STRATEGIC CHOICES AND ORGANIZATIONAL PERFORMANCE OF MANUFACTURING FIRMS IN ATHI RIVER, KENYA

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SEPTEMBER, 2021

DECLARATION

I declare that this research dissertation is my original work. It has not been submitted for examination in this university, or any other institution of higher learning. I declare that this research dissertation may be accessible for reference at the discretion of St. Paul's University.

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TABLE OF CONTENTS

DECLARATION ..... **ii**

ACKNOWLEDGEMENTS ..... **iii**

LIST OF FIGURES ..... **viii**

LIST OF TABLES ..... **ix**

ABBREVIATIONS AND ACRONYMS ..... **x**

OPERATIONAL DEFINITION OF KEY TERMS ..... **xi**

ABSTRACT ..... **xii**

CHAPTER ONE: INTRODUCTION **13**

1.1 Introduction of the Study 13

1.2 Background of the Study 13

1.2.1 Strategic Choices 15

1.2.2 Organizational Performance 19

1.2.3 Manufacturing Sector in Kenya 20

1.3 Problem Statement 22

1.4 Objectives of the Study 24

1.4.1 General Objective 24

1.4.2 Specific Objectives 24

1.5 Research Questions 25

1.6 Significance of the Study 25

1.7 Scope of the Study 26

1.8 Limitations of the Study 27

CHAPTER TWO: LITERATURE REVIEW **28**

2.1 Introduction 28

2.2 Theoretical Literature Review 28

2.2.1 Resource Based View (RBV) 28

2.2.2 Human Capital Theory 29
2.2.3 The Goal Setting Theory 30
2.3 Empirical Literature Review 31
2.3.1 Organizational Performance 31
2.3.2 Technology and Organizational Performance 33
2.3.3 Employee Occupational Safety and Health and Organizational Performance 35
2.3.4 Organizational Resources and Organizational Performance 37
2.3.5 Role of Management and Organizational Performance 38
2.4 Conceptual Framework 41
2.5 Summary of the gaps 43
CHAPTER THREE: RESEARCH METHODOLOGY 45
3.1 Introduction 45
3.2 Research Design 45
3.3 Target Population 45
3.4 Sample and Sampling Techniques 46
3.5 Data Collection Procedure 47
3.6 Data Collection Instrument 48
3.6.1 Reliability 48
3.6.2 Validity 48
3.7 Data Analysis and Presentation 49
3.8 Ethical Considerations 50
3.9 Diagnostic Tests 50
3.9.1 Multicollinearity Tests 50
3.9.2 Normality Tests 51
3.9.3 Heteroscedasticity Tests 51
CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION 52
4.1 Introduction 52
4.2 Response Rate 52

4.3 Reliability Analysis 53
4.4 Diagnostic Tests 54
4.4.1 Multicollinearity Tests 54
4.4.2 Normality Tests 55
4.4.3 Heteroscedasticity Tests 55
4.5 Demographics of the Respondents 55
4.6 Descriptive Analysis Results 59
4.6.1 Technology, Employee, Occupational Safety and Health, Organizational Resources, Role of management and Organizational Performance 59
4.6.1.1Technology and Organizational Performance 59
4.6.1.2 Occupational Safety and Health on Organizational Performance 60
4.6.1.3 Organizational Resources and Organizational Performance 62
4.6.1.4 Role of Management and Organizational Performance 65
4.7 Correlation Analysis 66
4.8 Multiple Linear Regression Analysis 67
4.9 Summary of the Chapter 70
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 71
5.1 Introduction 71
5.2 Summary of Findings 71
5.2.1 Technology 71
5.2.2 Employee Occupational Safety and Health 72
5.2.3 Organizational Resources 72
5.3.3 Role of management 73
5.2.5 Organizational Performance 73
5.3 Conclusions 74
5.4 Recommendations 75
5.5 Suggestions for Future Research 76
REFERENCES 78

APPENDICES **81**

APPENDIX I: INTRODUCTION LETTER **81**

APPENDIX II: RESEARCH QUESTIONNAIRE **82**

APPENDIX III: RESEARCH RECOMMENDATION LETTER **89**

APPENDIX IV: RESEARCH PERMIT LICENSE **90**

LIST OF FIGURES

Figure 2.1: Conceptual Framework of the Study 42

Figure 4.1: Gender of the Respondents 56

Figure 4.2: Level of education of the Respondents 57

Figure 4.3: Duration of employment of Respondents 58

Figure 4.4: Accommodation of Technology 59

Figure 4.5: Occupational Safety and Health Policy in the Organization 61

Figure 4.6: Training of Employees 61

Figure 4.7: Utilization of Resources 63

LIST OF TABLES

Table 2.1: Research Gaps 43

Table 3.1: Manufacturing Sectors in Kenya 46

Table 3.2: Target Population 47

Table 4.1: Response Rate 52

Table 4.2: Reliability coefficients 53

Table 4.3: Multicollinearity 54

Table 4.4: Normality 55

Table 4.5: Heteroscedasticity 55

Table 4.6: Age of the Respondents 56

Table 4.7: Positions of Respondents in the workplace 58

Table 4.8: Technology on Organizational Performance 60

Table 4.9: Technology on Organizational Performance 60

Table 4.10: Responsibility and Accountability by Employees 62

Table 4.11: Human Resources 63

Table 4.12: Physical Resource Factor 64

Table 4.13: Financial Resource Factor 64

Table 4.14: Organizational Capabilities 64

Table 4.15: Role of Management and Organization Performance 65

Table 4.16: Correlation Matrix 66

Table 4.17: Model Summary 68

Table 4.18: Analysis of Variance 68

Table 4.19: Coefficients 69

ABBREVIATIONS AND ACRONYMS

AMT	Advance Manufacturing Technology
CEO	Chief Executive Officer
COVID	Corona Virus Disease
CLRM	Classical Linear Regression Model
EAPCC	East African Portland Cement Company
EPZ	Export Processing Zone
GDP	Gross Domestic Product
GOK	Government of Kenya
HRM	Human Resource Management
IT	Information Technology
KAM	Kenya Association of Manufacturers
KMC	Kenya Meat Commission
KIPPRA	Kenya Institute for Public Policy Research and Analysis
MAPSKID	Master Plan for Kenya's Industrial development
MLR	Multiple Linear Regression Model
NACOSTI	National Council of Science and Technology Innovations
OSH	Occupational Safety and Health.
RBV	Resource Based View
SCM	Supply Chain Management
SPSS	Statistical Package for Social Science
VIF	Variance Inflation Factor

OPERATIONAL DEFINITION OF KEY TERMS

Organizational Performance: is the actual output or results of the manufacturing firms as measured against the intended outputs such as market share and satisfaction of the personnel.

Organizational Resources: these are the tangible and intangible assets a firm uses to choose and implement its strategies. These include human, physical and financial resources.

Occupational Health and Safety Management: this involves the planning and implementation of specific programs that are used to improve the health and safety of employees at the workplace and this includes training of employees and ensuring the responsibility and accountability by employees.

Technology: these are the techniques that are used in the operations of a firm, which bring about efficiency and effectiveness and involve the machines used in the firm and how technology is incorporated with the operations at the firms.

Management: this is the planning, organizing, coordinating, directing, monitoring and evaluation of activities of an organization by managers so as to accomplish the set organizational goals and involves the management styles and skills used to bring about organizational performance.

Manufacturing sector: this is a sector that is involved in the production of various items for use or for sale; where raw materials are transformed into finished products on a large scale.

ABSTRACT

Strategic choices are contingent to an organization in posting positive performance and also ensuring that a firm survives in the long run. Manufacturing firms in Kenya are operating in a dynamic environment and due to this, companies are facing challenges such as obsolete technology, inadequate resources, inadequate adoption of the Occupational Safety and Health Act and unfavorable management styles. This motivated the initiation of this research which was guided by four main objectives namely, to establish the effects of technology, organizational resources, occupational safety and health and role of management on organizational performance of manufacturing firms in Athi River, Kenya. The research was supported by theories which included: Resource Based View, Human capital theory and the Goal setting theory. A descriptive research design was used targeting a population of 240 respondents who were selected from 4 companies that lie in different sectors in Athi River area. Data was collected by use of a structured questionnaire. Data was analyzed by use of descriptive and inferential statistics; including multiple regression analysis and correlation analysis. Data was presented through tables and figures, for analysis and interpretation. The findings established that technology and organizational resources had a positive and significant impact on organizational performance. The study concluded that the two independent variables were significant predictors of organizational performance. On the other hand, role of management and employee occupational safety and health were not significant in predicting organizational performance, concluding that they were not significant predictors of organizational performance. Recommendations were made that the government through the Kenya Association of Manufacturers should put in place strict policies and procedures on efficient technology, adequate resources, good management and adoption of the occupational safety and health Act so as to improve the performance of manufacturing firms in Kenya. It was also recommended that more studies should be done on more manufacturing firms across the country, in different sectors using other strategic choices to understand their impact on organizational performance and enhance this study.

CHAPTER ONE

INTRODUCTION

1.1 Introduction of the Study

This chapter forms the introduction to research variables and their descriptions. It also contains statement of the problem, objectives, significance, scope and limitations of the study.

1.2 Background of the Study

Organizational performance is said to be the sum of endeavors that have been accomplished by all departments in an organization. Therefore they are the Organizations targets that are projected so that they could be met within a certain time frame. The achievement of any industry depends on its organizational performance. Adler (2018) described organizational performance as power of an organization to successfully execute plans to attain established goals. The researcher showed a number of variables that comprise of organizational performance which included; business model success, efficiency, and results. It was asserted that performance of any organization hangs to a great extent on the degree of proficiency of its leaders have on matters that relate to executing strategies. Andre de Waal (2016) depicted the spirit of leadership as a restrictive connection that exists as far as the relationship exhibited between a manager and his or her followers is concerned.

According to a research study by Atikiya (2015), there are a variety of considerations that affect organizational performance. These issues comprise of multidivisional structures of organizations, enterprise risk management, the charisma that a CEO possesses and social networks as well, involvement of the stakeholders of the firm and their support, organizational learning, strategic

integration of human resource management, managerial practices related to strategies, measurement of performance, corporate governance, innovation and development, embracing of green supply chain management (SCM) practices and information creation.

Globally, the manufacturing sector and its output has been on a declining trend since 2019. This could be attributed to the effects brought about by the trade tension between the United States and China which came about due to Brexit. In addition to this, the COVID-19 pandemic which hit the world in 2020 has even made this situation worse due to lockdown within countries, limiting exchange of goods, services and labor within the countries of the world (KAM, 2021). The global manufacturing output dropped by 6%, 11.2% and 1.1% in the three quarters of 2020. This caused a contraction in the global economic output from 2019, and intensively affected the manufacturing sector. According to the United Nations Industrial Development Organization, countries such as China was faced by a huge drop in the manufacturing output of 14.1% decline in 2020 (UNIDO, 2020).

In Africa, the manufacturing sector has been on a rising projection over the years. This is attributed to the dynamism of the environment, changing demands and industrialization. Africa has proven to embrace this sector which has heavily contributed to the gross domestic product (GDP) of individual countries, increase in national income and a significant increase in the economic state of the countries (KAM, 2021). However, due to the COVID-19 pandemic, the overall manufacturing output has declined sharply due to the restrictions in movements and lockdowns imposed throughout the continent. In the second quarter of 2020, there was a 12.4% drop, but this was countered with a 4% contraction in the third quarter of 2020 (UNIDO, 2020).

In Kenya, the manufacturing sector was also affected by the impacts of COVD-19 pandemic, which saw a 3.2% decline in outputs. This was experienced in the food and non-food manufacturing sectors. The manufacturing sector's contribution to GDP reduced to 7.5% in 2019 from 7.8% in 2018 which is a worrying trend as efforts to boost the sector are involved and steered by the Big Four Agenda. However, the sector has posted a value addition from Ksh. 690.6 billion to Ksh. 734.6 billion from 2018 to 2019 (KNBS, 2020). The manufacturing sector also registered an increase in the creation of new jobs and formal wage earnings in 2019. However, a manufacturing priority agenda was developed to cushion the manufacturing industry against the problems experienced in the sector in the recent past (KAM, 2021). Manufacturing firms are widely spread in the country, majorly based in Nairobi, Athi River, Nakuru, Thika and the Coast region (KNBS, 2020). However, Athi River is seen as the manufacturing hub where a lot of finances are directed so as to steer the economy of the sector into the right direction.

1.2.1 Strategic Choices

Strategic choices are those decisions made by an organization to determine or steer the future of a firm. These are the decisions that are deliberated upon, formulated, implemented, monitored and evaluated so as to successfully achieve the goals and aspirations of an organization (Schilling, 2017). These choices should be carefully deliberated upon as they will eventually make a huge impact on the performance of a firm. With the rapid changes in the manufacturing sector, the firms are prompted to respond accordingly to these changes. The decisions they take up should be more effective, strategic to the goals of the firm and beneficial to the entire workforce to reap maximum benefits (Gilbert, 2015). A good strategic choice is one that brings about competitive advantage, which brings about overall high performance of the organization

(Hubbard, 2009). Therefore, organizational performance could be greatly attributed to the strategic choices that an organization makes and implements. The strategic choices that a firm should adopt and which are the focus of this current study are technology and its integration at work, occupational safety and health, organizational resources and role of management which are linked to the overall performance of the organizations.

The use of technology is turning out to be broader in satisfying the increasing needs of the customer which are ever fluctuating. Technology is becoming the resilience of any flourishing enterprise as well as any country's economy (Wang, 2015). Hence technology innovation is a major concern that influences an organization to be able to have good performance. Technology is depended upon when products and services are brought to the marketplace and is highly dependent on the machinery that the firms use and how they integrate technology in their operations. The production of services and goods quality and quantity is impacted by the state of technology that exists in an organization. This necessitates innovation to take center stage in coping up with advancement and changes in technology. Performance and effectiveness of an organization can be attained when responsiveness to innovation is given a lot of emphasis. Fitzsimons (2011) pointed out that to gain competitive advantage, technology is among the most prominent factors. Caution should be exercised to avoid technologies which are outdated and obsolete, the results of which are products whose quality is low, products whose prices are high, products whose quantities are less and decreasing performance of the firm.

Employee occupational health and safety relates on training of employees on health and safety and ensuring that the employees are responsible and accountable in their actions. When the

company has high technological machines and level of knowledge by employees is low, there is high risk of having accidents while the vice versa is always true. The use of technology should go hand in hand with employee training. In other words, they are inseparable since they adversely affect employee performance hence the overall organizational performance. Schilling (2017) singled out that there are several causes of accidents but he took a dimension which was twofold: The first one relates to conditions of work that are not safe and they are physical and environmental in nature. The physical and environmental work conditions comprise lack of adequate or no protective equipment, equipment that are defective, machine guards that are not adequate and unsafe work behaviors. In addition, stress at work, noise, radiation, fumes and dust are some of the conditions that can make employees to sustain injuries or get accidents and therefore organizations would have to prioritize and put safety and health programs in their manufacturing organizations. The occupational safety and health administration (OSHA) is tasked with the responsibility of establishing and enforcing the health and safety standards which are necessary. Occupational health and safety is very crucial to the manufacturing companies and should not be ignored.

A study by Wang (2015) analytically argued that if a firm is to succeed in its competitive advantage strategy, importance and correlation must be placed on certain things. These include organizational capabilities and organizational resources. According to the study, organizations are supposed to have a minimum of four types of resources so that the objectives of the organization are achieved. These resources are financial, physical, human and technological resources. Allocation of resources on the other hand could be hindered by several things (Carmeli & Tishler, 2004). These hindrances include resources that are overprotected, strategies

that are ambiguous, monotonous or targets that are vague. This study focused on the organizational capabilities, financial resources, human resources and physical resources which were all linked to the organizational performance of the manufacturing firms.

According to Foss, (2016), productivity maximization cannot happen until organizations understand that resources are important as they are the factors dependent on success. Therefore, human resources like any other resources, are the most important factors in an organization. Therefore, an organization should view the workers' health and safety as a separate role because it seeks to add the value of competitiveness, profits and value of production of the organization and the performance of the employees (Wang, 2015). Financial resources stability and usage depends on human resource. Durability and usage of physical resources also depends on human resource, which means there should be effective ways of handling human resources. This therefore is in relation to the role of management which is instrumental in ensuring that all the above-mentioned objectives can be resourceful in realizing the desired organizational goals and objectives.

Organizations must have objectives and goals to enable them to succeed. For success to be realized, organizations are required to do that through their vision and mission. This is the stage where the role of management in an organization is crucial. The management should be involved in important activities such as coordination and directing of organizational efforts, structuring of policies and strategy designing (Ryan & Tipu, 2013). Strategic leaders normally have characteristics, skills and management style that they employ to ensure that the organization is running effectively thereby promoting high organizational performance. Another important task

that leaders are required to undertake is making a mix between organizational competencies and organizational resources and analyzing which ones are difficult to substitute, those whose imitation is not easy and rare. This mix is the one which contribute to the competitiveness against organizations adversaries. Core competencies are resources and capabilities that give firms a competitive advantage over their rivals. This study incorporated leadership skills and styles as indicators of role of management to investigate its impact on organizational performance.

1.2.2 Organizational Performance

Schilling (2017) asserts that performance in organizations is a multidimensional construct that could be grouped into four components. The first component is performance whose attention and scheme are pegged on customer orientation. This component comprises of satisfaction of customers and performance of service or product. The second component of performance is referred to as market financial. It constitutes such elements as shares for every share, Position of market, returns, earnings, time cycle of cash to cash; The third in consideration is performance sustained by resources as a result of human efficiency, effectiveness, reliability of workers, market encompassing, innovation level flexibility sustained by chain of supply, and production is among the fourth components (Nyamwange, 2001).

Organizational performance is the ability of an organization to achieve its set goals and objectives (Ricardo & Wade, 2001). Organizational performance can be measured using financial and non-financial measures. Financial measures of performance include gross profit, return on assets, return on investment, revenue growth, market share, liquidity and operational efficiency. Non-financial measures include satisfied personnel, customer satisfaction, growth in

terms of customer base and supplier base. To measure performance efficiently, Postma and Zwarf (2001) suggest that both financial and non-financial measures should be included so as to get a wider view of organizational performance. This study incorporated the use of both financial and non-financial measures of organizational performance; that is, market share and satisfied personnel.

1.2.3 Manufacturing Sector in Kenya

One of the principal purposes of Kenya has been to attain vision 2030. The dream to attain this has always been determined by many drivers and the manufacturing sector is one of the key sectors. This involves projects being formulated and thereby requiring some materials and the manufacturing sector is highly relied upon. The manufacturing sector has also been viewed as a key sector that provides high levels of employment and alleviation of poverty among Kenyans. The sector that deals with manufacturing and production makes a contribution of approximately 12% of the GDP income of Kenya every year (KIPPRA, 2016). In Kenya, most of the manufacturing firms, which operate on a large-scale basis are majorly located in Nairobi, Athi River, Nyanza, Thika, Nakuru and Eldoret (KAM, 2020). The manufacturing sector is the third largest industrial sector after agriculture and transport and communication (KPMG, 2020).

The manufacturing industry in Kenya is comprised of a variety of sectors. They include, food and beverage, agro-processing, plastic and rubber, automotive, chemical and allied, timber sector, metal and allied, paper sector, building and construction, leather and footwear, textile and apparel, pharmaceutical and services sectors (KAM, 2021). The study focused on four sectors that is food and beverage, chemical and allied, building, mining and construction and textile and apparel sectors. The ownership of investments in the manufacturing sector is mostly from the

United Kingdom and the second in command that follows the hierarchy is America and currently China who owns around twenty- five percent of Kenya' manufacturing sector (Kenya Economic Report, 2019).

Outdated equipment and machinery and limited resources in Kenyan manufacturing sector have been recorded to be reasons of the low contribution of the sector, which is at 12%, and which is highly anticipated by the Kenya's vision 2030. In addition, machine inefficiency, extremely high cost of running business is not an exception in bringing down the morale of growth in the sector. Other factors which cannot be ignored and are a big stake as stumbling blocks in the realization of the vision are, the lack of confidence in the Kenya's foreign exchange rates, high costs of production, stiff competition from imported goods and uncertainties in the politics of the country, that has caused a decrease in the levels of investments (World Bank, 2015). Currently the issue of COVID-19 has led to total deterioration of most industries, since the foreign investors opted to return to their countries.

The initiative undertaken by Kenya which is named, 'Master Plan for Kenya's Industrial Development' (MAPSKID), has continued to pose serious challenges although the aim was to make sure that the performance of manufacturing industries improves up to the level of other global players (GOK, 2010). This master plan was expected to boost the manufacturing sector through minimizing the challenges of counterfeit products and defective products into the market, high input and instead gain improved performance by firms in the manufacturing sector in Kenya.

1.3 Problem Statement

According to Kirangu (2018) the volatility of the ever-changing environment has led to the incapacity of the manufacturing sector to cope up with change, and this can be easily reflected to inability of the manufacturing sector to cope with challenges leading to their low performance over the years. This is witnessed by various companies closing down as well as retrenching most of its employees. For example East African Portland Cement Company (EAPCC) unfortunately declared its entire workforce redundant which led to effectively firing its entire staff (Daily Nation 8th, 2019). This was as a result of its poor performance which was blamed on the dilapidated plant and machinery. Besides machinery, outdated and obsolete technology in these firms, which affects their ability to be competitive in the fast competitive environment was also a major problem. Other companies like Kenya Meat Commission (KMC) were transferred for its operations to be controlled by the Ministry of Defense due to low performance (Gov Gazette September 9th, 2020). An unreliable supply of raw material and an ageing plant, which had slowed down the firm's operations, were the main reasons for this move by the government. Other companies like Sameer Africa, Softa Bottling Company, laid off its employees citing low performance brought about by technology and a substandard workforce. Beer, Armstrong, Oguamanam and Schonwetter (2014) argued that improved performance and productivity can to be contributed to adequate human and physical resources to a large extent (MacRae & Furnham, 2017).

An improvement in machinery means improvement of technology, thus effective staff is needed to operate the machinery otherwise accidents may occur. According to Basher (2016), accidents do not happen on their own instead they are caused. Thus, the innovation and development of

machinery, empowerment of employees and technology will decrease the health and safety hazards at work leading to good performance. All these needs effective management to strategically blend them for general organizational performance. Therefore, many manufacturing companies have inefficient machinery, low use of technology which is as a result of in effective work force who cause health and safety hazards thus causing finances of these companies end up in paying for the accidents, hence low organizational performance.

In addition to technology and its incorporation in work, resources are a major limiting factor in manufacturing firms. Resources such as finances, employees and physical resources are limited or not emphasized on, and this leads to low performance of the operations and the firm in general (Atikiya, 2015). Manufacturing firms also have a major problem when it comes to employee health and safety whereas this sector is majorly technical and hands-on. The health and safety of the employees should be a major concern as the hazards posed by these industries are of magnitude (Kihara, 2016).

Manufacturing firms in Athi River are well established but have various challenges with regards to their operations. Ineffective machinery and obsolete technology is a major problem whereas these are the mostly used equipment in these firms. Resources such as financial, physical and human resources are also a major concern as these are critical factors in these manufacturing firms; these resources could either be inadequate, not well incorporated into the operations or not well taken care of to give maximum benefits. Management of these manufacturing firms are a major issue as the style and skills employed by the managers to their employees could either be strictly work-oriented or one which does not involve employees in decision making.

Previous studies which have been done on the organizational performance of manufacturing firms have displayed contextual, empirical and conceptual gaps, where some of which will be filled through this current study. Many studies on manufacturing firms were done outside the country, Kenya and this study will fill this contextual gap, as this study was carried out in Kenya, Athi River. Some studies carried out on manufacturing firms were carried out more than ten years ago and those done currently are few therefore creating a contextual gap in which this current study sought to fill. This study therefore sought to determine and analyze the impact of these strategic choices made by manufacturing firms in Athi River, Kenya, which include technology, organizational resources, employee occupational safety and health and role of management, and how these strategies affect their organizational performance.

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of the study was to determine the influence that specific strategies have on the organizational performance of manufacturing firms in Kenya.

1.4.2 Specific Objectives

1. To determine the influence of technology on the organizational performance of the manufacturing firms in Athi River, Kenya.
2. To determine the effect of employee occupational safety and health on the organizational performance of the manufacturing firms in Athi River, Kenya.
3. To determine influence of organizational resources on the organizational performance of the manufacturing firms in Athi River, Kenya.

4. To establish the role of management in influencing organizational performance of the manufacturing firms in Athi River, Kenya.

1.5 Research Questions

1. Does technology influence organizational performance of the manufacturing firms in Athi River, Kenya?
2. Does employee occupational safety and health influence organizational performance of the manufacturing firms in Athi River, Kenya?
3. Do organizational resources influence organizational performance of manufacturing firms in Athi River, Kenya?
4. Does the role of management influence organizational performance of manufacturing firms in Athi River, Kenya?

1.6 Significance of the Study

The findings of the study were expected to provide information on the influence of strategic choices on the organizational performance of manufacturing firms in Athi River, Kenya. The relevance of this study is that it is going to be a foundation and addition to the review of literature. Furthermore, researchers in addition to scholars who would be interested in furthering undertakings in measurement of performance would also benefit from this study. The findings of this study would enhance those studies that would be undertaken on organizational performance of manufacturing firms.

The management of the manufacturing firms would benefit from the findings of this study. Management would be able to critically look at the strategic factors affecting the performance of

their firms in terms of the adoption of technology, how the management itself influences performance, adoption of the OSH Act and the adequacy of the resources. These factors would be bases for improving performance of the manufacturing firms.

The Government has not been left out of those who would benefit. For instance, when policies relating to measurement of performance and standards to be met by firms in the manufacturing sector in quality are being set, this research could be as important as a reference point. The findings of this study will be of benefit to the government as it will enable the policy makers to come up with policies and procedures that would be of benefit to the manufacturing sector. Strict enforcement of these strategic policies would in turn boost the performance of the companies and the sector at large.

This research may as well be useful to especially Kenya Association of Manufacturers where this research may be of help in coming up with solutions which cause firms lack competitiveness, locally and globally and improve the firms' operations in Kenya. The strategies considered under this study such as technology, role of management, organizational resources and employee occupational safety and health would be a basis for setting guidelines of improvement of performance of the manufacturing firms.

1.7 Scope of the Study

The general purpose of the study was to determine the influence of strategic choices on organizational performance of manufacturing firms in Kenya, case of manufacturing firms in Athi River. The study covered specific manufacturing firms within Athi river area. Data collection took place from January to June 2021, with regards to technology, occupational safety and health, resources and role of management. The firms were selected according to the sector

that they represented. The firms that were sampled included Kenya Meat Commission which is in the food and beverage industry, Portland Cement which is in the building and construction industry, Orbit Chemicals which is in the chemicals industry and Export Processing Zone, which is in the textiles and apparel industry. The area is highly populated by manufacturing companies and most of these companies have long been established. The respondents of the study included employees from the human resources departments, safety management department, IT department and operations management department.

1.8 Limitations of the Study

The sample size was limited to only employees at manufacturing companies within Athi River area. The study was conducted over a span of a limited duration of time, and due to this, follow ups were done through phone calls and physical stopovers to the firms. The respondents were anticipated to give minimal corporation based on the nature of work. This was overcome by assuring the respondents on confidentiality on specific data provided and also allowing enough time, agreed upon by the respondents.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on the strategic issues affecting performance measurement. It begins by expounding on theoretical framework done to highlight the theories on that have been put forward by various scholars on organizational performance then it draws on empirical review related to research objective. It also elaborates performance measurement, and lastly elaborates on the major issues which the researcher is to tackle called conceptual framework.

2.2 Theoretical Literature Review

The study is supported by various theories that are discussed in the following section.

2.2.1 Resource Based View (RBV)

Resource Based View (RBV) is a theory which proposes that for an organization to possess competitive advantage that is sustainable over other firms, resources play a major role in its performance superiority (Göhlich, 2016). The researcher foretold that the advantage of competition sustained by firms is generated and controlled by certain types of resources that finally contribute to performance that is greater. The list of resources that are key, range from those which are physical in nature, organizational and intangible oriented. When we start serializing the resources which take the physical dimension, the following would be exhibited; human inclined resources, physical, financial and organizational resources. The other category of resources which cannot be touched but are vital are aspects of social, culture, position and reputation. The last one is capabilities of the organization and they include building of relationships, alliances, learning collectively, core competencies, abilities that are informal and

networks characterized by technology only to mention but a few (Adler, 2018). The organizational resource's objective of this study gains support from the RBV theory.

2.2.2 Human Capital Theory

Schuz in 1961 and Becker in 1964 are remembered for their participation in the Human Capital Theory in the sense that it was proposed and developed respectively. The proponents of Human capital theory are of the suggestion that productivity of workers is to a greater extent uplifted by education and training of impacting useful knowledge and skills, and as a result raising workers forthcoming income by their life incremental earning (Roy, 2015). The theory creates the importance of education and training of employees which will in turn influence the performance of the organization in a positive manner. What makes it relevant to this study is that the target is to see the direct relationship between trained employee performance and untrained employee performance.

The human capital theory relates to the employee occupational safety and health objective in this study. Occupational Safety and Health of employees is training of employees on the new technology of upcoming machines within the industry. The productivity of workers of an entity is likely to improve if they are given meaningful training and education concerning their safety, operations undertaken and also their health. This theory is important for the research since if applied, occupational safety and health risk will be reduced. Also, transformational leadership will be applied by training current managers to adopt to meet new leadership styles.

2.2.3 The Goal Setting Theory

The Goal Setting Theory which was proposed by Göhlich (2016) established that there is a thin line between motivation for performance and the goals and objectives which an employee establishes. The reason behind this analogy is that employees go overboard to make sure that their goals are accomplished and objectives are realized. In the absence of this, when goals are not realized, employees will choose to either amend to make them more attainable or improve their performance. Phillips and Freeman (2014) assert that when performance improvement receives a soft landing from the employees, the result is that performance achievement aims would have been realized. As employees of the company, managers have a share of the company successes since because of the core values they set. The management of an organization are tasked with the responsibility of developing ideals which are typical and values shared by the organization and then other members of the group adopt them (Jung & Yoon, 2016). The standards are common and followed by all members of the organization when acting on behalf of the group. These can sometimes also be stated to as core values which are shared and can positively impact an organizations performance (Lawrence & Weber, 2014).

Performance is enhanced by specific and ambitious goals when compared to rather general goals. If an employee agrees to undertake a goal, the person has the ability to attain it and is not disoriented by conflicting goals, the expected outcome is a constructive linear association amongst goals and performance. Adherence by an organization to its shared values has a direct correlation to its performance. Examples of shared values common to organizations include social justice, respect for tradition, loyalty, equality, health, independence, creativity, social recognition, trust, responsibility and preserving one's public image (Lawrence & Weber, 2014). The theory is significant to this study since it describes the bond concerning individual goals and

organizational performance. The study will therefore consider the measurement of individual goals as a performance measurement practice. Such goals are also in line with the organizational goal.

2.3 Empirical Literature Review

This section of literature review presents the review of studies done in relation to this study. It reviews the work of other researchers who have carried out studies focusing on manufacturing sector and manufacturing firms.

2.3.1 Organizational Performance

Establishments have significant protagonist in their everyday lives and consequently, fruitful organizations characterize an essential element within rising countries especially in Kenya. Ronald & Gilbert (2015) likens firm establishments and organizations to an appliance in molding the political, commercial and societal improvement of any country in the world. They argue that the focus of any organization is its performance and continuity because performance is a strong impetus in progress and growth. Study of management, therefore, relies heavily on performance of organizations as an important variable and it goes without saying that it is also an essential eye opener to organizational performance. Organizational performance in this study has been found to be influenced by strategic factors such as technology, resources, capabilities, occupational safety and health of employees and role of management in steering these factors so as to achieve high organizational performance.

Goals and objectives of a firm can also be referred to as the intended input of an organization. In comparison, results could be assumed to be the actual output measured referred to as

Organizational. According to Waal (2020) organizational performance incorporates a triple dimension approach area of organizational results: performance of money matters (revenues, dividends, return on savings, etc.); of a product in the market, (sales, market share, etc.) and shareholder profit (overall shareholder return, monetary worth added). Hence, Organizational Performance (OP) is an indicator that measures how an enterprise achieves its objectives satisfactorily. In this current study, the findings add onto the sentiments of Waal (2020) as organizational performance has been found to be incorporating the resources used, technology at work, safety and health of employees and the role of management which steers these factors to achieve a high OP and achieve its objectives. As a result, an organization can assess and measure the effectiveness and efficiency through various approaches (Andre, 2016).

Various ways have been implored to study Organizational Performance (OP). It comprises of segments, parts and units which have had various interactions with one another as noted by (Basher, 2016). The performance of organizations is represented by a beehive of activities day in day out additionally, factors such as employment set of systems of the organization and values that are shared impact greatly on the performance of the organization. Basher (2016) opined organizational performance in a threefold dimension, this includes performance financially, performance business wise and effectiveness of organizations. This study focused on the performance of an organization through effectiveness and efficiency through employing adequate resources, being employee oriented, incorporation of up-to-date technology and the management taking up the role to coordinate these factors to achieve a sustainable OP.

Daft (2017) on his study on “Organizational theory and design” came up with two suggestions and ways of assessing performance of organizations: market and organizational performance. While the latter is concerned with organizational marketing ability, total growth in sale, and total profitability, the former has something to do with product or service worth, product or facility innovation, member of staff desirability, personnel preservation, customer fulfillment, management/employee relation and employee relation. This study also focused on employee safety and health which takes care of their relations and retention to the organization, satisfied personnel which are also ways of assessing performance of an organization. Angelo, Erik, Eddy and Lorenzet (2014) added on the research through a study, “The relationship between enduring leadership and organizational performance" by proposing organizational performance to be measurable on four magnitudes: comparative profitability, return on venture, customer preservation, and total sales growing. In the current study, we combine all these research studies and concentrate on the strategic factors which are technology, occupational safety, resources and leadership.

2.3.2 Technology and Organizational Performance

The influence of technological innovation on the performance of a company is huge (Schilling, 2017). Wang (2015) did an empirical study to determine the effects of technology on organizational performance in Nestle Foods Nigeria Plc. The author studied the advanced manufacturing technology (AMT) and its use, its interaction with the size of the firm, and how it impacts the performance of a firm. This study took into consideration 160 manufacturing firms and resulted in grouping of AMTs of four types which included low volume flexible technologies, high volume manufacturing technologies, product design technologies, and information exchange technologies. The study involved an investigation of the relationship among the four with the

size of the firm and it was noted that as the size of the firm grows logarithmically, the use of three of the four types of AMTs increased linearly (product design excluded).

In this study which focused on the organization level, it was noted that technology use for each of the four types was not a forecaster of enhanced firm performance, but with size as a moderator, superior organizations gave the impression to use technology more selectively. The basic idea that technology implementation alone is not a way of improving performance is supported by these discoveries. However, it can be recognized that size characterizes changing organizational structures and processes, hence this study examined how these factors interrelate with technology for improved performance.

Performance enhancement coupled with production that is incremental may not be realize by technologies alone unless other resources like human resources are combined effectively. A study done by Schilling (2017) focused on “Strategic management on technological innovation”. The manner in which products are distributed after being designed and developed has a lot of effect done by technology. The researcher instituted a positive association between boosted technology and business performance. Further quality and price of product also are affected by technology. In addition, he establishes that in the context of organizations, innovation of technology may be associated with growth and performance through progression in efficacy, production, excellence, strategic positioning and share of market in addition to many others. The other finding that was revealed is that innovation of technology has a positive correlation with performance. These were also the sentiments of this current study where technology was found to have a positive relationship towards performance of an organization.

2.3.3 Employee Occupational Safety and Health and Organizational Performance

Occupational safety and health involves helping employees by placing measures that try to prevent them from being injured or becoming ill due to dangers in their workplaces. The employer must do due diligence, in taking steps to meet the standards. Therefore, it is important to maintain high standards of safety at the workplace because this eliminates or tries to eliminate risks and hazards at the workstation. It ensures that production time lost is minimized when attending to injuries. Several categories of hazards including physical injuries, psychological and physiological hazards, chemical hazards and environmental hazards are some dangers that workers in high risked organizations are often exposed to.

In his study "Strategic planning and its impact on performance in the manufacturing sector in Kenya", Kirangu, (2018) explained that strategic factors that are considered in planning are key in the performance of an organization. One of the factors were employee occupational safety and health which was found to be key in ensuring performance, however in this study, employee OSH was found to influence performance of an organization in a significant way. The author suggests that those businesses that invest in high performance health and safety practices realize maximum productivity. He also explains that to be more productive the firm needs to maintain a healthy and happy workforce, which leads to increased investment in health and safety practices to reduce accidents, which in turn leads to more gains in productivity.

Occupational health and safety are an integral part in risk management study. Schilling (2017) argues that unsafe work conditions and behaviors are the two outcomes of accidents. Defective equipment, lack of protective equipment and apparatus, and inadequate on no guards

at all can be categorized in the group of physical conditions that are unsafe. On the other hand, those conditions that result to health and safety hazards to workers belong to unsafe work conditions. According to Lussier and Achua (2016) there are two approaches which are essential in cushioning the situation; one of them relates to prevention of accidents and the other one is about safe working conditions maintenance. In their study there was relationship between workplace health and safety and performance. Where occupation health and safety is considered, performance is highly and vice versa is true.

In a case of Kenyan research, which was done by Ndirangu and Namusonge (2016) established that significant factors affecting the implementation of occupational safety and health at Kenya vehicle manufacturers included attitude, leadership, motivation and organizational culture. Further, a study by Kaguathi (2015) revealed that organization culture, structure, and employee resistance were some of the factors that affected the successful implementation of occupational health and safety strategies at East African Portland Cement Company Limited.

Lukoko, Chege and Musiega (2015) analyzed the influence of occupational safety and health practices on employee performance at Mumias Company. Their study revealed that high levels of ignorance on occupational hazards at the workplace affected job performance. From the above stated research study, a gap existed to investigate effect of occupational health and safety on organizational performance of major manufacturing companies in Kenya. However, this current study will not only focus on the effects of employee occupational safety and health on performance, but also technology, resources and role of management to give a broader view on the strategic factors affecting organizational performance. This study also involved more

manufacturing companies so as to include more sentiments on the factors affecting organizational performance.

2.3.4 Organizational Resources and Organizational Performance

A study by Bashaer, Sanjay and Singh (2016) on the "Determinants of organizational performance: A proposed framework" empirically examined that resources perform special role on organizational resources, capabilities and systems and how such resources relate with competitive advantage of the firms. The study found that organizational resources, capabilities and systems had helpful and substantial effect on the competitive advantage of the firms. These were also the findings of this study as organizational resources and capabilities were found to have a significant and positive relationship and highly influenced organizational performance. The results showed that some resources had positive and significant influences on agency effectiveness while others had negative or insignificant relationships with agency performance bringing about a mixture of results. They also stated that organizations need to have at least four types of resources that have to be used; financial, human, physical and technological resources so as to achieve the objectives of the organization. A number of factors including an over protection of resources, organization politics, vague strategy targets, reluctance in taking risks, and lack of sufficient information, commonly prohibit effective resource allocation.

A study by Carmeli and Tishler (2004) focused on "Resources, capabilities and the performance of industrial firms: A multivariate analysis" which empirically examined that resources play special role on performance of organizations. Resources of an organization such as, systems, and capabilities relate with competitive advantage of an organization. The study established that competitive advantage of a firm that is substantial is realized by such resources organizational resources as

systems, capabilities with a total variance in competitive advantage described for by the model referred to as multiple linear regression (MLR) at 56.2%. Effective allocation of resources is to a large extent hampered by considerable a number of factors. Failure to take risks, strategies that are not clear, underutilization or over protection of resources, politics in firms and information that is outdated are just but a few of the hindrances and prohibitions. However, as much as this study focused on resources and capabilities as factors affecting organizational performance, this study also focused on technology and role of management to give a broader view of the factors affecting organizational performance.

2.3.5 Role of Management and Organizational Performance

Management of an organization is one of the key driving forces for boosting performance of an organization. Managers, who are the key decision-makers in an organization, determine the acquisition, development, and distribution of organizational resources. The managers also deal with the transformation of these resources into valuable products and services, and the delivery of value to administrative stakeholders and the entire firm. Therefore, they are potent sources of managerial rents and this brings about sustained competitive advantage. This is supported by Ricardo and Wade (2001) who focus on corporate performance management and explain that management is a key driver of firm performance. However, this is different in this study as role of management has been found to be insignificant in relation to performance and this is due to the nature of the manufacturing firms, which are deemed as technical and hands on and management does not seem to impact the daily routines in the firms. There are numeral research studies done on the studies related to management performance in order to separate the values, motivations and other personality dimensions that are unique to successful leaders. However, very few have been specifically defining the management styles of manufacturing companies.

Foss, (2016) analyzed the role of leadership on organizational performance by focusing on 125 Chinese firms. Two types of leadership behaviors were identified in this study. These behaviors are relational behaviors and task behaviors. Further in their study, factors that were used to measure organizational performance were profitability, sales growth, market share, and competitive status. It was found out that managers' task-related behavior and organizational performance are directly related and affect each other. However, this current study notes that the role of management and leadership did not affect organizational performance of manufacturing firms located in Kenya in a great way. In addition, this study was carried out in a different country, with different leadership styles, economic levels and technological levels and this may have brought about the difference in the findings.

Waal (2020) in his study on high performance and managerial leadership explains that various perspectives including managers' personal characteristics, the nature of the organizational context and the behavior of subordinates have been used to examine the role of management of a firm. The author also explains that charismatic theory of leadership is how leaders try to get followers to surpass their own self-interest for the sake of an organization. The transformational perspective is mostly applied to the transactional leadership style and which emphasizes contingent rewards to influence motivations of the followers. Leaders who use consideration style show a high level of concern for people and are supportive of them. These leaders would seek and accept suggestions from subordinates, consult with the employees beforehand on important matters and criticize the work done rather than the personnel. A leader who is oriented towards the structured style would highlight the clear definition of tasks and goal-setting, be

more likely to actively introduce his or her own ideas, assign duties and tasks to other people and monitor their actions closely. This leader further sets demanding performance standards, expects obedience to the standards, and encourages competition among employees. This current study focused on the effects of role of management, especially management style and skills, on the performance of an organization. The findings revealed that the role of management does not have a huge impact on the performance of the manufacturing firms, which could be attributed to the nature of work in these organizations.

A positive correlation between relation-oriented behavior of the management and performance has been noted by various researchers such as Waal, (2020). This is however different in this study as management skills and style does not really impact the performance of a firm. Less conclusive results have been noted from studies regarding the performance impact of a leader's task-oriented behavior. Further, it has been pointed out that highly effective leaders are likely to use a mixture of both task and relationship oriented behaviors. They may selectively employ the style appropriate to a given situation, e.g., considering the type of subordinate or the type of task at hand. Relationships between performance, leadership styles, business strategies, and management systems should be understood so as to provide clues on how the growth paths of fast track manufacturing companies differ from those of which do not perform as well, not achieving the bare minimum.

According to Ssekakubo (2014) leadership characteristics such as skills aligned to the current dynamic work environment and management styles which are customer and employee oriented have great contribution on performance of an organization and further affirmed that leadership

proficiencies can improve performance of employees. The relationship between organizational performance and leadership competencies have been targeted to a large extent by researchers. Atikiya (2015) on the “Effect of Competitive Strategies on the performance of manufacturing firms in Kenya” explains that organizations have decided to prioritize the leadership of the management so as to bring about sustainable firm performance. The management is deemed to be able to control and direct the strategies of a firm so as to steer them to achieve its objectives, which in this case is organizational performance.

2.4 Conceptual Framework

According to Malhotra (2020) a concept is an intellectual or universal clue indirect or derivative of exact occasions. A conceptual framework is explained as a set of all-encompassing ideas and values acquired from appropriate fields of investigation and are used to assemble an ensuing exhibition. Below is a figurative representation of the variables that were explored by this study. The relationship between the independent and dependent variables is depicted in the conceptual framework. When there is an association between the variables, a change in the independent variables results in a change in the dependent variable. In such a case, it is said the worth of the dependent variable dependents on the ideals of the independent variables.

INDEPENDENT VARIABLES **DEPENDENT VARIABLE**

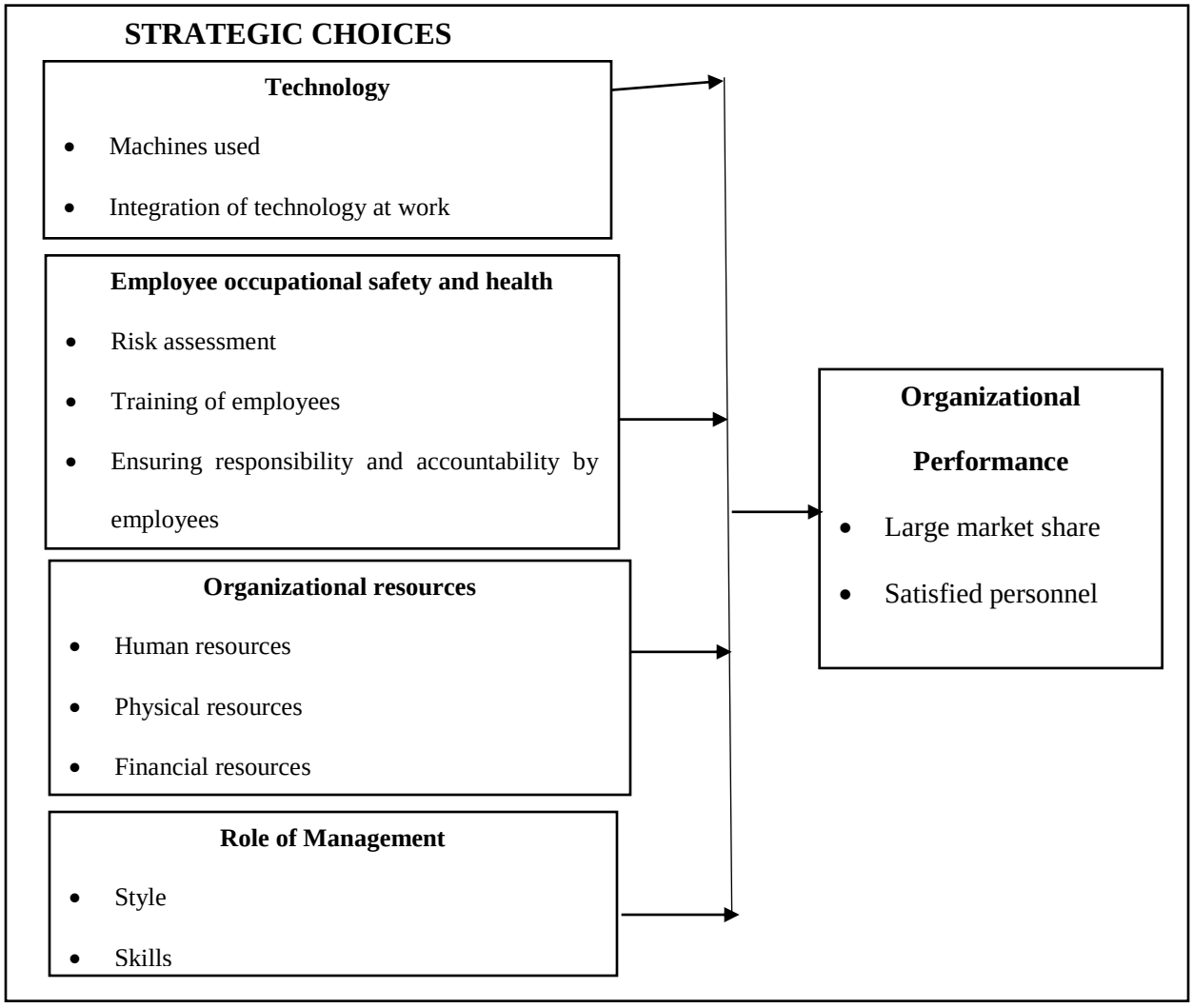


Figure 2.1: Conceptual Framework of the Study
Source: Researcher, (2021)

The conceptual framework depicts the relationship between the dependent variable and the independent variables. In this study, the independent variables in consideration were technology, employee occupational safety and health, organizational resources and role of management. The dependent variable was organizational performance. Parameters used to measure technology were machines used and the integration of technology at work and those used to measure occupational safety and health of employees were risk assessment, training of employees and

ensuring responsibility and accountability of employees. Parameters used to measure organizational resources were human resources, financial resources and physical resources and those used to measure role of management were style and skills. The dependent variable, organizational performance was measured using large market share and satisfied personnel.

2.5 Summary of the gaps

Table 2.1 shows the summary of the gaps that were identified in the literature review

Table 2.1: Research Gaps

Author/ Year	Topic/Purpose of the Study	Findings	Research gaps.	How current study filled the gap
Awino (2011)	Strategic management: An empirical investigation of selected variables on firm performance: A study of supply chain management in large private manufacturing firms in Kenya.	Major strategies of manufacturing firms are critical in determining the performance of the companies.	The study was focused on private manufacturing firms.	The study was focused on private firms and this current study focused on public firms to enhance the study.
Carmeli and Tishler (2004)	Resources, capabilities and the performance of industrial firms: A multivariate analysis.	Resources and organizational capabilities play a major role in the performance of industrial firms.	This study focused on resources and capabilities only as influences of organizational performance.	The study did not include technology and role of management in determining their impact on industrial firms and this current study included the two to fill this gap.
Ying Wang (2015),	To determine the effects of technology on organizational performance	Findings showed The performance of an organization can be achieved through a mix of collective and individual approach to capabilities of market and capabilities that relate to planning of strategy.	This study was done in Nigeria. This study was focused only on technology as an impact of organizational performance.	The study was carried in Nigeria, Nestle Foods Nigeria Plc. No such study has been conducted in Kenya

Lukoko, Chege and Musiega (2015)	To investigate effect of occupational safety and health on performance of the organization.	Top management of Nzoia water services company were not providing its staff with the support on health and safety issue awareness.	This study focused on only occupational safety and health as an objective influencing organizational performance.	In this Research, Leadership and occupational are variables which will be exploited fully to bring a better solution to another manufacturing company.
Otieno (2012)	Influence of strategic orientation on performance of Kenya's manufacturing firms operating under East African Regional Integration.	Strategic orientation was found to have a great and positive impact on the manufacturing firms.	The study focused on the strategic process and its impact on the firms.	This study will narrow down on four strategies and investigate their impact on the performance of the manufacturing firms.
Kaya and Seyrek (2005)	Performance impacts of strategic orientations: Evidence from Turkish manufacturing firms.	Strategic plans are found to have a great impact on the performance of manufacturing firms in the Turkey economy.	Research study was done in Turkey, in a different economic atmosphere.	This research was carried out in Turkey which has a different economy from Kenya. This current study was conducted in Kenya to fill this gap.
Kirangu (2018)	Strategic planning and its impact on performance in the manufacturing sector in Kenya.	Strategies play a major role in the organizational performance of manufacturing firms in Kenya.	The study focused on many manufacturing firms.	This research focused on all the samples of firms. This current study narrowed down further the four firms to understand further the impact of strategic planning on manufacturing firms.
Nyamwange (2001)	Operation strategies applied for competitiveness of Kenyan large manufacturing firms.	Strategies that deal with operations of a firm are significant towards its performance.	This study deal with only operational strategies.	This research will focus on how the operations of a firm are affected with technology and resources affecting performance.

Source: Researcher, (2021)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter involves the methodology and techniques which were espoused for the purpose of meeting the objectives stated in chapter one. The research design, target population, sample and sampling techniques, data collection procedures, data collection tool and data analysis were deliberated into details in this chapter.

3.2 Research Design

According to Kothari (2019) a structure of concepts that facilitate research to be done is known as a research design. It is a blueprint for the gathering, sizing, and breakdown of data. The design of study that would be applied in this study is descriptive. A descriptive study is type of design in research whose objective is major. It involves describing the situation of the subject, parts or entire population with certain characteristics (Malhotra, 2020). Descriptive research was the most superlative design for this study as it enables the use of quantitative methods of examining data in order to achieve dependable results.

3.3 Target Population

Hanif, Shahbaz, & Ahmad (2018) pointed out that, population is a group which is of interest to the researcher. Therefore, it is the group that the researcher would like to take a broad view of the findings of the study. Lee (2013) also defines population as all members of a set of objects, event or people, to which the results of a study a researcher wishes to generalize. The target population of this study included all 14 manufacturing sectors in Kenya (KAM, 2020). The

choice of population is grounded on the element that most of these organizations function in analogous environments, identical areas, produce like products, met with related market conditions, access like raw materials, use similar manufacturing technologies, employ matching infrastructure and exposed to similar tax administration and policies by the regime depending on the industry. The table below presents the manufacturing sectors in Kenya.

Table 3.2: Manufacturing Sectors in Kenya

MANUFACTURING SECTORS	
Food and beverage	Metal and allied sector
Agro-Processing	Building, mining and construction
Plastic and rubber sector	Paper sector
Automotive sector	Leather and footwear
Chemical and allied	Textile and apparel sector
Timber sector	Pharmaceutical sector
Energy, electrical and electronic	Services sector

Source: Kenya Association of Manufacturers, (2021)

3.4 Sample and Sampling Techniques

A sample is a small set of the whole of the target population which is considered more precise in data collection and in representing the whole population. According to Mugenda and Mugenda (2012), a sample which is adequate to represent the total population is one that represents it between the ranges of 10% to 30%. Therefore, the sample chosen for this study was 30% of the total manufacturing sectors, giving a sample of 4 manufacturing sectors. The four manufacturing

firms which were picked randomly included: food and beverage sector, building, mining and construction sector, chemical and allied sector and textiles and apparel sector that are found in Athi River. In the four sectors, one company was targeted to represent the sector. A sample of 240 was carefully chosen from the population which was targeted and this is as shown below.

Table 3.3: Target Population

TARGET INDUSTRY	COMPANY TARGETED	TARGETPOPULATION
Food and Beverage	Kenya Meat Commission (KMC)	60
Building and construction	Portland Cement	40
Chemical and allied	Orbit Chemicals	60
Textiles & Apparel	Export Processing Zone (EPZ)	80
Total		240

Source: Researcher, (2021)

The sample of 240 respondents included employees from strategic departments of the four companies that were linked to the variables of this study. This included four major employee positions including: human resource management (HRM) department, safety management department, IT (Information Technology) department and operations department. The employees of the department were the managers who headed the units in various capacities. The human resources department managers represented the organizational resources objective of the study, safety management managers represented the occupational safety and health variable of the study, the IT department managers represented the technology variable of the study and the operations department managers represented the overall processes of the organizations. The choice to involve the managers was also to analyze the role of management towards performance of these companies.

3.5 Data Collection Procedure

This study comprised of sources from primary data. Primary data was gathered by use of

structured questionnaires. However, data collection from the respondents of the study was based fully on primary data. Data was collected through drop and pick method, where the researcher dropped the questionnaires to the respondents and at an agreed time, picked them for data analysis and interpretation. Follow ups were done to ensure a high or adequate response rate, through physical visits to the firms.

3.6 Data Collection Instrument

The study used structured questionnaires consisting of Likert scale, which was constructed and used to collect primary data from the respondents. The questionnaires were the most preferable data collection instruments since they allow the researcher to reach a lot of respondents within a short period of time (Mugenda & Mugenda, 2012). The questionnaires were introduced to the respondents using an introductory letter, which introduced the topic, the purpose of the study and requested for their honest opinions without coercion. The questionnaires were tested for validity and reliability.

3.6.1 Reliability

Reliability is the extent to which data collection instrument can be relied on (Cooper & Schindler, 2003). Reliability will be done by conducting a pilot study on a section of the targeted participants. After data collection, Cronbach's Alpha with a benchmark value of 0.7 or 70% was used to define and verify the extent of internal consistency of the matters in the questionnaire.

3.6.2 Validity

Validity is explained as the extent to which the research instruments mirror the state of the variables (Kothari, 2019). Validity of the questionnaire was determined through literature

examination that presents the true nature of the variables being examined. Validity was also checked through examination of the questionnaire by the supervisors and was found to be fit and adequate to evaluate the variables of the study. Validity was verified through the guidance of supervisors who are experts in the field.

3.7 Data Analysis and Presentation

The collected data was cleaned and examined to make sure that there was consistency, accuracy and completeness. It was then analyzed by use of descriptive and inferential statistics. Means were used to assess the level of central tendency of the data collected, which is part of descriptive statistics. Standard deviations were also used to assess the extent of data dispersion. The degree of association of the variables was determined by use of Pearson's correlation and a multiple regression model was applied to find out how the specific strategies determine the performance of the firms. Statistical Package for Social Science (SPSS) was used in calculating the data in order to ensure accuracy. The model was as follows:

$Y= \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$ where;

Y= is the dependent variable representing organizational performance of manufacturing firms in Athi River, Kenya.

β_0= is the constant beta factor, which is the value of Y when all Xs are zero.

$\beta_1, \beta_2, \beta_3,$ and β_4 = are the beta regression coefficients.

X_1= is the variable representing technology.

X_2= is the variable representing employee occupational safety and health.

X_3= is the variable representing organizational resources.

X_4= is the variable representing role of management.

Ɛ= is the term of error accounting for all other strategic factors not included in the model.

3.8 Ethical Considerations

The research process ensured that standards of integrity and ethics were upheld. The researcher was issued with an introductory letter from the university, which was used to seek for a research license or permit. The researcher sought the research permit from the National Council of Science and Technology Innovations (NACOSTI). An introduction letter was also sent to the respondents so as to introduce the topic, its purpose and consent to participate in the study. The researcher ensured that the respondents' identities were confidential as well as the information they provided towards the study.

3.9 Diagnostic Tests

Diagnostic tests are those that are carried out on study data, so as to ensure that assumptions of classical linear regression model (CLRM) are upheld. These tests are done when a study incorporates linear regression to estimate relationships between variables (Brooks, 2008). A regression model assumes that there is a linear relationship between the independent variables and the dependent variable, and this assumption should be upheld, by verifying through diagnostic tests. Since this study used linear regression as a method of data analysis, various diagnostic tests such as multicollinearity, normality and autocorrelation were used.

3.9.1 Multicollinearity Tests

Multicollinearity is the existence of relationships between independent variables. Collinearity is where two independent variables are highly correlated, while multicollinearity is where two or more independent variables are highly correlated (Cooper & Schindler, 2007). According to Brooks (2008), multicollinearity could be tested through Variance Inflation Factor (VIF) and

tolerance factor so as to determine if one independent variable relates to another. If there is a high level of multicollinearity; if VIF is more than 10 and tolerance value is less than 0.2, then it would be hard to establish the combined effect of the independent variables on the dependent variable.

3.9.2 Normality Tests

Brooks (2008) notes that, normality distribution is assumed in order to check if data is normally distributed. To assess normality of the distribution of the study data, Kolmogorov-Smirnov test was conducted through SPSS.

3.9.3 Heteroscedasticity Tests

The CLRM assumes that the error term is homoscedastic meaning it has a constant variance. If the error variance is not constant, then the data has an instance of heteroscedasticity. It is important to conduct a heteroscedasticity it would lead to biased parameter estimates. The Breusch-Pagan/Godfrey test was used to test for heteroscedasticity.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter discusses results of the study, discussions which were made from the outcomes and analyses made. The chapter consists of the response rate, reliability analysis and demographic characteristics of the respondents and results of specific strategic factors that influence organizational performance. Correlation analysis using the Karl Pearson's correlation coefficient and multiple regression analysis using the regression model of the study were also conducted on the variables. The responses by the participants of the study were presented in form of tables and figures.

4.2 Response Rate

The questionnaires that were filled and returned were 180 out of the total 240 and are as presented on the table below.

Table 4.4: Response Rate

TARGET INDUSTRY	COMPANY TARGETED	TARGET POPULATION	RESPONSE RATE
Food and Beverage	Kenya Meat Commission (KMC) Athi river	60	45
Building and construction	Portland Cement	40	30
Chemical and allied	Orbit Chemicals	60	45
Textiles & Apparel	Export Processing Zone(EPZ)	80	60
Total		240	180

Source: Researcher, (2021)

This research was conducted in several companies as shown in table above. The reason for this is because each industry behaves differently to these strategic factors, but they are all influenced. The researcher distributed a total of two hundred and forty (240) questionnaires issued to the

participants employed in various companies which were the targeted population. A total of 180 questionnaires were returned and were found to be fit for analysis as they were filled entirely making a response rate of 75% from the targeted population, out of the 240 questionnaires that were distributed. This response rate is considered as adequate and characteristic and obeys the proposal by Mugenda and Mugenda (2015) that a response rate of 50% is satisfactory for analysis and interpretation, that 60% is noble and a response rate of 70% and over is exceptional.

4.3 Reliability Analysis

The Table 4.4 below shows the coefficients of reliability of the items in the questionnaire, which were tested for internal consistency using the Cronbach's Alpha with a benchmark value of 0.7 (70%).

Table 4.5: Reliability coefficients

Questionnaire context	Number of items	Cronbach's Alpha	Comment
Demographic Information	5	0.950	Reliable
Technology	10	0.896	Reliable
Employee occupational safety and health	20	0.959	Reliable
Organizational resources	15	0.991	Reliable
Role of management	5	0.994	Reliable
TOTAL	55	0.958	Reliable

Source: Researcher, (2021)

The table above has presented the reliability coefficients of the variables of the study and the items that were tested for internal consistency, including demographic information, technology, employee occupational safety and health, organizational resources and role of management. The overall comment of the reliability of the questionnaire was that it was reliable and therefore fit to be used in data collection, with a coefficient of 0.958. The demographic information which had 5 items had a Cronbach's Alpha of 0.950 while technology which is one of the independent

variables had a coefficient of 0.896. The rest of the independent variables were deemed reliable; with employee occupational health and safety having a coefficient of 0.959, organizational resources having a coefficient of 0.991 and role of management having a coefficient of 0.994. Therefore, using the Cronbach's Alpha benchmark coefficient of 0.7%, the data collection tool was found to be reliable and could be used to collect data and for further interpretations.

4.4 Diagnostic Tests

Diagnostic tests were carried out on the data of the study. The tests carried out were multicollinearity, normality and heteroscedasticity to determine if the study upheld the assumptions of classical linear regression model.

4.4.1 Multicollinearity Tests

The data of the study was subjected to multicollinearity tests. To determine levels of multicollinearity, VIF and tolerance levels were checked. Hair et al. (2010) suggests that VIF should be lower than 10 and the tolerance values should be not less than 0.1. The table below shows that the VIF values were all below 10 and the tolerance levels were more than 0.1 showing that there was no multicollinearity between or among the independent variables of the study.

Table 4.6: Multicollinearity

Variable	VIF	Tolerance
Technology	1.95	0.560
Employee occupational safety and health	1.46	0.690
Organizational Resources	1.37	0.884
Role of management	1.12	0.890

Source: Researcher, (2021)

4.4.2 Normality Tests

Normality tests were carried out using Kolmogorov-Smirnov tests ran through SPSS. The variables of the study all had a significant value of more than the conventional probability value of 0.05. This shows that the data of the study had a normal distribution, therefore upholding the assumptions of CLRM.

Table 4.7: Normality

	Kolmogorov-Smirnov[a]		
	Statistic	df	Sig.
Organizational Performance	0.441	180	0.300
Technology	0.479	180	0.100
Employee occupational safety and health	0.487	180	0.211
Organizational Resources	0.439	180	0.200
Role of management	0.553	180	0.115

Source: Researcher, (2021)

4.4.3 Heteroscedasticity Tests

The data was run through heteroscedasticity tests using the Breusch-Pagan tests to ensure that the assumptions of CLRM were upheld. The table below shows that the p value of 0.0126 was less than 0.05 meaning that the data was homoscedastic therefore the heteroscedasticity of the data was not experienced.

Table 4.8: Heteroscedasticity

Breusch-Pagan test for heteroscedasticity
H0: Constant variance
chi2 (4) = 12.88
Prob>chi2 = 0.0126

Source: Researcher, (2021)

4.5 Demographics of the Respondents

The section shows the data provided by the participants of the study on their overall information. The demographic information comprised of gender, number of years worked in their respective

organizations, their level of education, department and age bracket at the time of the study. The participants were required to indicate their gender. The results are presented in the figure below

4.5.1 Gender

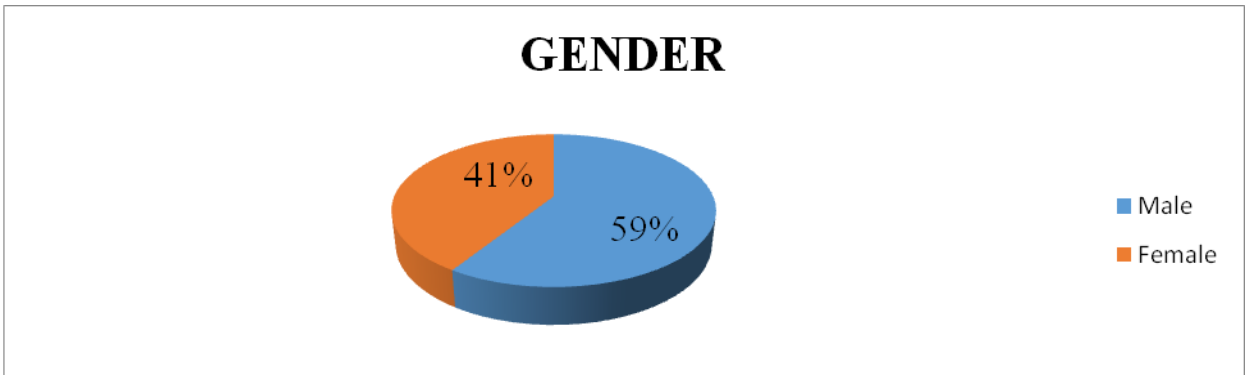


Figure 4.2: Gender of the Respondents
Source: Researcher, (2021)

Results indicated that 59% of the respondents were males while females had 41%. Due to the nature of work done in the various manufacturing companies, the findings indicated that there are more males than females by a great margin.

4.5.2 Age of Respondents

The study aimed to find out the ages of the participants of the study in their respective companies under study. The results are as in the table below.

Table 4.9: Age of the Respondents

Age Category	Frequencies	Percentages
Below 25 years	13	7.22
26 – 35 years	37	20.56
36-45 years	59	32.78
Above 46 years	71	39.44
Total	180	100

Source: Researcher (2021)

Findings from the respondents pointed out that majority of the participants were 46 years of age and above representing (39.44%), 36-45 years (32.78%), 26-35 years (20.56%) and below 25 years (13%).

4.5.3 Level of Education

The study also aimed to recognize the level of education of the employees who were the respondents of this study. The findings are as shown below.

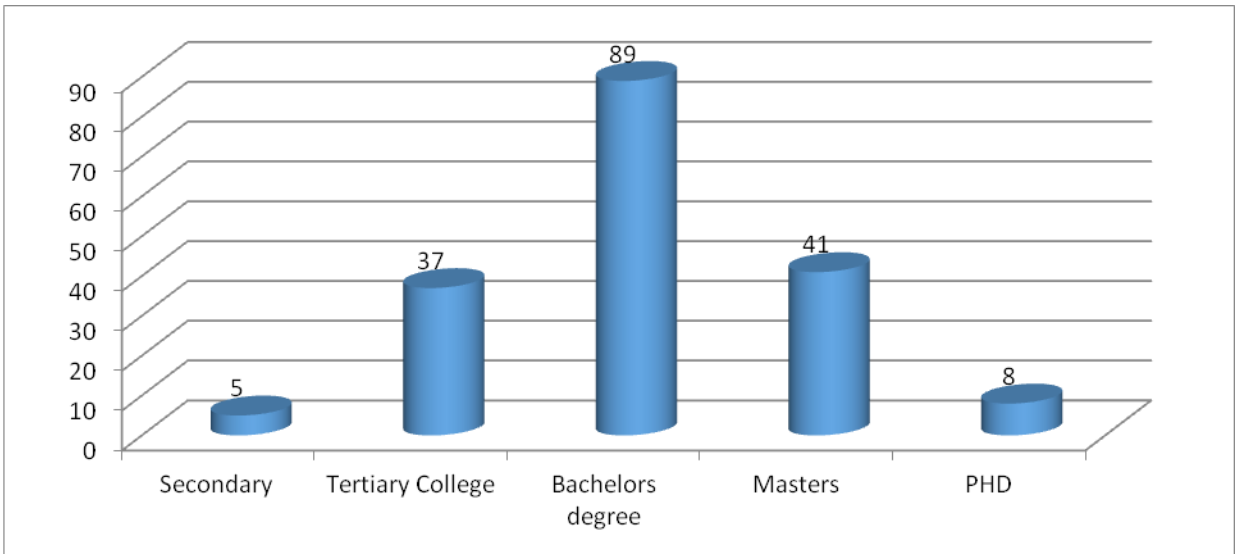


Figure 4.3: Level of education of the Respondents
Source: Researcher, (2021).

From Figure 4.3, it is noted that majority of the employees had attained a Bachelor's Degree (90), Masters (46), Tertiary (39), PHD (8) and secondary (5). It is important that most of the employees are well-informed on strategic firm factors on organizational performance in the organization.

4.5.4 Duration of Employment

After determining the level of education, the duration that the employees had been employed in the company was established and data presented in the Figure 4.3

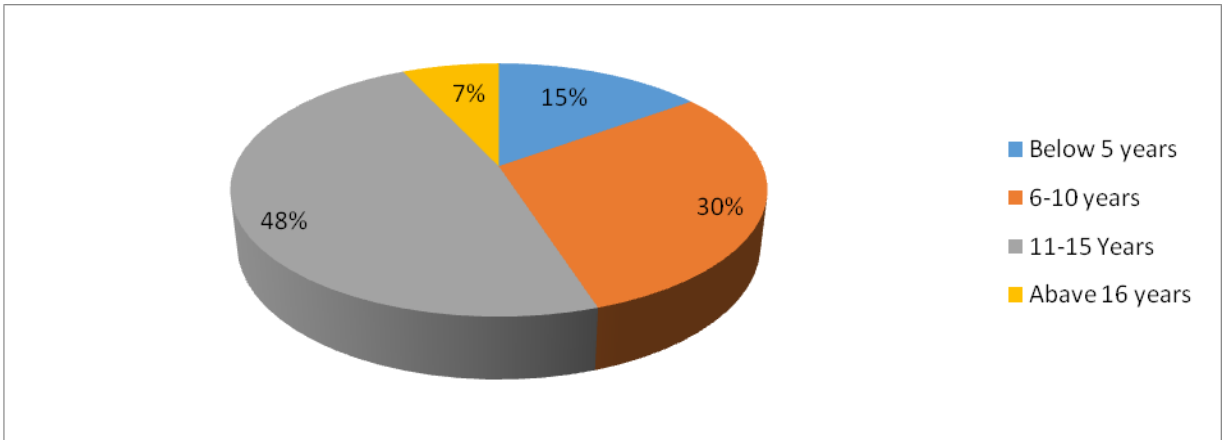


Figure 4.4: Duration of employment of Respondents
Source: Researcher, (2021)

The duration of employment of respondents was as shown in Figure 4.3above. It is indicated that most of the participants had been in employment in the organization for 11-15 years (48%), 6-10 years (30%) and below 5 years (15%). These responses indicate that most of the respondents were employed at their respective companies for a period of more than 10 years. It is worth to note that most of the respondents had adequate understanding of the workplace and hence were considered fit to give most reliable information required.

4.5.5 Positions of Employees in the Organization

The position of employees in the organization was also determined and results recorded on the table below.

Table 4.10: Positions of Respondents in the workplace

Category	Frequency	Percentage
HRM	38	21.11
Safety Manager	62	34.44
IT manager	33	18.34
Operation manager	47	26.11
Total	180	100.0

Source: Researcher, (2021)

From the research findings shown in the table, most of the participants were in safety management (34.44%), operations management (26.11%), HRM (21.11%) and IT management

with 18.34%. As employees' contributions were significant on the findings of this study, all levels of employees were represented.

4.6 Descriptive Analysis Results

4.6.1 Technology, Employee, Occupational Safety and Health, Organizational Resources, Role of management and Organizational Performance

This section represents section B in the questionnaire which the respondents were required to fill according to their workplace. Questions included the accommodation and use of growing technology at the workplace, how technological innovation applies in the organization and to what extent has the technology of the company affected organizational performance.

4.6.1.1Technology and Organizational Performance

Results indicated that 65% of respondents agreed that technology is being used, 30% disagreed while 5% were not sure if it was being used. This can be concluded that technology is being applied in manufacturing firms. These results are presented on figure below

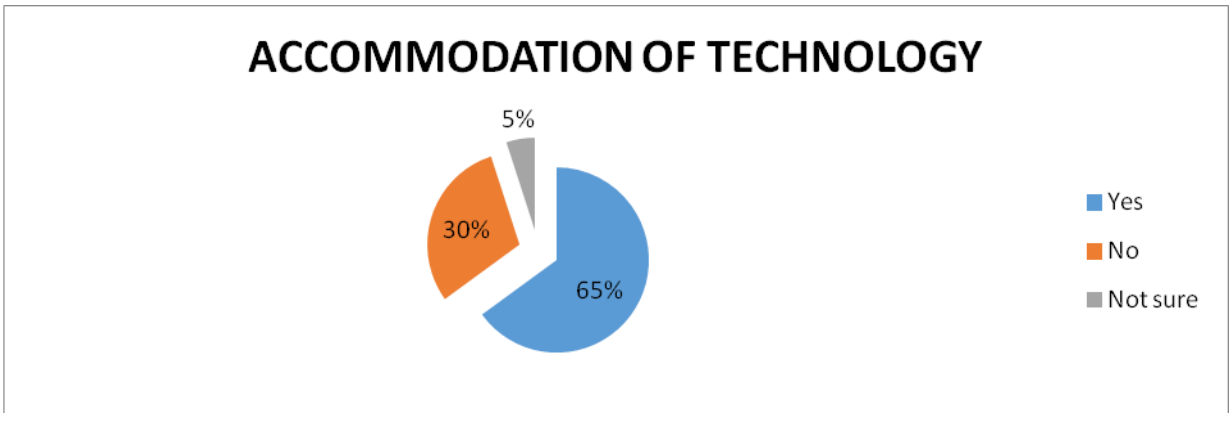


Figure 4.5: Accommodation of Technology
Source: Researcher, (2021)

From the analyzed results, 87% agreed that the organization was using technology in various ways like: Advanced machinery, Effective technological production processes, Instant customer

support mechanisms and Employee social integration and sharing forums. Responses on effect of Technology on Organizational Performance had responses as indicated below.

Table 4.11: Technology on Organizational Performance

	SA	A	N	D	SD	Total
Has Technology of the company impacted your company performance in the last five years	35	46	36	38	25	180
Has new innovations influenced the organizations profits in the last five years	41	56	34	27	22	180
The numbers of downtime and stoppages in the company manufacturing processes changed in the last five years	20	28	56	39	37	180
Has the level of organizational technological awareness among employees changed in the last five years	32	48	38	36	26	180

Source: Researcher, (2021)

Results on extent technology has impacted company performance are presented on table below.

Table 4.12: Technology on Organizational Performance

	SA	A	N	D	SD	Total
Efficient machinery thus high products output	23	30	50	41	36	180
Motivated staff through technology	40	51	35	31	23	180
High market share	41	53	32	29	25	180
Satisfied customer	46	57	30	26	21	180

Source: Researcher, (2021)

4.6.1.2 Occupational Safety and Health on Organizational Performance

This section represents section C which deals with employee occupational safety and health and its impact on organizational performance. This objective included training of employees and ensuring responsibility and accountability by employees.

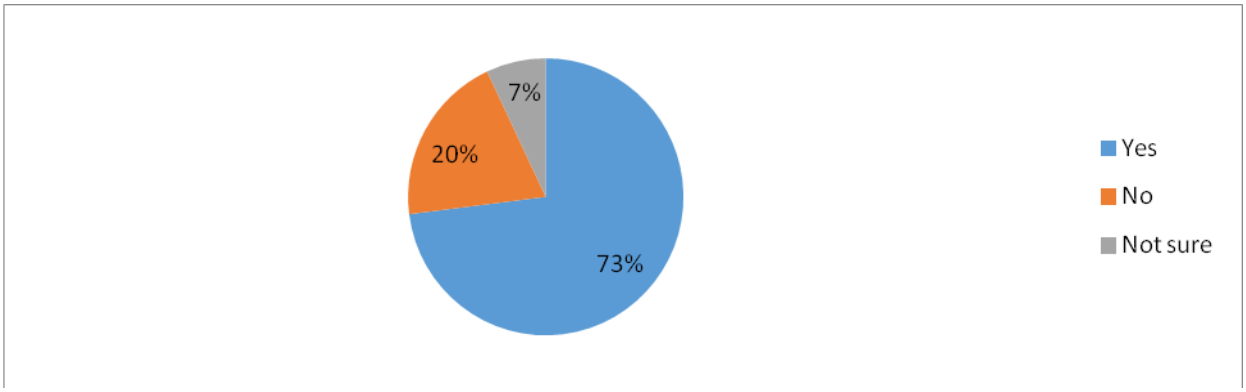


Figure 4.6: Occupational Safety and Health Policy in the Organization
Source: Researcher, (2021)

From the figure, 73% of the respondents agreed that OSH policy apply in the organizations they were working. 20% disagreed while 7% were not sure if there was a policy on safety measures. It can be concluded that OSH policy is available in the organizations under research.

Employee training on occupational and health safety plays a very being role in curbing occupational health hazards and accidents. To support this researcher had various variables as shown below.

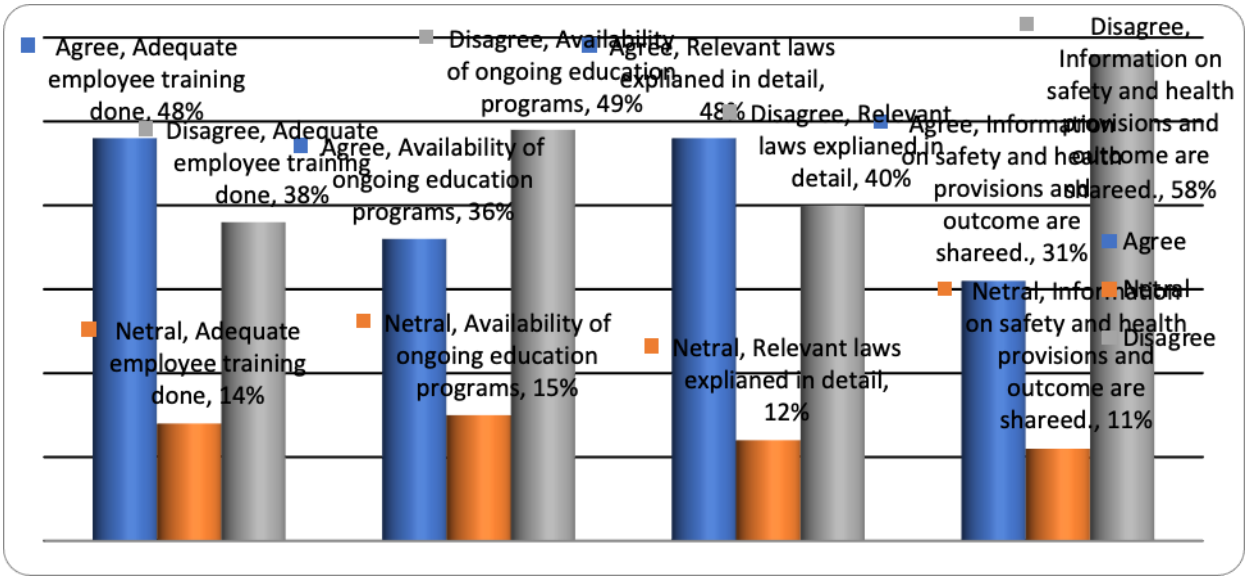


Figure 4.7: Training of Employees
Source: Researcher, (2021).

From the results it can be analyzed that adequate training is done as well as the relevant laws are explained to the employees. Availability of ongoing education programs is not well covered as well as sharing of information pertaining health provision to expose employees and outcomes are not well catered for. It can be concluded that exposure to outcome information can have good impact on OSH regulation guidance and adherence.

Table 4.13: Responsibility and Accountability by Employees

	Ensuring Responsibility and accountability by employees	**SA**	**A**	**N**	**D**	**SD**	**Total**
i)	The company trains employees on healthy policies and safety measures.	39	54	20	38	29	180
ii)	The policy defines the procedure for handling complaints on health and safety.	57	78	25	11	9	180
iii)	The policy has been made available to all employees for transparency purposes	51	68	30	19	12	180
iv)	Roles and responsibilities of the employees and employer is defined in the policy.	65	80	9	15	11	180
v)	Organization register for all the accidents happening in the work premises	29	39	10	58	44	180
vi)	The policy complies with OSHA Act 2007	42	40	35	35	28	180

Source: Researcher (2021)

4.6.1.3 Organizational Resources and Organizational Performance

This part presents section D of the questionnaire, where the participants filled responses on the influence that organizational resources have on organizational performance. Statements included utilization of human resources, financial resources, physical resources and organizational capabilities.

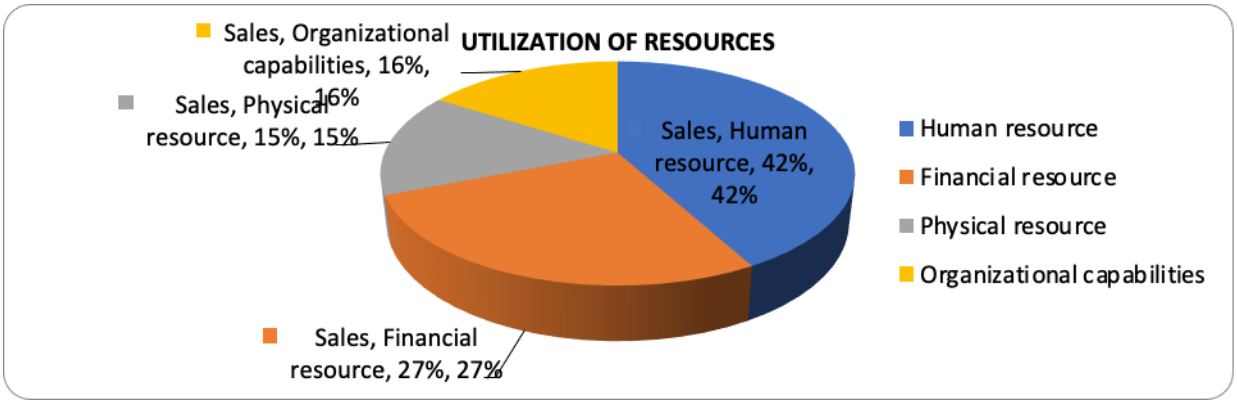


Figure 4.8: Utilization of Resources
Source: Researcher (2021)

From the results it was observed that 42% of human resource was highly pushed to the limit while trying to achieve organizational performance. Financial and organizational capabilities have 27% and 16 percent respectively. It can be concluded that the physical resource is not much strained as compared to the other resources.

The research sought to seek clarity on four resources: Human resource, financial resources, Physical resources and Organizational capabilities. The data analyzed is presented as shown below. Respondents used the following scale:

SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

Table 4.14: Human Resources

	Human resources	**SA**	**A**	**N**	**D**	**SD**
i)	Human resource such as top and middle management and administrative functions affect organization performance	59	73	10	23	15
ii)	Staff empowerment enhances organizational goal attainment	57	78	9	25	11
iii)	Staff empowerment influences stakeholder satisfaction	51	68	12	30	19
iv)	Staff empowerment supports organizational process efficiency	65	80	9	17	9

Source: Researcher (2021)

Table 4.15: Physical Resource Factor

	Physical resources	SA	A	N	D	S	Total
i)	Physical resources such as the plant, machinery, equipment, production technology and capacity contribute positively towards the performance of organization	59	73	10	23	15	180
ii)	Dynamic environment (preference and taste of consumers, prices of products and changes in taxes) affects organizational performance	51	68	12	30	19	180

Source: Researcher (2021)

The results indicate that physical resources such as the plant, machinery, equipment, production technology and capacity contribute positively towards the performance of organization as compared to Dynamic environment.

Table 4.16: Financial Resource Factor

	Financial resources	A	N	D
i)	Financial resources such as cash-in-hand, bank deposits and/or savings and financial capital (e.g., stocks and shares) also help in improving the performance	132	10	38
ii)	Allocation of organizational funds helps in goal attainment	135	9	36
iii)	Effective allocation of funds enhances satisfaction of the organization's stakeholders	119	12	49
iv)	Allocation of funds supports process efficiency in the organization	145	9	26

Source: Researcher (2021)

From the results which show a response rate of 145, allocation of funds greatly supports the efficiency of organization performance. While allocation of funds, which displayed a response rate of 135, showed that it affects the attainment of goals, hence affecting organizational performance. It can be concluded that financial resource factor affects organizational performance.

Table 4.17: Organizational Capabilities

D.	Organizational Capabilities	SA	A	N	D	SD
i)	Hostile environment (competitive pricing, combination of marketing strategies, market niche and new methods of packaging) affects organizational performance	41	53	32	29	25

ii)	Competitive intensity (new demand on existing products, sales and marketing, increase of market share, financial resources for sales promotion and improving market share) affects performance	46	57	30	26	21
iii)	Heterogeneity (competitive aggressiveness, investing in new ventures, innovation ability and behavior of taking risk) affects performance	34	48	30	40	28

Source: Researcher (2021)

Results indicate that 103 respondents agreed that competitive intensity affects performance, closely followed by hostile environment with 94 agreeing response. From the results 68 respondents indicated that heterogeneity does not affect performance as much as the others.

4.6.1.4 Role of Management and Organizational Performance

Management plays a key role in performance of nay organization. To fully understand the researcher had various variables as shown in the table below. The respondents used the following scale: SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

Table 4.18: Role of Management and Organization Performance

Statements	SA	A	N	D	SD	Total
Management style impacts organizational performance	56	70	15	26	13	180
Management behavior influences organizational structure and performance	57	77	10	25	11	180
Good Management has Impact on employee performance	65	80	9	17	9	180
Management entails monitoring your team on their day-to-day activities	33	36	20	45	46	180
Management recognizes employees efforts and rewards them accordingly	26	36	18	52	48	180

Source: Researcher (2021)

From the results it can be deduced that good management has impacted employee performance with 145 respondents agreeing. Management behavior and style had impact on employee performance with 134 and 126 responses respectively. There was strong disagreement on

recognizing staff efforts and rewarding them as well management keeping daily to daily monitoring of the staff with 100 and 91 responses respectively. It can be concluded that management style and behavior significantly affect performance. Management also should consider rewarding staff efforts and avoid monitoring their staff since innovation and freedom of work might be highly interfered thus low performance.

4.7 Correlation Analysis

The table below shows the coefficients of correlation retrieved from the Karl Pearson's analysis of the relationships between the independent variable and the dependent variable.

Table 4.19: Correlation Matrix

Correlations					
	Organizational Performance	**Technology**	**Employee Occupational safety and health**	**Organizational resources**	**Role of management**
Organizational Performance	1				
Technology	0.990**	1			
Employee Occupational Safety and health	0.988**	0.987**	1		
Organizational resources	0.971**	0.952**	0.973**	1	
Role of management	0.967**	0.972**	0.976**	0.950**	1
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Study data (2021)

The table above shows the coefficients of correlation as proposed by Karl Pearson. They are presented as the relationships between the independent variables and the dependent variable. It is indicated and noted that the four variables; technology, employee occupational safety and health, organizational resources and role of management had a linear relationship with the dependent variable; organizational performance. With a significance level of 90% (0.01), the relationship between organizational performance and technology was noted to be a value of 0.990, which is positive and significant and can be able to predict changes in organizational performance.

A value of 0.988 was noted in the correlation between employee occupational safety and health and organizational performance, which is also positive, linear, strong and can be able to detect changes in organizational performance. The correlation between organizational resources and organizational performance was noted to be a value of 0.971 and that of role of management and organizational performance to be 0.967. Therefore, all independent variables were noted to have a positive and strong relationship with organizational performance and all of them can be used to predict any change or fluctuations in the dependent variable. Due to this, the variables can be further analyzed in relation to the dependent variable as they have a statistically significant relationship with each other.

4.8 Multiple Linear Regression Analysis

A multiple linear regression analysis was conducted to predict the relationship between the independent variables and the dependent variable. A summary of the model was carried out, the analysis of variance and the coefficients of the variables were also computed to present a full regression analysis.

Table 4.20: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.994[a]	0.989	0.989	0.55201

a. Predictors: (Constant), Role of management, Organizational resources, Technology, Employee occupational safety and health

Source: Researcher (2021)

The model summary presents the values of the coefficients of determination known as the R Square and the Adjusted R Square which is represented by a value of 98.9% (0.989). This means that the joint effect of the four predictor variables; technology, employee occupational safety and health, organizational resources and role of management explained 98.9% of the variations in organizational performance.

Table 4.21: Analysis of Variance

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4753.670	4	1188.418	3900.148	.000[b]
	Residual	53.324	175	.305		
	Total	4806.994	179			

a. Dependent Variable: Organizational Performance

b. Predictors: (Constant), Role of management, Organizational resources, Technology, Employee occupational safety and health

Source: Researcher (2021)

The results as shown above indicate that the value of the F statistic, which was a higher value of 4,175 degrees of freedom and with a significant value of 0.00 (<0.05), indicate that the four independent variables were good predictors of organizational performance of the manufacturing firms in Athi River and therefore the model was fit.

The table below shows the coefficients of the variables of the study, the t values and the significant values of the variables and the constant factor in the model.

Table 4.22: Coefficients

Model		Unstandardized Coefficients	Standardized coefficients	t-value	Sig.
1	(Constant)	4.094		-13.279	0.000
	Technology	0.625	0.670	12.850	0.000
	Employee occupational safety and health	0.025	0.107	1.541	0.125
	Organizational resources	0.088	0.283	8.078	0.000
	Role of management	0.047	-0.058	-1.536	0.126

Source: Researcher (2021)

The multiple regression model was as: $Y= 4.094 + 0.625X_1 + 0.088X_{2,} + 0.607X_3 + 0.107X_{4.}$ This means that for every 0.625 units of technology, and 0.088 units of organizational resources, organizational performance increased by one unit. The standardized coefficients were 0.670 for technology, 0.107 of employee safety and health, 0.283 of organizational resources and 0.058 of role of management. From the standardized coefficients of the variables, it is noted that technology with a value of 0.670 had the highest value among the four and therefore had the greatest contribution towards organizational performance. Technology and organizational performance displayed a significant value of 0.00, which is lesser than the conventional value of 0.05 and therefore were significant towards organizational performance. Employee occupational safety and role of management had a significant value of 0.125 and 0.126 respectively, which is more than 0.05 and therefore were not significant in predicting any changes in organizational performance.

4.9 Summary of the Chapter

This chapter has presented the various analyses done on the data collected including reliability analysis, descriptive analysis, correlation analysis and multiple regression analysis. Data was later presented in tables and figures for easy interpretations and drawing of conclusions.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a comprehensive summary of the results of the study, conclusions made and recommendations that were drawn which were based on the findings and recommendations as well. The conclusions were made in line with the objectives of this study.

5.2 Summary of Findings

This section provides the summary of findings of the study in relation to the data collected from the study respondents. These findings include those related to the objectives of the study including technology, employee occupational safety and health, organizational resources and role of management as the independent variables and organizational performance as the dependent variable.

5.2.1 Technology

Technology was one of the independent variables that was under study; investigating its impact on the organizational performance of manufacturing firms in Athi River, Kenya. The respondents of the study agreed that they adopt technology widely in their operations, which makes work more efficient. The findings of the study also noted that there has been adoption of technology driven innovations which have raised the profits of the organization in the recent past. Technology was therefore found to have a great impact on the organizational performance of the manufacturing firms in Athi River, Kenya.

5.2.2 Employee Occupational Safety and Health

Employee Occupational Safety and Health was the second objective and independent variable considered under study. The findings of the study noted that OSH policy was available in the organizations under research. From the results it was concluded that even though policy is there, but presence of protective equipment is not there, regular and periodic inspection of employees exposed to hazards relating to health is not done, evaluation of working environment is not done effectively due to lack of operational health and safety committee. It was concluded that risk assessment is not catered for in the organizations under study, although adequate training is done as well as the relevant laws are explained to the employees. Availability of ongoing education programs is not well covered as well as sharing of information pertaining health provision to exposed employees and outcomes are not well catered for. It was therefore found out that employee occupational safety and health is not a significant predictor of organizational performance.

5.2.3 Organizational Resources

Organizational resources was another independent variable of the study, tested against organizational performance of manufacturing firms in Athi River, Kenya. From the findings of the study, it can be concluded that the physical resource is not much strained as compared to the other resources. The findings of the study also note that human factor has impact on organizational performance. The results indicate that physical resources such as plant, machinery and equipment and production technology contribute positively concerning the performance of organization as compared to dynamic environment. Therefore, organizational resources such as physical, human and financial resources positively and significantly impact organizational performance.

5.3.3 Role of management

Lastly, role of management was an independent variable considered under this study. The findings of the study noted that good management has impact on employee performance. Management behavior and style also had a great impact on employee performance, which led to better organizational performance. There was high disagreement on recognizing staff efforts and rewarding them as well management keeping daily to daily monitoring of the staff. It can be concluded that management style and behavior significantly affect performance. Management also should consider rewarding staff efforts and avoid monitoring their staff since innovation and freedom of work might be highly interfered thus low performance. Findings of the study noted that role of management did not have a significant impact or was not significant in predicting changes in organizational performance.

5.2.5 Organizational Performance

Analysis of coefficients of correlation as proposed by Karl Pearson was done to determine the relationships between the independent variables and the dependent variable. It was indicated that the four variables; technology, employee occupational safety and health, organizational resources and role of management had a linear correlation with the dependent variable; organizational performance. Therefore, all independent variables were noted to have a positive and strong relationship with organizational performance and all of them can be used to predict any change or fluctuations in the dependent variable.

5.3 Conclusions

This study concludes that technology is a great predictor of organizational performance. Technology including the machines used and how they are being incorporated in work has been found to be important in dictating the efficiency in the operations of manufacturing firms. Technology was noted to have a great influence on performance of the organization. Therefore, technology has a positive and significant impact on the organizational performance of manufacturing firms in Athi River, Kenya.

Organizational resources played a key role in the organizational performance of manufacturing firms in Kenya. They include human, physical and financial resources and have been found to significantly affect the performance of the operations of a firm and its overall performance. Therefore, organizational resources are a positive and significant factor in the organizational performance of the manufacturing firms in Athi River, Kenya.

Occupation and safety of employees was not significant in performance implying whether the guidelines were observed or not people still took up the work. The explanation was that limited jobs made people to take up whatever was available irrespective of health hazards. Employee occupational safety is a great factor which should be incorporated in the operations of the firms, and according to the findings of this study, however important it is, it does not impact performance of the manufacturing firms in a significant manner.

The role of management was also insignificant because in automated environment, limited managerial expertise was required. Role of management is important, however, the findings of

this study notes that role of management does not have a significant impact in the performance of the manufacturing firms. This study therefore concludes that employee occupational safety and health and role of management were not significant factors in influencing organizational performance of manufacturing firms in Athi River, Kenya.

5.4 Recommendations

This study recommends that programs that involve occupational safety and health need to consider factors such as prevention and protection of personnel at the workplace. Primary prevention at the workplace should be of great importance and efforts must be focused on this at a greater level. For safety and health of all users of the spaces, workplaces and working environments should be prearranged and premeditated. This is essential as this ensures that the health and safety policies, regulations and technical standards to prevent occupational injuries, diseases and deaths are adapted every so often, to social, technical and scientific progress and other variations in the work area. This is best done through the improvement and application of actions that support the Occupational Safety and Health Act.

Information is considered as very important for the conception and carrying out of programs which are effective and efficient. The gathering and distribution of truthful statistics on dangers and harmful things, scrutiny of workstations, observing of agreement with policies and adoption of best practice within the organization, and other related actions are fundamental to the formulation and administration of strategies that are effective. Workers and employers must all be knowledgeable of how important it is to establish working procedures that are considered safe and how to go about it in a holistic manner.

The entire management of the organization and workers and their respective responsibilities should be complementary and jointly strengthening in the mission to encouraging technology, occupational safety and health as well as effective use of organizational resources to the highest degree possible within the limitations of company's state of affairs and operations. This alluded to the fact that training, improving, preventing, and protecting workers from risks that may be experienced at the workplace and inefficient machinery as well as strained resources, must be undertaken. Therefore, it is the mandate of the top-level management, to acquire the necessary knowledge and offer commitment that will make sure that the processes and procedures at work champion for health and safety. Financial, human and physical resources should be allocated by the management sufficiently and will steer the proper functioning of the laid down programs concerning occupational safety and health. Strategies by the management that are dynamic need to be established and their full implementation overseen. This will ensure that there is full adherence, coherence and relevance of all the components that make organizations.

This study also recommends that the Government in conjunction with Kenya Association of Manufacturers should lay down stringent measures and policies on efficient technology, adequate organizational resources, adoption of OSH Act and good corporate governance through management of the manufacturing firms. This will ensure that policies and procedures are followed to the latter, aiming to boost organizational performance of the manufacturing firms in Kenya.

5.5 Suggestions for Future Research

I suggest that future research can be done to explore the degree to which implementation and compliance of laws; both at an international and a national level and is closely related to

technology and also occupational health and safety in the workplace. More studies could be done using substitute data collection methods, for example interviews and this may be used to bring about more in-depth sentiments on the impact of strategic firm factors on organizational performance. This study recommends that more studies should be done on manufacturing firms in other parts of the country, focusing on different manufacturing sectors, all directed at organizational performance. Also, studies could be done on more manufacturing firms so as to validate the findings of this study and to enhance the sentiments brought out in this study. More studies should also be done on other strategic choices of manufacturing firms so as to understand how other strategies affect organizational performance of manufacturing firms in Kenya.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Thoya Kenga Thoya
St. Paul's University
Private Bag
Nairobi.

Dear Respondent,

RE: CONSENT TO CARRY OUT RESEARCH

Greetings, I am a student currently pursuing Masters in Business Administration, specializing in Strategic Management at St. Paul's University. As a requirement for our program, I am undertaking a dissertation with the topic: **'Specific strategies and organizational performance of the manufacturing firms in Athi River, Kenya'**. This questionnaire is for the purpose of academic research only and disclosure of any information associated with any firm will be kept confidential. Please assist me to achieve this noble cause.

Thank you in advance.

Yours truly,
Thoya Kenga Thoya.

APPENDIX II: RESEARCH QUESTIONNAIRE

Instructions: Kindly tick or fill the appropriate answer in the spaces provided below.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender Male ☐ Female ☐

2. Age: 20 – 25 years ☐ 26 – 35 years ☐

   46-60 years ☐ above 60 years ☐

3. Please indicate your highest level of education.

   Secondary Level ☐

   Tertiary College ☐

   Bachelor's Degree ☐

   Master's Degree ☐

4. How many years have you worked at the organization

0-1 year ☐ 1- 3 years ☐ 3-5 years ☐

6-10 years ☐ 10-20 years ☐ Above 20 years ☐

2. Please indicate your position in employment

HRM ☐ Safety Manager ☐ IT manager ☐ Operation Manager ☐

SECTION B: TECHNOLOGY AND ORGANIZATIONAL PERFORMANCE

3. Does the company accommodate and use growing manufacturing technology?

   Yes ☐ No ☐

4. In what ways does technology innovation apply in the organization?

Advanced machinery ☐

Effective technological production processes ☐

Instant customer support mechanisms ☐

Employee social integration and sharing forums ☐

All the above ☐

5. Kindly indicate the level of technology and organizational performance with each statement by placing a tick (√) using the following scale.

SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

STATEMENT	**SA**	**A**	**N**	**D**	**SD**
Has Technology of the company impacted your company performance in the last five years					
Has new innovations influenced the organizations profits in the last five years					
The numbers of downtime and stoppages in the company manufacturing processes changed in the last five years?					
Has the level of organizational technological awareness among employees changed in the last five years					

6. To what extent Has Technology of the company impacted company performance

STATEMENT	SA	A	N	D	SD
Efficient machinery thus high products output					
Motivated staff through technology					
High market share					
Satisfied customer and staff					

SECTION C: EMPLOYEE OCCUPATIONAL SAFETY AND HEALTH ON ORGANIZATIONAL PERFORMANCE

7. Do occupational safety and health policy apply in the organization?

Yes ☐ No ☐

8. Kindly indicate the level of occupational safety and health factors of Management (risk assessment), Training of Employees and Ensuring Responsibility and accountability by employees, with each statement by placing a tick (√) using the following scale.

SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

A.	MANAGEMENT (RISK ASSESSMENT)	SA	A	N	D	SD
i)	There is regularly & periodic examination of employees exposed to health hazards or illness.					
ii)	Organization has bought employee protective equipment the last five years					
iii)	There is an assessment of working environment to identify factors that may affect workers health.					
iv)	The organization has a health and safety committee in place.					

v)	The company has a healthy and safety policy in place that aims at promoting safety culture.					
vi)	The company conducts regular inspections at the workplace.					
vi)	The inspections help in developing health and safety strategies and initiatives that are tailored to the organization specific needs.					

B.	**TRAINING OF EMPLOYEES**	**SA**	**A**	**N**	**D**	**SD**
i)	Employees are provided with adequate training to understand proper working methods.					
ii)	Company educates employees about a healthy work-style and lifestyle.					
iii)	Availability of ongoing education programs on health and safety.					
iv)	Relevant laws and regulations are explained during training.					
v)	Information about safety and health provisions and outcome are shared openly with employees.					

C.	**ENSURING RESPONSIBILITY AND ACCOUNTABILITY BY EMPLOYEES**	**SA**	**A**	**N**	**D**	**SD**
i)	The company trains employees on healthy policies and safety measures.					
ii)	The policy defines the procedure for handling complaints on health and safety.					
iii)	The policy has been made available to all employees for transparency purposes					
iv)	Roles and responsibilities of the employees and employer is defined in the policy.					
v)	Organization register for all the accidents happening in the work premises					

vi)	The policy complies with OSHA Act 2007					
vii)	Employees are involved in the inspection process.					

SECTION D: ORGANIZATIONAL RESOURCES AND ORGANIZATIONAL PERFORMANCE

9. Which organizational resource is high pushed to the limit due to high utilization in your organization?

Human resources ☐

Financial resources ☐

Physical resources ☐

Organizational capabilities ☐

10. Kindly assess the level of organizational resources and organizational performance with each statement by placing a tick (√) using the following scale.

SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.

A.	**HUMAN RESOURCES**	**SA**	**A**	**N**	**D**	**SD**
i)	Human resource such as top and middle management and administrative functions affect organization performance					
ii)	Staff empowerment enhances organizational goal attainment					
iii)	Staff empowerment influences stakeholder satisfaction					
iv)	Staff empowerment supports organizational process efficiency					

B.	**PHYSICAL RESOURCES**	**SA**	**A**	**N**	**D**	**SD**
i)	Physical resources such as the plant, machinery, equipment,					

	production technology and capacity contribute positively towards the performance of organization					
ii)	Dynamic environment (preference and taste of consumers, prices of products and changes in taxes) affects organizational performance					

C.	**FINANCIAL RESOURCES**	**SA**	**A**	**N**	**D**	**SD**
i)	Financial resources such as cash-in-hand, bank deposits and/or savings and financial capital (e.g., stocks and shares) also help in improving the performance					
ii)	Allocation of organizational funds helps in goal attainment					
iii)	Effective allocation of funds enhances satisfaction of the organization's stakeholders					
iv)	Allocation of funds supports process efficiency in the organization					
v)	Experiential resources such as product reputation, manufacturing experience and brand name account for the performance of organization					

D.	**ORGANIZATIONAL CAPABILITIES**	**SA**	**A**	**N**	**D**	**SD**
i)	Hostile environment (competitive pricing, combination of marketing strategies, market niche and new methods of packaging) affects organizational performance					
ii)	Competitive intensity (new demand on existing products, sales and marketing, increase of market share, financial resources for sales promotion and improving market share) affects performance					
iii)	Heterogeneity (competitive aggressiveness, investing in new ventures, innovation ability and behavior of taking risk) affects performance					

SECTION F: MANAGEMENT AND ORGANIZATION PERFORMANCE

11. Kindly indicate the level of agreement and disagreement on role of management and organization performance with each statement by placing a tick (√) using the following scale. **SA= Strongly Agree, A= Agree, N= Neutral, D= Disagree, SD= Strongly Disagree.**

	SA	**A**	**N**	**D**	**SD**
How does Management style impacts organizational performance					
Do Management behavior influences organizational structure and performance					
Impact of Good Management has on employee performance					
Management entails monitoring your team on their day-to-day activities					
Management recognizes employees efforts and rewards them accordingly					

THANK YOU FOR YOUR PARTCIPATION

APPENDIX III: RESEARCH RECOMMENDATION LETTER

ST. PAUL'S UNIVERSITY

Private Bag 00217 LIMURU, KENYA
Email: postgraduatestudies@spu.ac.ke
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BOARD OF POSTGRADUATE STUDIES

5th August 2021

National Commission for Science and Technology,
P.O. BOX 30623-00100,
Nairobi.

Dear Sir/Madam,

RE: RECOMMENDATION FOR THOYA KENGA THOYA- MBANRB317120 TO CONDUCT RESEARCH

This letter confirms the above named person is a student of the Master of Business Administration program at St. Paul's University.

The second year consists of a major research work leading to a dissertation. The student's selected topic is '*Specific Strategies and Organizational Performance of Manufacturing Firms in Kenya: Case of Manufacturing Firms in Athi River.*'

Kindly grant this student the required permit.

Yours Faithfully,

DIRECTOR POSTGRADUATE STUDIES ST. PAUL'S UNIVERSITY 05 AUG 2021 TEL: 020-2020505/2020510 P.O. PRIVATE BAG - 00217, LIMURU

Dr. Julius Kahuthia
Director, Postgraduate Studies

APPENDIX IV: RESEARCH PERMIT LICENSE

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 342999

Date of Issue: 09/August/2021

RESEARCH LICENSE



This is to Certify that Mr.. Thoya Kenga Kenga of St. Paul's University, has been licensed to conduct research in Kajiado on the topic: Specific Strategies and Organizational Performance of Manufacturing Firms in Kenya: Case of Manufacturing Firms in Athi River, Kenya. for the period ending : 09/August/2022.

License No: NACOSTI/P/21/12307

342999

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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