the cost of sales/distribution incurred in the last five years.  $\mu$  is the error term.

# 3.7 Data Validity and Reliability

Some constructs of this research in the conceptual model were developed as new scales and adopted from prior researches. The face and content validity were verified by accounting academic experts. Confirmatory and exploratory factor analysis was utilized to examine the underlying relationship of a large number of items and to verify whether it could be reduced to a smaller set of factors. The factor analyses were done individually on each set of the items representing a particular scale; this approach is used for the limited observations reason. Factor loading values if greater than 0.50 are generally considered necessary for practical significant (Hair et al., 2010).

# **CHAPTER FOUR**

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### **4.1 Introduction**

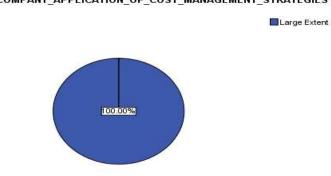
This chapter presents, discusses and interprets the data which is obtained from the selected sample population of the different manufacturing companies trading in the NSE (Nairobi Securities Exchange). The data collected and to be analyzed was gathered from the manufacturing companies in the MIMS (Main Investment Market Segment) of the Nairobi Securities Exchange. The total sample was 9 manufacturing companies trading in the NSE. The data is presented by use of descriptive data analysis tools which include tables, graphs, charts as well as other percentage scores. The questionnaires were separately analyzed in order to test the correlation of the independent variables with the dependent variables.

#### 4.2 Data Presentation

#### 4.2.1 Application of Cost Management Strategies

The sampled respondents were asked to what extent the manufacturing companies they represented were keen on application of cost management strategies. All the respondents indicated that their companies were to a large extent keen on application of the cost management strategies. This represented 100% of the data sampled. This is indicated in a pie chart as shown below:-

# Fig 1: Application of Cost Management Strategies

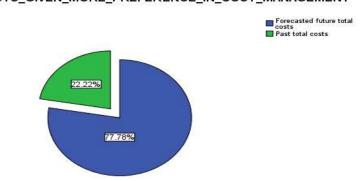


COMPANY APPLICATION OF COST MANAGEMENT STRATEGIES

## 4.2.2 Preferential costs in Cost management

The respondents were asked to outline which costs they felt were given more preference in cost management. 77.78% of the respondents indicated that forecasted future costs were given more preference in cost management whereas 22.22% of the respondents indicated that past total costs were given more preference. None of the sampled respondents felt that present total costs were given any preference when it came to management of costs. The responses given are highlighted in the pie chart given below:-



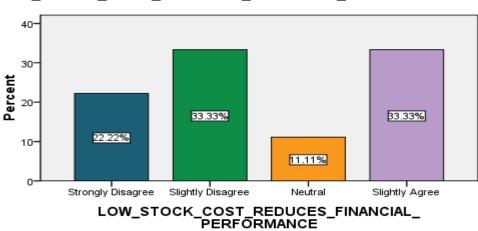


### COSTS\_GIVEN\_MORE\_PREFERENCE\_IN\_COST\_MANAGEMENT

# 4.3. Impact of cost of stock on financial performance of manufacturing companies

The respondents were asked what they felt was the impact of the cost of stock on the financial performance of financial companies listed in the Nairobi Securities Exchange. They gave differing responses based on the various questions asked. The pie charts below show how they responded regarding each particular question.

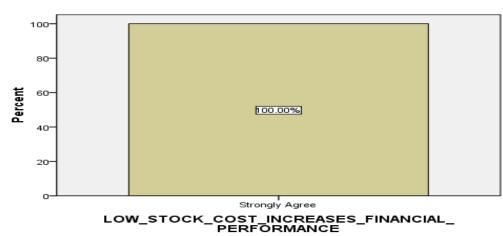
# Fig 3: Low stock cost reduces financial performance



LOW\_STOCK\_COST\_REDUCES\_FINANCIAL\_PERFORMANCE

Among the sampled respondents, 22.22% of the respondents strongly disagreed that low cost stock reduces financial performance of manufacturing companies. 33.33% of them slightly disagreed whereas 11.1% were neutral about the same. 33.33% of the respondents slightly agreed.

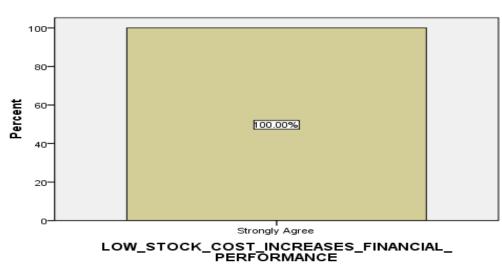
# Figure 4: Low stock cost increases financial performance



LOW\_STOCK\_COST\_INCREASES\_FINANCIAL\_PERFORMANCE

All the respondents who were sampled strongly agreed that indeed low stock cost increased financial performance among manufacturing companies.

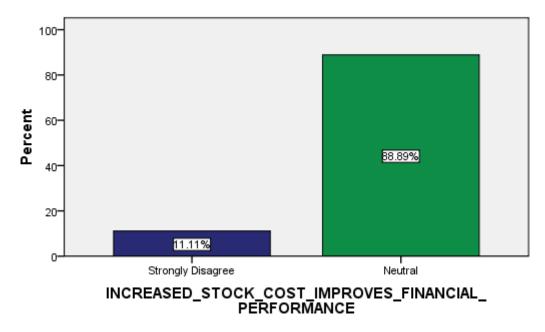
# **Figure 5: Low stock cost increases financial performance**



LOW\_STOCK\_COST\_INCREASES\_FINANCIAL\_PERFORMANCE

All the respondents who were sampled strongly agreed that indeed low stock cost increased financial performance among manufacturing companies.

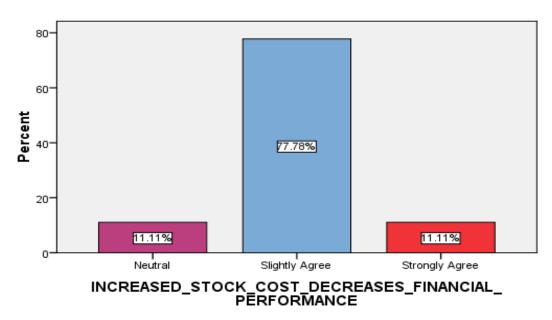
# Fig 6: Increased stock cost improves financial performance



## INCREASED\_STOCK\_COST\_IMPROVES\_FINANCIAL\_PERFORMANCE

The respondents were further asked whether they felt that increased stock cost improves financial performance. 11.11% of the sampled respondents strongly disagreed with this statement whereas 88.89% of the respondents were neutral over this statement. None of the respondents agreed in any way with this statement that increased stock cost improved financial performance.

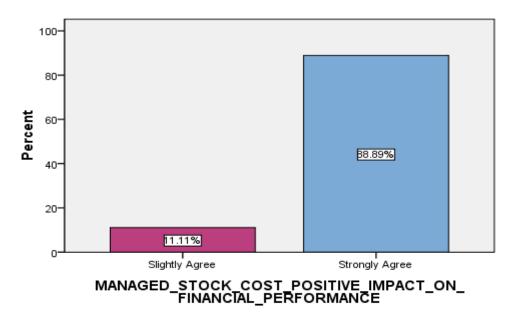
# Fig. 7: Increased stock cost decreases financial performance



INCREASED\_STOCK\_COST\_DECREASES\_FINANCIAL\_PERFORMANCE

The sampled respondents were asked whether they felt that increased stock cost decreased financial performance. 11.11% of the sampled respondents were neutral about this statement. 77.78% of the respondents felt indeed that increased stock cost decreases financial performance whereas 11.11% strongly agreed with this statement.

Fig 8: managed stock cost causes positive impacts of financial performance



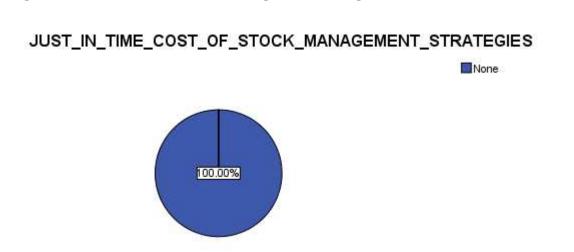
MANAGED\_STOCK\_COST\_POSITIVE\_IMPACT\_ON\_FINANCIAL\_PERFORMANCE

The respondents were further asked whether managed stock cost had a positive impact on the financial performance. 11.11% of the sampled respondents slightly agreed with this statement whereas 88.89% of the sampled respondents strongly agreed with these sentiments. None of the sampled respondents disagreed or were either neutral regarding this statement.

# 4.4 Stock management strategies employed by Manufacturing Companies

The sampled respondents were asked to detail the different stock management strategies which were utilized in the manufacturing companies. Among the strategies selected included just in time, economic order quantity and safety stock above normal quantity. The sampled respondents highlighted that none of the manufacturing companies employed just in time cost of stock management strategies. Some of the sampled respondents implied they used economic order quantity cost of stock management strategy. Among those who employed economic order quantity cost of stock management strategy, 55.56% felt that it had a positive impact on financial performance. For those respondents who indicated to use safety stock above normal cost of stock

management strategy, 44.44% of the respondents indicated that indeed it had a positive impact on financial performance. This information is represented graphically as indicated below.

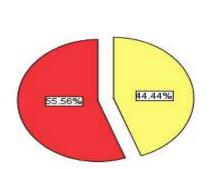


# Fig 9: Just in time cost of stock management strategies

Fig 10: Economic order quantity cost of stock management strategy

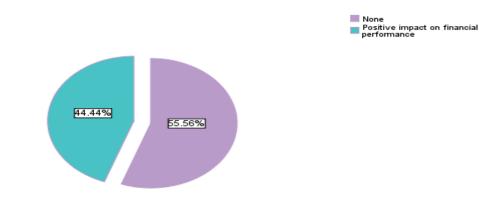
ECONOMIC\_ORDER\_QUANTITY\_COST\_OF\_STOCK\_MANAGEMENT\_STRATEGY

None Positive Impact on financial performance



Among those who employed economic order quantity cost of stock management strategy, 55.56% felt that it had a positive impact on financial performance.

### Fig 11: Safetey stock above normal quantity for security sake



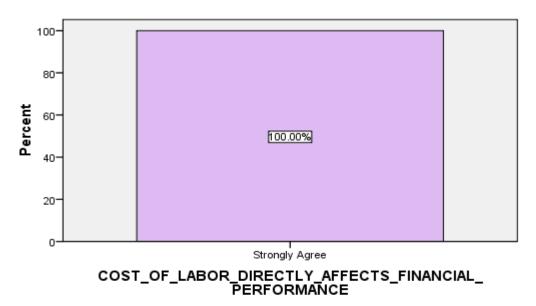
#### SAFETY\_STOCK\_ABOVE\_NORMAL\_QUANTITY\_FOR\_SECURITY\_SAKE

For those respondents who indicated to use safety stock above normal cost of stock management strategy, 44.44% of the respondents indicated that indeed it had a positive impact on financial performance. This information is represented graphically as indicated below.

# 4.5. Effect of the cost of labour on financial performance of manufacturing companies

The respondents were asked whether they felt that the cost of labour directly affected financial performance of manufacturing companies. All the sampled respondents strongly agreed that indeed cost of labour had a direct impact on financial performance. This is indicated in the bar graph shown below.

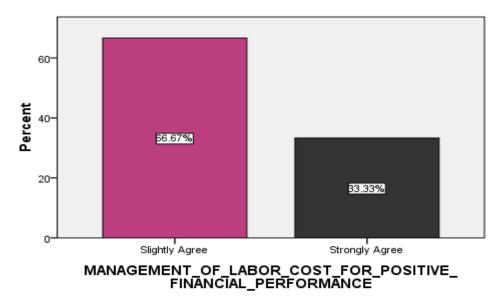
# Fig 12: Cost of labour directly affects financial performance



COST\_OF\_LABOR\_DIRECTLY\_AFFECTS\_FINANCIAL\_PERFORMANCE

The respondents were further asked whether the cost of labor in manufacturing companies listed in the NSE ought to be managed in a bid to positively impact on financial performance. Among the sampled respondents, 66.67% slightly agreed that they ought to be managed whereas 33.33% strongly agreed with this statement. None of the sampled respondents objected to these sentiments. The results are shown in the bar graph given below.

## Fig 13: Management of labour cost for positive financial performance



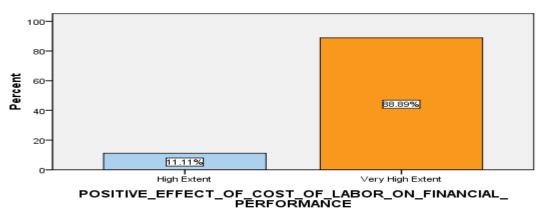
MANAGEMENT\_OF\_LABOR\_COST\_FOR\_POSITIVE\_FINANCIAL\_PERFORMANCE

### 4.6 Extent of Managed cost of labor effect on financial performance

## **4.6.1** Positive effect

The sampled respondents were asked to what extent they felt that the managed cost of labor had a positive effect on the financial performance of manufacturing companies listed in the NSE. 11.11% of the sampled respondents felt that there was a high extent of the positive effect of managed cost of labor on financial performance. 88.89% of the respondents further felt that there was a very high extent of the positive effect of managed cost of labor on financial performance of managed cost of labor on financial performance. 88.89% of the respondents further felt that there was a very high extent of the positive effect of managed cost of labor on financial performance of managed cost of labor on financial performance.

## Fig 14: Positive effects of costs of labour on financial performance

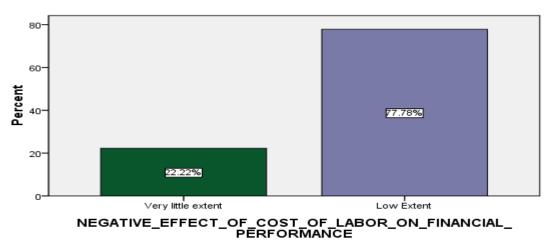


POSITIVE\_EFFECT\_OF\_COST\_OF\_LABOR\_ON\_FINANCIAL\_PERFORMANCE

## 4.6.2 Negative effect

They were further asked to what extent they felt that the managed cost of labor had a negative effect on the financial performance of manufacturing companies which were listed in the NSE. 22.22% of the sampled respondents felt that the negative effect of labor cost on financial performance was to a very little extent whereas 77.78% felt that it was to a low extent. None of the respondents indicated that the negative effects were significant.

# Fig 15: Negative effects of cost of labour on financial performance

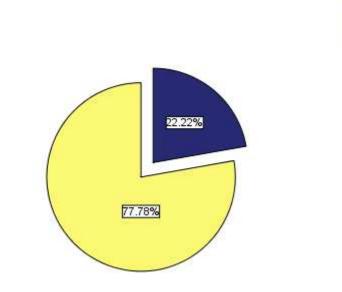


NEGATIVE\_EFFECT\_OF\_COST\_OF\_LABOR\_ON\_FINANCIAL\_PERFORMANCE

## 4.7. Cost of labor management methods employed by manufacturing companies

The respondents were asked which methods of managing cost of labor were employed by the company for the past five years as well as the impact they had on financial performance. They were further asked whether the impact which was exhibited was positive or negative. The respondents each gave varying responses as to the cost of labor management method they were familiar with. The responses given are tabulated in the pie charts given below.

# Fig 16: Impacts of automating production process



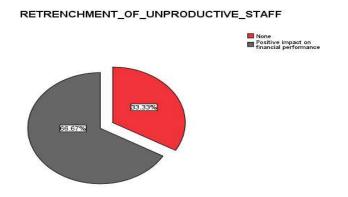


None

Positive Impact on financial performance

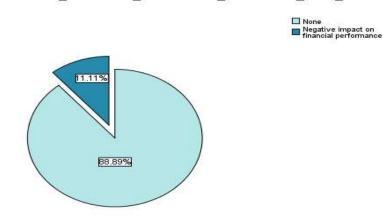
The respondents who selected the method of automating the production process had 77.78% indicating that it had a positive impact on financial performance.

# Fig 17: Retrenchment of unproductive staff



Those who selected the method of retrenching unproductive staff members, 66.67% felt that this method had a positive impact on financial performance.

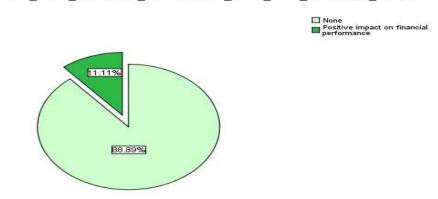
# Fig 18: Remuneration policies reducing salaries and wages



REMUNERATION\_POLICIES\_REDUCING\_SALARIES\_AND\_WAGES

The other method regarded reduction of salaries and wages as well as other remuneration and allowances. 88.89% of the respondents who selected this method felt that it had a negative impact on financial performance of the respondents.

Fig 19: Replacing high salaried employees with low salaried employees



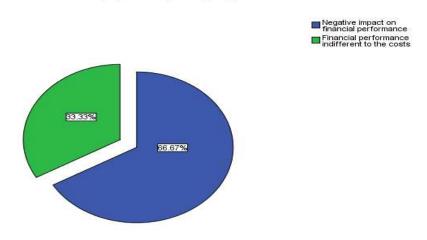
REPLACING\_HIGH\_SALARIED\_EMPLOYEES\_WITH\_LOW\_SALARIED\_ONES

The respondents were further asked what they felt about replacing high salaried employees with lower salaried ones. 88.89% of the respondents felt that this could have a positive impact on financial performance.

# 4.8 Impact of cost of distribution on financial performance in manufacturing companiesa) High cost of distribution

The respondents were asked what impact high cost of distribution had on manufacturing companies listed in the NSE. 66.67% of the sampled respondents felt that it had a negative impact on the financial performance whereas 33.33% felt that financial performance was indifferent to the costs. These results are displayed in the pie chart given below

## Fig 20: Impact of high cost of distribution

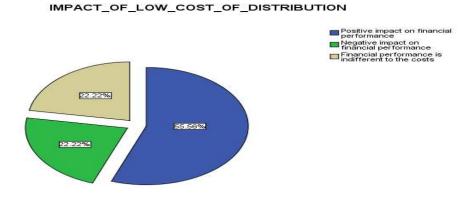


IMPACT\_OF\_HIGH\_COST\_OF\_DISTRIBUTION

## b) Low cost of distribution

The sampled respondents were further asked what impact low cost of distribution had on manufacturing companies listed in the NSE asked what impact high cost of distribution had on manufacturing companies listed in the NSE. 55.567% of the respondents felt that it had a positive impact on the financial performance of their companies. 22.22% of the respondents felt that it had a negative impact on the financial performance whereas 22.22% felt that financial performance was indifferent to the costs. These results are displayed in the pie chart given below

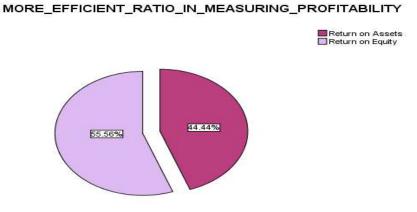
## Fig 21: Impact of low cost of distribution



# 4.9 Efficient ratio for measuring profitability

The respondents were asked which ratios they felt were efficient in measuring profitability. 55.56% of the sampled respondents felt that the return on assets was an excellent measure of profitability whereas 44.44% of the sampled respondents felt that return on equity was efficient in measuring profitability. The results of this are displayed in the pie charts given below:-

## Fig 22: More efficient ratio in measuring profitability



## **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.0 Introduction**

This chapter summarizes, concludes and recommends on the findings obtained from the study. It also highlights on the limitations of the study and suggests areas for further research.

#### 5.1 Summary

This study sought to find out the cost management strategies which are applied by manufacturing companies trading in the Nairobi Securities Exchange (NSE). We have also tried to establish the relationship between cost management strategies and financial performance of manufacturing companies in the NSE. Specifically, we have attempt to ascertain the effect of cost management strategies on the financial performance of manufacturing companies From a review of the questionnaires presented and used to sample respondents, we were able to find out that all the sampled institutions employed cost management strategies within their organization to a large extent. When it came to cost management, majority of the manufacturing companies preferred to depend on future forecasted total costs. From the research work conducted, we were able to ascertain that indeed low stock cost increases financial performance. Through this we could be able to ascertain that indeed stock cost and financial performance have a relationship which exists. With certainty, we could gather from the findings that the managed cost of the stock had a positive impact on the financial performance of these manufacturing companies.

The institutions employed different cost management strategies such as just in time production of stock, economic order quantity method and safety stock above the normal quantity method. Majority of the firms employed the economic order quantity method and it bore fruits in that it had a positive impact on the financial performance of these organizations. The cost of labor employed in these organizations was also reviewed in a bid to find out whether there existed any relationship between the cost of labor and financial performance. The different manufacturing companies were quite affirmative that indeed the cost of labor directly impacts on their financial

performance. The companies also illustrated that to a high extent, the cost of labor had a positive effect on the financial performance. They indicated that to a low extent did the cost of labor have a negative effect on the financial performance.

The manufacturing companies indicated that a threat to their operations and to the advancement of their financial performance was high distribution costs. The manufacturing firms indicated that automation of the production process, retrenchment of unproductive staff and replacement of high salaried employees with low salaried ones had a positive impact on financial performance. They indicated that if the remuneration policies regarding salaries and wages changed, they would have a negative impact on their financial performance. They indicated that they indeed utilized ratios in measuring their profitability and the ratios employed were return on assets and return on equity. Majority of the manufacturing firms found return on equity to be a better measure of profitability as compared to return on assets.

## **5.2 Conclusion**

Majority of the manufacturing companies in their daily operations are usually challenged by cost management. Some organizations have allocated and entire department with smaller cost departments to try and deal with the issue of cost management. The manufacturing companies have come to find out that to a great extent cost management has a direct impact on the financial performance of these organizations. An increase in the different costs which the organization has to deal with results in their financial performance being negatively affected. A prudent organization which is able to manage its costs is able to effectively improve its financial performance.

Throughout the study, I sought to establish the cost management strategies used by manufacturing companies in Kenya. I also sought to find out the effect which these cost management strategies had on financial performance of the manufacturing companies in Kenya. Specifically, the researcher wanted to investigate whether a relationship did exist between the cost management strategies and the financial performance.

## **5.3 Recommendation policy and practice**

Based on the results of this study I recommend company policy makers and transaction advisors should be keen on making cost management policies to be applied since they greatly impact on financial performance of the company.

Company policies regarding to financial performance of companies should incorporate various cost management strategies since they greatly impact financial performance.

Financial policies regarding cost management strategies should be formulated and be used keenly and with a lot of controls to avoid critical financial looses.

## **5.4 Limitations of the study**

The study selected only six out of the eight listed companies due to inaccessibility of data leaving out the two companies which could have altered the ultimate results.

There were limitations in terms of scope since it only concentrated on publicly listed firms and ignored private firms. This may limit fair findings that could have been gotten if all were included.

The study concentrated on a sector of economy which is manufacturing leaving out all the other sectors which could have resulted to different findings.

Market related data was not captured so as to have a real dynamism of the actual market operations.

## **5.5 Suggestions for further research**

The study confines itself only to companies listed on the NSE I recommend that a study should be undertaken to cover other private agricultural firms in the sector. The study limits itself only to three cost management strategies. I recommend additional strategies to be included in futures studies so tat the effects could be analyzed and documented. The same study should be replicated in other industries like financial institutions, energy sectors and should be done across the entire east Africa so as to gather more diverse data. The study considers ROA as a measure of firm performance in future I recommend that another study should be done in corporation other measures of performance to investigate if the relationship will be that same

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# **APPENDIX 1**

# Manufacturing Companies Listed on the Nairobi Securities Exchange

A.Baumann CO Ltd Ord 5.00 B.O.C Kenya Ltd Ord 5.00 British American Tobacco Kenya Ltd Ord 10.00 Carbacid Investments Ltd Ord 5.00 East African Breweries Ltd Ord 2.00 Mumias Sugar Co. Ltd Ord 2.00 Unga Group Ltd Ord 5.00 Eveready East Africa Ltd Ord.1.00 Kenya Orchards Ltd Ord 5.00

# APPENDIX II QUESTIONAIRE

1. To what extent is your company keen on applying cost management strategies?

Small extent	[	]
Large extent	[	]

- 2. When carrying out cost management which of these costs are given more preference? Forecasted Future total costs []
  Present total costs []
  Past total costs []
- 3. The following statements relate to the impact of cost of stock on the financial performance of manufacturing companies listed on the Nairobi Securities Exchange. Rate them as per the given Likert scale.

Statement	Strongly	Disaoree	Slightly	Disaoree	Neutral	Slightly	Aoree	Strongly	A oree
	1		2		3	4		5	
Cost of stock has direct effects the financial performance of manufacturing companies.									
Low cost of stock reduces the financial performance of manufacturing companies.									
Low cost of stock increases the financial performance of manufacturing companies.									
Increased cost of stock improves the financial performance of manufacturing companies.									
Increased cost of stock decreases the financial performance of manufacturing companies									
Managed cost of stock is more efficient and									

]	positively impacts on financial performance of			
1	manufacturing companies listed on the Nairobi			
:	securities exchange			

4. To what extent do you feel cost of stock affects the financial performance of manufacturing companies listed on the Nairobi Securities Exchange?

	Very	Little	Low	Extent	Neutral	High	Extent	Very	High
	1		2		3	4		5	
Positively									
Negatively									

5. Which of this cost of stock management strategies does your company implement and is its impact on financial performance positive or negative?

Just in time production of stock when it is needed	[]
Positive impact	[]
Negative impact	[]
Economic order quantity method that ensure no too n	nuch or too little stock [ ]
Positive impact	[]
Negative impact	[]
Having safety stock which is more above the normal	quantity for security sake [ ]
Positive impact	[]
Negative impact	[]

6. The following statements relate to effect of cost of labor on the financial performance of manufacturing companies listed on the Nairobi Securities Exchange. Rate them as per the given Likert scale.

Statement	Strongly	Disagree	Slightly	Disagree	Neutral	Slightly	Agree	Strongly	Agree
	1		2		3	4		5	
Cost of labor in manufacturing companies listed on									
the Nairobi Securities Exchange directly affects									
financial performance of these companies									
Cost of labour in manufacturing companies listed on									
the Nairobi Securities Exchange does not affects									
financial performance of these companies									
Cost of labour in manufacturing companies listed on									
the Nairobi Securities Exchange should be managed									
so as to positively impact on the financial									
performance.									

7. To what extent do you feel cost of labor has effect on the financial performance of manufacturing companies listed on the Nairobi Securities Exchange?

	Very	Little	Extent	Low	Extent	Neutral	High	Extent	Very	High
	1			2		3	4		5	
Positively										
Negatively										

8.	3. Which of these methods of managing cost of labour has your company implemented in the						
	past five years and has the impact on financi	al performance	been positive or negative?				
	Automating production process	[]					
	Positive impact on financial performance	[]					
	Negative impact on financial performance	[]					
	Retrenching workers who are not so product	tive to reduce st	aff size [ ]				
	Positive impact on financial performance	[]					
	Negative impact on financial performance	[]					
	Coming up with remuneration policies which	h reduce salarie	es and wages [ ]				
	Positive impact on financial performance	[]					
	Negative impact on financial performance	[]					
	Laying off highly paid staff members and r	eplacing them	with new once at a lower salary				
	[]						
	Positive impact on financial performance	[]					
	Negative impact on financial performance	[]					
9.	What impact does a high cost of distribution	n/sales have on	manufacturing companies listed				
	on the Nairobi Securities Exchange?						
	They have a positive impact on financial per	formance	[]				
	They have a negative impact on financial pe	rformance	[]				
	Financial performance is indifferent to the c	osts	[]				
10	. What impact does a low cost of distribution	sales have on	manufacturing companies listed				
	on the Nairobi Securities Exchange?						
	They have a positive impact on financial per	formance	[]				
	They have a negative impact on financial pe	rformance	[]				
	Financial performance is indifferent to the c	osts	[]				

11. Which of these suggestions could you make to reduce the negative effects of cost of distribution/sales on the financial performance of manufacturing companies listed on the Nairobi Securities Exchange?

	Eliminating middle men	[]	
	Shortening the supply chain	[]	
	Delivering the item directly on order to needy customers	[]	
	Inventing cheaper, creative and efficient methods of sales and	distribution	[]
	Clients getting goods directly from manufacturers to eliminate	e this cost	[]
12.	Which of these two ratios do you think is more efficient	for measure	profitability of
	manufacturing companies listed on the Nairobi Securities Exc	hange?	

Return on Assets[]Return on Equity[]