ANALYSIS OF TOTAL QUALITY MANAGEMENT STRATEGY ON ORGANIZATIONAL PERFORMANCE OF PROCESSING FIRMS IN KENYA. A CASE OF NEW KCC LIMITED

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DECLARATION AND APPROVAL

DECLARATION BY THE STUDENT

This research project is my original work and it has not been submitted for an award in any other university

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APPROVAL BY THE SUPERVISOR

This research project has been submitted for examinations with my approval as the University supervisor

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DEDICATION

I dedicate this work to my mother Margaret Wakina Ndwiga and all my siblings for their unending support.

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I acknowledge God for making it possible for me to come this far. I acknowledge my supervisor Dr. Maria Wambui Mung'ara for providing me with timely and substantial advice in doing this project. Additionally, acknowledgement goes to Dr. Isaac Mokono Abuga for the coordination of the whole process from assigning supervisor to timely updates on important seminar dates and requirements. Lastly, I would like to thank the postgraduate school's administrative team for their assistance.

ABSTRACT

The practice of total quality management is associated with operational performance of organizations; however, it is observed that companies in developing countries, and in particular Kenya, experience a decline in performance. In 2020, the new KCC limited recorded a loss of 150 million. In addition, more customers are complaining about the quality of the milk. The purpose of this study was an analysis of total quality management strategy on organizational performance of processing firms in Kenya. A case of New KCC limited. The specific objectives were to determine the influence of supplier management, customer focus, employee engagement, and continuous process on organizational performance. The study also examined the moderating influence of operating environment on the relationship between total quality management strategy and organizational performance. The theories of social capital, open systems, two factors, and overall quality management served as the foundation for this study. An explanatory research design was used in the study. Target population comprised of 110 members of the new KCC management team. Given the small target population, the study employed the census approach. Primary data was gathered using a questionnaire. Delivering the questionnaire, the researcher had two study partners help. The drop-and-pick method was then used. To increase the number of responses, surveys were also disseminated by email. Both descriptive and inferential statistics were used to analyze the data. The research findings were calculated and analyzed using SPSS Version 22 (Statistical Package for the Social Sciences). Diagrams and tables were used to display the results. The results of the study were anticipated to make a contribution to strategic management theory, practice, and policy. From the results, it was observed that there is a positive and also significant correlation between continuous process improvement, supplier management, customer focus, employee involvement and organizational performance. Regression analysis results also revealed a positive and significant relationship between continuous process improvement, supplier management, customer focus, employee involvement and organizational performance. Accordingly, the study came to the conclusion that employee involvement, supplier management, customer focus, and continuous process improvement all promote organizational performance. The study also concluded that operating environment will affect the effect of TQM strategies on organizational performance when they are adopted as a whole but will negatively affect the effect of each strategy when adopted alone. The study made suggestions that firms in Kenya should adopt these TQM strategies. The study also made recommendations that policy makers in government are recommended to formulate policies that will address the negative effect of the firms operating environment on the effect of TQM strategies on organizational performance.

TABLE OF CONTENTS

DECLARATION AND APPROVAL ..... **ii**
DEDICATION ..... **iii**
ACKNOWLEDGEMENT ..... **iv**
ABSTRACT ..... **v**
LIST OF TABLES ..... **ix**
LIST OF FIGURES ..... **x**
LIST OF ABBREVIATIONS AND ACRONYMS ..... **xi**
CHAPTER ONE **1**
INTRODUCTION **1**
1.0 Introduction 1
1.1 Background of the Study 1
1.1.1 Total Quality Management Strategy 4
1.1.2 Organizational Performance 7
1.1.3 Processing Firms in Kenya 8
1.2 Problem Statement 9
1.3 Purpose of the Study 10
1.4 Research Objectives 10
1.5 Research Questions 11
1.6 Significance of the Study 11
1.7 Scope of the Study 12
1.8 Limitations of the Study 12
1.9 Operational Definition of Key Terms 13
CHAPTER TWO **15**
LITERATURE REVIEW **15**
2.0 Introduction 15
2.1 Literature Review 15
2.1.1 Continuous Process Improvement and Organizational Performance 15
2.1.2 Supplier Management and Organizational Performance 16
2.1.3 Customer Focus and Organizational Performance 18
2.1.4 Employee Involvement and Organizational Performance 19
2.1.5 Operating Environment, Total Quality Management Strategy and Organizational Performance 20
2.2 Theoretical Literature Review 22
2.2.1 Total Quality Management Theory 22
2.2.2 Two Factor Theory 23

2.2.3 Social Capital Theory 24
2.2.4 Open System Theory 25
2.3 Theoretical Framework 27
2.4 Conceptual Framework 27
2.5 Research Gaps 28
CHAPTER THREE 30
RESEARCH METHODOLGY 30
3.0 Introduction 30
3.1 Research Methodology 30
3.2 Research Design 30
3.3 Location of the Study 31
3.4 Target Population 31
3.5 Sampling Design 31
3.6 Research Instrument 31
3.7 Pilot Study 32
3.7.1 Reliability of the Instrument 32
3.7.2 Validity of the Research Instrument 33
3.8 Data Collection Procedures 33
3.9 Data Analysis Procedures 33
3.9.1 Data Analysis Model 34
3.10 Ethical Considerations 36
CHAPTER FOUR 37
RESEARCH FINDINGS AND DISCUSSIONS 37
4.1 Introduction 37
4.2 Pilot Test of Research Instrument 37
4.2.1 Test of Reliability 37
4.3 Response Rate 38
4.4 Background Information 39
4.4.1 Gender of the Respondents 39
4.4.1 Highest Level of Education 40
4.4.3 Duration Worked at New KCC 42
4.5 Descriptive Analysis of Study Variables 43
4.5.1 Descriptive Analysis for Continuous Process Improvement 43
4.5.2 Descriptive Analysis for Supplier Management 45
4.5.3 Descriptive Analysis for Customer Focus 47
4.5.4 Descriptive Analysis for Employee Involvement 48
4.5.5 Descriptive Analysis for Operating Environment 50

4.5.6 Descriptive Analysis for Organizational Performance 52
4.6 Diagnostic Tests 54
4.6.1 Multicollinearity Test 54
4.6.2 Heteroskedasticity Test 55
4.6.3 Normality Test 55
4.7 Correlation Analysis 56
4.8 Regression Analysis 59
4.8.1 Multiple Regression Analysis 59
4.8.2 Moderating Effect of Operating Environment on the relationship between total quality management strategies and organizational performance 62
CHAPTER FIVE 65
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 65
5.1 Introduction 65
5.2 Summary of Findings 65
5.2.1 Continuous Process Improvement and Organizational Performance 65
5.2.2 Supplier Management and Organizational Performance 66
5.2.3 Customer Focus and Organizational Performance 66
5.2.4 Employee Involvement and Organizational Performance 67
5.2.5 Operating Environment, Total Quality Management Strategy and Organizational Performance 67
5.3 Conclusion 67
5.4 Recommendations 70
5.4.1 Recommendations for Practice 70
5.4.2 Recommendations for Policy Makers 70
5.4.3 Contribution to Knowledge 71
5.6 Suggestions for Further Studies 71
REFERENCES 72
APPENDICES 80
Appendix I: Consent Form 80
Appendix II: Questionnaire 81
Appendix III: Research permit 85

LIST OF TABLES

Table 1: StudyPopulation 31

Table 3: OperationalizationofVariables 35

Table 4: Reliability TestResults 38

Table 5: Response Rate 38

Table 6: Descriptive Analysis of Continuous Process Improvement 44

Table 7: Descriptive Analysis for Supplier Management 46

Table 8: Descriptive Statistics for Customer Focus 47

Table 9: Descriptive Analysis for Employee Involvement 49

Table 10: Descriptive Analysis for Operating Environment 51

Table 11: Descriptive Analysis for Organizational Performance 53

Table 12: VIF Test for Multicollinearity 54

Table 13: Breusch Pagan Test for Heteroskedasticity 55

Table 14: Skewness and Kurtosis Test for Normality 56

Table 15: Correlation Analysis Results 57

Table 16: Model of Fitness 59

Table 17: ANOVA 59

Table 18: Regression Coefficients 60

Table 19: R Square Change 62

Table 20: ANOVA 62

Table 21: Regression Coefficients 63

LIST OF FIGURES

Figure 1: Conceptual Framework 28

Figure 2: Gender Representation 39

Figure 3: Level of Education 41

Figure 4: Duration Worked at New KCC 42

LIST OF ABBREVIATIONS AND ACRONYMS

AFDB: African Development Bank

GDP: Gross Domestic Product

KAM: Kenya Association of Manufacturers

KCC: Kenya Co-operative Creameries

ROA: Return on Assets

SPSS: Statistical Package of Social Sciences

TQM: Total Quality Management

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents background of the study, problem statement, purpose and objectives. The chapter also outlines research questions, significance of the study, scope, and limitations of the study. Further, the chapter highlights operational definition of key terms.

1.1 Background of the Study

The method of performance analysis involves comparing an organization's actual performance to established goals (Hakes, 2017). Job performance and organizational performance are the two different categories of performance that exist in the workplace. More creativity in the construction sector is clearly increased by the correlation between improved management practices and managing abilities and organizational success (Muiruri et al., 2019). Kiprotich et al. (2018) further shows that organizations that perform well are those that successfully achieve their goals or effectively implement a comprehensive quality management strategy. Therefore, organizational performance is determined by Total Quality Management (TQM) practices implemented in the organization.

There are both public and private organizations that can use the integrated management concept known as TQM. This encourages a culture of continuous improvement where successful businesses try to adapt to client perceptions of quality to boost client satisfaction and operational effectiveness (Alghamdi, 2018). According to Keinan and Karugu (2018), applying TQM is a technique that enhances and sustains organizational

performance. Performance is even more effectively used for organizational change and quality improvement through quality management (Olepein, 2017).

The global processing industry is undergoing unheard-of changes as a result of the difficulties in supplying high-quality goods and services, which led to the introduction of ISO certification for advancement. These influences include government pressure to ensure manufacturers make quality products that meet consumer demands (Wanyoike, 2016). Economies such as China, India and India have risen to the forefront of global processing. This sector generates 70 percent of primary processing exports in both developed and developing markets. China, India and Brazil, for example, show very high growth rates in exports of industrial products. These are leading countries and highly competitive exporters: India for IT-enabled software and services, China for skills-intensive producers, and Brazil for agricultural products (Na & Kang, 2019).

The processing industry's operational performance in the United States is crucial for ensuring customer satisfaction since offering high-quality services directly affects clients' contentment, loyalty, and the financial success of service providers. Customer experience is crucial in reviewing and measuring the operational performance of the product business, particularly processing. The processing sector with modern technology, newer and more efficient services, as well as greater client rates, reasonably priced, efficiently and effectively delivered services, can be considered to have the ideal quality operational performance in the sector (Keinan & Karugu, 2018).

In Saudi Arabia, Aljaaidi and Bagais (2021) find that companies in the processing sector gain a competitive advantage by fully integrating quality management into the system. Abd-Elwahed and El-Baz (2018) further show that processing companies that have invested in employee development and supplier engagement are likely to achieve not

only good operational performance but also sustainable customer relationships. Customer loyalty and overall organizational productivity encourage further ongoing development of goods and services.

In Japan, processing companies operating in the 21st century have gained competitive advantage by developing comprehensive quality management strategies and adopting strategic leadership practices (Matsui, 2017). In Japanese processing firms throughout the past 60+ years, methods and practices for total quality management have been developed. These methods and technologies are used to pinpoint prospective issues, reduce the number of times they occur, and enhance business performance. (Psomas & Fotopoulos, 2020).

It has been found that processing firms in Africa, and particularly in sub-Saharan Africa, experience a decline in productivity. The World Bank report (2017) states that processing companies in Africa are operating below capacity. The report of the African Development Bank (AFDB, 2017) also shows that processing companies in Africa have a small share of GDP, ranging between 3.8% and 11%, compared to developed countries, which range between 30% and 40% (Wanjiru et al., 2019).

Processing companies are viewed as catalysts for economic growth and sustainability in South Africa. On the other hand, South African processing businesses actually saw a reduction in performance. The organization's sluggish TQM adoption is largely to blame for the performance drop. But a lot of them have just lately begun giving TQM top priority in their development processes. SMEs in South Africa hold a prominent position in the economic agenda. It was therefore expected that the performance of the processing firms would increase (Beraki et al., 2022).

In Uganda, a number of companies face the challenge of overall poor-quality management in terms of employee participation in decision making, which affects performance (Sendawula et al., 2018). For example, in a case involving a tea production company in Uganda, the summary audited financial statements of Igaara Growers Tea Estate (2017) noted a decrease in profitability from US$589.9 million in 2018 to US$106.6 million in 2019. This decrease in profitability was due to the way the company treats its suppliers, employees, and customers.

Processing is a sizable industry in Kenya that significantly boosts productivity, economic growth, and innovation. But a lot of processing businesses have moved or reorganized their operations, choosing to supply local markets with imports from low-cost processing nations like Egypt, South Africa, and India, which has resulted in job losses (Kithinji et al., 2021). This is a sign that many processing companies in Kenya are struggling with productivity, and there are numerous cautions about profit reporting due to problematic workplace conditions. (GoK, 2017). As a result, processing struggled to develop and several key companies in the sector closed due to unfavorable working conditions (Kungu, 2017). For example, Sameer East Africa closed its Yana tire processing facility in Nairobi, citing increased competition from cheaper imports. Other manufacturers that went out of business included Proctor and Gamble and East Africa Daily. According to World Bank data, Kenyan manufacturers have seen stagnation and declining earnings over the last five years as a result of an unpredictable operating environment. (World Bank, 2017).

1.1.1 Total Quality Management Strategy

TQM refers to a strategy for producing and delivering goods or services that satisfy customer demands or requirements by outperforming competitors' offerings in a better,

more affordable, quicker, safer, and easier way with the involvement of all employees and under the guidance of senior management (Wamalwa, 2018). Chaudary et al. (2017) define TQM as a set of business management techniques that are used to understand customers' hidden and visible demands, which are sensitive to changes in the market, and to improve the efficiency of the processes that result in goods or services. The ultimate goal is to provide customers with better value. Total Quality Management (TQM) encompasses a wide range of practices, including personnel management, continuous improvement, fact-based decision-making, supplier management, leadership management, process management, customer focus, and system approach to management (Toma & Naruo, 2017). The four main TQM pillars that were the focus of the current study were customer focus, supplier partnerships, staff involvement, and continuous process management.

Continuous improvement is a continuous process used to enhance a good, service, or procedure. This effort can take the shape of an abrupt spike in progress or a gradual increase over time (Philip, 2018). Processes of continuous improvement are ongoing initiatives to enhance goods, services, or procedures. These initiatives could aim for gradual advancements over time or abrupt breakthroughs (Mairura, 2018). In this study, continuous process improvement was measured through employee training, system measurement, continuous quality audits and benchmarking.

By adopting the supplier management process, a business may make informed supplier choices and bargain for the best prices on the goods and services it needs to purchase. Senior management monitors the company's supply chain to ensure that suppliers are knowledgeable about its manufacturing processes and operational operations (Yang & Zhang, 2017). Techniques for supplier evaluation, better methods for supplier selection,

efficient selection procedures, improved methods for supplier performance, efficient methods for managing supplier relationships, supplier collaboration, and supplier development are some examples of supplier management strategies (Njeru et al., 2017). In this study supplier management was measured using supplier relations, supplier performance methods and supplier evaluation techniques.

Customer focus is the practice of giving your full attention to providing excellent customer service, which boosts business performance and promotes client retention by lowering complaints (Wanyoike, 2016). According to Wamalwa (2018), customer focus is the key to the success and superior performance of a company. Because businesses rely on their customers, management must make sure that organizational goals are related to customer needs and expectations. To improve performance, businesses must work to understand their current and future customer needs, as well as their requirements and expectations. Using customer feedback systems, customer retention initiatives, and complaint management were the methods used in this study to gauge customer orientation.

Employee engagement is a method that uses workforce capacity and aims to increase employee involvement in the overall success of the organization (Ambani, 2017). Employee engagement can be described as the positive attitude of employees towards organizational values. Organizations must remove obstacles to employee participation in order to foster an enabling work environment and include staff in choices that have an impact on their work lives (Moletsane et al., 2019). Representative participation, participatory decision making and quality circles were used as measures of employee participation in this study.

1.1.2 Organizational Performance

In essence, organizational performance is the degree to which a business fulfills its goals and objectives (Windermere, 2018). The concept of analyzing a process or procedure's output and then making modifications to it to increase efficacy, efficiency, or results is another aspect of organizational performance (Ndegwa, 2017). Organizational performance is defined by Njuguna and Waithaka (2020) as the process of evaluating an organization's performance in relation to numerous pre-established goals and objectives. This comprises actual results or, using an org chart, results in comparison to target results.

The primary goal of organizational performance is to raise an organization's effectiveness and efficiency because this enhances its capacity to supply goods and/or services. Organizational efficiency, which encompasses the process of creating organizational goals and objectives in a continuous cycle, is another aspect of organizational performance that periodically focuses on continuous improvement (Ogunyomi & Bruning, 2016). Organizational performance frequently involves practices like statistical quality control at the individual employee level. Performance at the organizational level is frequently measured using more complex techniques since customer satisfaction surveys are utilized to gather qualitative data on performance from the perspective of the customer (Ndegwa, 2017).

According to Ipinazar et al. (2021), organizational performance can be divided into three different organizational output categories. Sales and market share are used to evaluate first-party financial performance; income and return on equity are used to evaluate second-party financial performance; and shareholder return—which is determined by economic value contributed and overall shareholder performance—is evaluated third. Metrics that are both financial and non-financial can be used to assess an organization's success.

Financial measures include sufficient profit (sales), return on equity, and return on assets (Batchimeg, 2017). Non-financial measures encompass market share, an organization's capacity to meet the needs of its stakeholders, its accomplishment of present goals, and its ongoing ability to adjust and thrive in a dynamic setting. Customer satisfaction, according to Wamalwa (2018), encompasses customer acquisition, retention, and loyalty. Performance was measured in this study using market share, profit, and customer satisfaction.

1.1.3 Processing Firms in Kenya

Kenya's processing industry caters to both domestic and foreign markets. Around 13% of the gross domestic product is made up of subsidiaries of international corporations (Wanyoike, (2016). Kenya is the most industrialized nation in East Africa, and it has the fourth-largest industry after agriculture, transportation and communications, and wholesale and retail commerce. The industry relies on exports, which is consistent with the government's plan for it to grow into a medium-sized economy by 2030. It also relies on imports of raw materials and goods made by certain companies. Among these sub-sectors are food and drink, footwear and leather goods, metal and related materials, paper and cardboard, medical supplies and pharmaceuticals, plastics and rubber, textiles and clothing, wood, wood furniture, and fresh goods (Waihenya, 2018).

The new Kenya Cooperative Creamery (KCC) is the driving force behind the dairy industry's enthusiasm in the nation. He has significantly enhanced the welfare of dairy producers throughout the years. The company, however, has a longer history dating back several decades. KCC was established in 1925 by white immigrants in the Naivasha area during the colonial era. For long years, it operated as a settler organization. Africans are

not allowed to handle or manufacture milk for themselves or their neighbors, according to Matu Wamae, the new chairman of KCC (Kenya Dairy Board, 2017).

The Cooperatives Ordinance was followed in 1931 when the New KCC was founded, with a Ksh. 70 million initial capital. In 1998, it collapsed due to ongoing financial problems and inadequate administration. After almost ten years of losses, KCC was sold to a group of private investors in 2000 for Ksh 447 million, a huge decrease from its Sh 2 billion estimate. This change in ownership did not, however, benefit the dairies. The government acquired KCC in 2000 for Sh547 million before the NARC regime took office in 2003 (Kenya Dairy Board 2010). Despite increasing competition from private processors like as Brookside, Aspendo Dairies Limited, Uplands Dairies Limited, Githunguri, and numerous other smaller enterprises, the new KCC Limited maintained a market share of approximately 30% (Kenya Dairy Board, 2010).

1.2 Problem Statement

Processing companies are recognized for their role in providing goods and services, increasing competition, encouraging innovation, creating jobs for the community, and reducing poverty. As a result, active processing businesses are crucial to the economy of the nation. However, widespread financial mismanagement at processing firms is a hallmark of their subpar internal management. Consequently, some industries have been privatized, commercialized, or have implemented comprehensive quality management strategies to make them more efficient and profitable (Al-Tit, 2017). Many processing companies have implemented quality management strategies to improve organizational performance and satisfy customers (Keinan & Karugu, 2018). Companies in poor nations like Kenya continue to face performance declines despite efforts to apply TQM practices. In the year 2020, New KCC registered losses of 150 million (New KCC limited Report, 2022). Further, customers continue to complaint about quality of milk (Dhieu, 2019). This raises concerns regarding the organizational performance of New KCC.

Although studies have been done in the past, little is known about the organizational performance and overall quality management approach of Kenyan processing enterprises. Oyiro (2017) focused on the overall quality control and operational efficiency of construction companies located in Nairobi. This study, which demonstrates conceptual gaps, focused on construction companies. The processing industry is the topic of this study. Wanyoike (2016) focuses on commercial performance and quality management practices in Kenyan KCC processing companies. This study focused on the overall production and thereby revealed contextual gaps. This study focused specifically on the new KCC. The performance of processing businesses in Sakit County, Kenya, as well as the adoption of comprehensive quality management methods are the main topics of Dhieu's (2019) study. The current study addressed the existing research gaps by investigating the influence of total quality management strategy on organizational performance of processing firms in Kenya. A case of New KCC limited.

1.3 Purpose of the Study

The purpose of this study was an analysis of total quality management strategy on organizational performance of processing firms in Kenya. A case of New KCC limited.

1.4 Research Objectives

The specific objective were to;

i. To establish the influence of continuous process improvement on organizational performance of New KCC limited in Kenya
ii. To determine the influence of supplier management on organizational performance of New KCC limited in Kenya.
iii. To establish the influence of customer focus on organizational performance of New KCC limited in Kenya.

iv. To determine the influence of employee involvement on organizational performance of New KCC limited in Kenya.

v. To determine the moderating influence of operating environment on the relationship between total quality management strategy and organizational performance of New KCC limited in Kenya.

1.5 Research Questions

1. What is the influence of continuous process improvement on organizational performance of New KCC limited in Kenya?
2. What is the influence of supplier management on organizational performance of New KCC limited in Kenya.
3. Does customer focus influence organizational performance of New KCC limited in Kenya?
4. What is the influence of employee involvement on organizational performance of New KCC limited in Kenya?
5. What is the moderating influence of operating environment on the relationship between total quality management strategy and organizational performance of New KCC limited in Kenya?

1.6 Significance of the Study

This study would be useful to KCC management regarding overall quality management practices and their impact on organizational performance. Management will understand the best and most appropriate TQM practices to invest in to improve performance. This research would also assist manufacturers and rivals in becoming familiar with the resources, procedures, and strategies available to them for cost management and profit maximization.

The results of the study can be used by local and national government organizations, such as the Department of Industrialization, to develop and put into practice policies that would assist regulate and enhance the processing industry, which is essential to the creation of jobs and economic growth.

Furthermore, this project would provide chances for research by researchers and research institutions to further our understanding of how a comprehensive quality management approach affects the operational effectiveness of Kenya's processing industries. For scholars, this study might serve as a source of reference for their future academic endeavors and will also help fill existing academic gaps.

1.7 Scope of the Study

This study examined how Kenyan processing companies' organizational performance was affected by their overall quality management strategy. Continuous process improvement, supplier management, customer focus, and staff involvement were the key factors. The moderating influence of the operational environment was also a focus of the investigation. The study was conducted in Nairobi at the New KCC headquarters. Employees in management were among the target population. Questionnaires were used in the collection of primary data. The study period was 2023 to 2024.

1.8 Limitations of the Study

It was anticipated that some of the employees in the survey may feel uncomfortable disclosing matters related to their organization's work. Joint efforts were made to restore that trust with assurances of confidentiality. In addition, the identity of the respondent was protected. Executives are very busy and may feel unmotivated to take the time to complete the questionnaire. Sufficient time was given and some follow-up action was taken to ensure sufficient data was collected and sufficient respondents were able to

complete the survey. The researcher sent questionnaires via email to enhance response rate.

1.9 Operational Definition of Key Terms

Continuous improvement is a continuous effort to improve a product, service or process. These efforts can seek incremental improvements over time or revolutionary improvements all at once. It was measured in this study using benchmarking, continuous quality audits, and systems measurements.

Customer focus refers to placing focus and energy on providing quality customer service that drives business performance and ensures customer retention by reducing customer complaints. Customer feedback systems, customer complaints management, and customer retention strategies were used in this study to measure it.

Employee involvement refers to a strategy that makes use of workforce capacity and seeks to raise employee involvement in the organization's overall performance. It was measured using representative participation, participative decision making and quality circles.

Operating Environment include determinants of a firm's ability to successfully acquire necessary resources or economically promote its goods and services in a competitive environment. In this study, it was measured in terms of industry regulations, competition and market conditions.

Organizational performance is the process of analyzing company performance against several goals and targets. This includes actual results or results compared to target results according to an org chart. in this study, it was measured using profits, customer satisfaction and market share.

Supplier management is a business procedure that allows an organization to properly choose its suppliers and bargain for the best pricing on the products and services it acquires. It was measured in terms of supplier relationship, supplier performance methods and supplier appraisal techniques.

TQM is a strategy for producing and delivering goods or services that satisfy customer demands or requirements by outperforming competitors' offerings in better, more cost-effective, quicker, safer, and easier ways with the involvement of all employees and under the supervision of senior management.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents the theories that underpin the study. Additionally, it provides the earlier research on the effects of a whole quality management strategy on the operational effectiveness of Kenyan processing industries. Kenya's New KCC Limited is an example. Also provided is a conceptual framework that explains how the variables relate to one another. The research gaps are also described in this chapter.

2.1 Literature Review

This section contains the past studies that have been done in relation to continuous process improvement, supplier management, customer focus, employee involvement and organizational performance.

2.1.1 Continuous Process Improvement and Organizational Performance

The focus of Khan et al.'s (2019) case study was on enhancing organizational performance via the application of continuous improvement approaches. A case study methodology was applied in the course of this examination. The study's findings also demonstrated that workers' natural appreciation of a clean, orderly workspace. This inquiry used a case study design to reveal methodological problems. This study employed an explanatory research design.

David (2018) focused on Quality Management Practices and Customer Satisfaction in Graduate Schools in Machakos County, Kenya. This research follows a descriptive research design. Continuous improvement is a TQM practice identified in this study. The study also showed that information, communication, and technology integration, internal

promotion, and infrastructure modernization can all lead to ongoing improvements in organizational operations. Other TQM procedures, according to the report, include of directing a quality vision and goal, creating TQM-related rules, and rewarding and recognizing devoted clients. The moderator aspect was omitted from the study, indicating a conceptual gap.

Maina (2021) focused on continuous improvement practices and organizational performance of Nairobi Bottlers Limited, Kenya. The study found that waste reduction procedures was embraced by Nairobi Bottlers Limited. Secondly fair and diligent financial management was used by Nairobi Bottlers Limited; observance of management and industry standards was used by Nairobi Bottlers Limited. Thirdly, use of modern and new technology is used by Nairobi Bottlers Limited, originality is embraced by Nairobi Bottlers Limited. Fourthly the study found that effective inventory management was present at Nairobi Bottlers Limited. Finally, this research finds a strong and positive relationship between continuous improvement practices (lean processing, industry best practices, continuous innovation, and lean supply chain management) and the performance. The study focused on Nairobi Bottlers Limited, Kenya, and thus uncovers substantive gaps. This study was conducted at New KCC Limited Kenya.

2.1.2 Supplier Management and Organizational Performance

Yang and Zhang's (2017) empirical study in China looked at how supplier-buyer performance was affected by sustainable supplier management strategies. This study's goal was to be descriptive. According to this study, buyer-supplier relationships and buyer competitive advantage are positively correlated with sustainable supplier development, continuous supplier monitoring, and sustainable supplier collaboration. Additionally, it discovered a favorable correlation between supplier performance and

sustainable supplier collaboration, continuous supplier monitoring, and sustainable supplier selection. Although the study was carried out in China, the most recent one was carried out in Kenya.

Njeru et al. (2017) focused their study on how supplier management affects Kenyan higher education institutions' adoption of effective procurement practices. A descriptive research design was used for this investigation. The survey's findings show that many public universities find it challenging to put in place efficient procurement practices because of supplier management factors like supplier evaluation methods, supplier selection strategies, supplier selection procedures, supplier performance methods, supplier relationship management, supplier development, and supplier collaboration.

Nyaberi's (2020) research on supplier development management techniques focuses on the organizational performance of processing companies in Kenya. Descriptive research methodology is used in this study. This study suggests that supplier appraisal, technical skill and information sharing, and supplier selection can all improve supplier development. This study focused on only one comprehensive quality management practice, namely supplier management, which shows a conceptual gap. The four overall quality management practices that were the focus of this study were employee involvement, supplier relationships, customer emphasis, and continuous process improvement.

The comparative study by Oduro et al. (2020) focused on hospital organizational performance and supplier relationship management in the changing economic setting. The research design for this study was descriptive. The study came to the conclusion that, in a continually shifting business environment, achieving operational excellence will be challenging until KRA embraces TQM methods including employee training, continuous improvement, and system automation. The study was carried out in a hospital, which revealed holes in the content. This study was carried out in a processing facility.

2.1.3 Customer Focus and Organizational Performance

In Pakistan, Ajmal et al. (2016) concentrated on the connection between organizational performance and customer centricity in Pakistani telecommunication firms. The research design used was correlative. The outcomes of these statistical methods demonstrate that the quality culture and performance have a favorable and substantial association.

The subject of Mokhtar (2017) study is the influence of customer centricity on the performance of new products. The study's design was chosen. The findings demonstrate that customer focus is statistically associated with new product performance, supporting the stated research hypothesis. A survey research design with a methodological gap was selected for this investigation.

Han et al. (2021) focused on retailer brand capture and customer concentration. The findings indicate that the two outbreaks' combined average grew over time. Despite the stark differences between the two priority areas, brand focus is more inconsistent among merchants than customer focus. The two areas of attention are distinct from one another. The greatest brand emphasis is held by specialty stores, whereas the greatest customer focus is held by Internet and direct marketing businesses. Customer centricity and retailer profitability are positively correlated, whereas brand centricity and profitability are not.

In Kirinyaga District, Kenya, Nyaga and Gakobo's (2017) study focuses on how quality management techniques affect the performance of savings and loan organizations. The study's correlation analysis revealed that customer centricity significantly and favorably affects a company's performance. According to the study's findings, adopting customer-centric practices is something that every SACCO manager should think about doing if they want to boost their organization's success. However, the study missed the moderator aspect.

2.1.4 Employee Involvement and Organizational Performance

The Kenya Medical Research Institute is the subject of Ambani's (2017) study on the effect of employee ownership on job performance. According to the results of this study, KEMRI (CGHR) staff members have specific aims and objectives and are aware of how their work affects the business as a whole. According to this survey, managers talk to their staff members about the organization's future plans. This study also identified representative participation as an important means of engaging employees to work effectively. This study also proves that the team at KEMRI is involved in deciding how work should be done, but the team is not given control and autonomy to carry out their tasks. The study missed the moderator aspect, showing a contextual gap. This study focused on how the workplace environment affects the relationship between the Kenyan processing industry's organizational performance and its comprehensive quality management strategy.

Obiekwe et al. (2019) focused on employee participation in organizations: benefits, challenges, and implications. This research is descriptive in nature. This study found that well-planned and executed engagement programs result in high levels of employee engagement, foster teamwork, increase morale, and lead to strategic competitive advantage and other positive organizational outcomes. However, employee engagement programs face many difficulties, including poor management attitude towards employee participation, lack of skilled workforce, high cost of implementation, socio-cultural environment and others. However, the research did not link employee participation with firm performance, indicating a conceptual gap.

The case of a part-time lecturer at a state university in Kenya is the focus of Odero and Makori's (2018) study on Employee Engagement and Employee Performance. In this

study, a descriptive survey is used.This research indicates that employee involvement has a major impact on worker performance. This report recommends that public institutions use employee ownership initiatives to boost performance, growth, and competitiveness in regional and global markets. There is a conceptual gap in this study since it solely considers customer-centric total quality management techniques. This research focused on four comprehensive quality management methods; continuous process improvement, supplier relations, customer orientation and employee participation.

The study by Roslin et al. (2019) focused on how a lean processing system's implementation affects organizational performance through empowering and involving employees. The research design used was descriptive. The results obtained from the effective implementation of LMS in the Malaysian automotive sector point to the integration of employee empowerment and involvement as a crucial organizational competency that influences organizational performance. This study demonstrated a conceptual gap by focusing on how employee ownership affects empowerment. This study focused on the effect of employee ownership on company performance

2.1.5 Operating Environment, Total Quality Management Strategy and Organizational Performance

Wanjiru et al.'s (2019) research in Nairobi City County, Kenya, concentrated on the moderating role of the external work environment on the relationship between corporate strategy and processing company performance. For the data analysis, both qualitative and quantitative data were used. The results showed that the external working environment moderates the association between corporate strategy and business performance. This

study concentrated on all firms in the processing sector. This study focused on New KCC Limited.

Obi and Visser's (2017) research focused on how the workplace environment affects how technically efficient logging operations are. It employed data envelope analysis. The study's findings revealed that the technical efficiency of logging was greatly influenced by the size of the pieces, the number of log kinds, the area of the forest, the size of the plantation, and other factors. The work environment was used in this study both as an independent variable and a moderating variable.

By moderating the effects of marketing and operational skills, Hirunyawipada and Xiong (2018) concentrate on Corporate Environmental Commitment and Financial Performance. It was done to analyze panels. The study discovered that the influence of CEC on business value is only moderated by operational capability. Furthermore, this study shows a bidirectional relationship between CEC and company performance, pointing out that both marketing skill and a lack of firm resources (short-term profitability) act as predecessors of CEC. However, this study ignored the strategic aspects of quality management as a whole.

In their study of a company listed on the Nairobi Stock Exchange, Makini et al. (2020) concentrated on the moderating effect of the workplace on corporate governance and company performance. A case study methodology was applied in the course of this examination. Even though the work environment greatly weakened the association between corporate governance and corporate performance among NSE listed enterprises, it was still determined that corporate governance had a favorable and significant impact on the performance of NSE listed organizations. This inquiry used a case study design to reveal methodological problems. This research adopted an explanatory research design.

2.2 Theoretical Literature Review

A theoretical framework is made up of a number of connected ideas that specify the variables the researcher will be measuring and the statistical associations they will be looking for. It provides a perspective on the world for researchers. (Ngugi, 2013). The two component theory, social capital theory, open system theory, and overall quality management theory served as the foundation for this study.

2.2.1 Total Quality Management Theory

Edwards Deming and Joseph Juran proposed this hypothesis in 1931. Customer happiness was the foundation for this theory. They demonstrate how various buyers view quality from various vantage points. This theory's central tenet emphasizes that effective leadership, staff input into important decisions, system integration of technology, ongoing system improvement, and user research are critical factors in determining customer satisfaction in any competitive firm (Yusuf, 2013). Alves and Raposo (2010) note that product design and business process change can improve organizational performance in terms of customer satisfaction. Meeting and exceeding client expectations is one of the ways businesses may draw in and keep customers (Johnson & Scholes, 2002).

According to Battisti et al. (2010), a system's service quality can only be determined by the consumer. Additionally, Hanif et al. (2010) contend that firms seeking to be competitive must implement a quality management plan in order to endure in a changing business climate, despite how difficult it is to construct customer happiness in an organizational context (Zaim et al, 2010). According to Uwalomwa and Olamide (2012), firms operating in a changing business climate may use a variety of customer satisfaction

management models as a result of shifting attitudes toward customer service (Sultan & Wong, 2010).

The underlying assumption of the study's anchor theory is that processing organizations will likely outperform consumer satisfaction if they implement strategic management techniques including user research, technology, customer involvement, and continuous improvement. The independent variables in this investigation were therefore informed by the theory. Additionally, because customer happiness was utilized as a gauge of organizational effectiveness, the theory also influences the dependent variable.

2.2.2 Two Factor Theory

Fredrik Herzberg created the two-factor theory in 1959. Herzberg (1959) used the philosophy of people's labor to construct a two-dimensional factorial model. Two patterns that Herzberg classified as satisfactory and unsatisfactory were singled out by him and his supporters. According to the multiple factor theory, motivating variables are necessary for job satisfaction but are not necessary for job discontent. Recognization, success, and responsibility are a few examples of motivational variables. However, the absence of some hygienic criteria, like as supervision, job stability, and remuneration, results in sentiments of job dissatisfaction rather than feelings of satisfaction (Daft, 2003).

Herzberg (1959) contends that because cleanliness reduces employee dissatisfaction, it is possible for a dirty workplace to result in unhappy workers. In other words, while lacking these elements results in discontent, they do not add to motivation. The motivating factor, as opposed to the issue of hygiene, might genuinely inspire employees to work hard and appreciate their jobs. These features address what employees really accomplish at work and must be incorporated into positions to foster intrinsic motivation.

(Herzberg, 1984). Herzberg (1959) contends that motivators, which are typically closely tied to the task at hand and are associated with long-term positive impacts on the workplace, are more effective than cleanliness in improving productivity and attitudes over the long term.

The two-factor study is significant for this research because it highlights aspects that contribute to job motivation, such as demanding work and employee involvement. As a result, the two-factor theory offers a framework to prove the veracity of the claim that employee involvement improves organizational performance.

2.2.3 Social Capital Theory

Sternberg and Lubart (1991) introduced the concept of social capital. The conventions and networks that allow people to act as a group are referred to as social capital. This theory's central thesis holds that while each individual in a capitalist society has individual aims and objectives to concentrate on, players have come to the realization that teaming up with like-minded partners produces greater results than going it alone.

This notion affirms the need for suppliers and customers to establish cooperative connections in order to improve their mutual benefits (Deng, 1989). As a result, both businesses must pool their resources to help one another accomplish shared objectives. As a result, the buyer contributes the infrastructure and resources of its business to aid its chosen suppliers in honing their production-related skills, with the buyer's business bearing the consequences.

According to Sternberg and Lubart (1991), supplier growth may be viewed via the prism of social capital theory, and this effort offers insightful information on the various social capital elements pertaining to the relationship between industrial purchasing firms and

their suppliers. In a similar vein, Xingxing (2012) backs the idea that increased buyer participation and the development of social capital among major suppliers can boost the efficiency of purchasing organizations. Through supplier management, this study aims to gain a deeper understanding of the value created by companies ready to build lasting connections and social capital with important suppliers. Furthermore, an attempt will be made to explain the value provided for purchasing organizations involved in supplier development using the social capital theory (Deng, 1989) in this study.

Relationships have the potential to be a source of material resources and knowledge, according to social capital theory. According to research, utilizing these resources can assist organizations in achieving desirable results like increasing company performance. Xingxing (2012) discusses the features of the buyer-supplier relationship and how they affect business performance. However, there are benefits and drawbacks to using social capital in a cooperative connection between buyers and sellers. To enhance buyer organizations' operational performance, relationships—which include the cognitive, relational, and structural aspects of social capital—should be studied in the discipline of operational management (Day, 1989).

The idea that underpins this research is social capital theory, which is thought to be pertinent to comprehending how supplier management affects the organizational effectiveness of processing organizations. The idea is applied to investigate how context influences flexibility and the growth of trust in supply chains, particularly between suppliers and purchasers. Therefore, the theory informed about one of the independent research variables, namely supplier management.

2.2.4 Open System Theory

Bertanlanffy (1956) is credited with creating open systems theory. According to the principle, businesses operate as systems that gather data from their environment and use

it to influence decisions (Singh, 2012). Due to the changing external environment, firms must use a variety of models, including the SWOT and PESTEL 5C models, to examine factors that have an impact on business operations (Senthilkumar & Arulraj, 2010). According to Alves and Raposo (2010), companies that don't interact with the business environment have a lower chance of success than those that do and rely on the input they get from it. Khan et al. (2011) argue that TQM, as an outward-looking management philosophy, helps organizations avoid an environment that is continually changing in order to become effective and efficient over the long run.

The theory holds that companies that want to stay relevant in a dynamic business environment have to align their Total Quality Management (TQM) strategy with changing customer expectations. When developing a TQM policy, analysis of both external and internal factors is necessary (Singh, 2012). Furthermore, Hanif et al. (2010) state that for a quality management plan to be executed effectively in any company, managers should evaluate the effectiveness of people, systems, structures, processes, and culture. Organizations must embrace procedures that promote an open-door culture to communicate information with important stakeholders, such as shareholders, employees, and consumers, if they want to thrive in the challenging business environment (Singh, 2012).

The theory therefore informed both the independent and moderating variable. The theory showed the link between the operating environment and total quality management strategy. From this theory external factors (operating environment) should be analyzed when formulating TQM policies

2.3 Theoretical Framework

This study was therefore informed by four theories; total quality management theory, open system theory, two factor theory and social capital theory. Total quality management theory assumes that quality is perceived by different customers from different perspectives (Juran, 1931). Therefore, total quality management theory informed the research independent variable, namely total quality management. The two-factor theory was put forward by Herzberg (1959). According to the hypothesis, motivational variables contribute to job happiness but do not generate job discontent when they are absent. In this case one of the motivation factors that motivate employees is employee involvement which is one of the variables of the study.

Another theory was the theory of social capital put forward by Sternberg and Lubart (1991). This theory supported the need to build buyer-supplier working relationships to increase organizational effectiveness. Therefore, the theory supported the need for supplier relationship management to improve KCC performance. Open systems theory was put forward by Bertanlanffy (1956). According to the notion, organizations must connect their TQM strategy with shifting consumer expectations in order to remain relevant in a business environment that is constantly evolving.

2.4 Conceptual Framework

The link between the independent factors, the dependent variable, and the moderating variable was graphically represented in the conceptual framework. (Robinson, 2011). The independent factors included continuous process improvement, supplier connections, customer focus, and staff engagement, whereas the dependent variable was organizational performance. The moderating variable was operating environment.

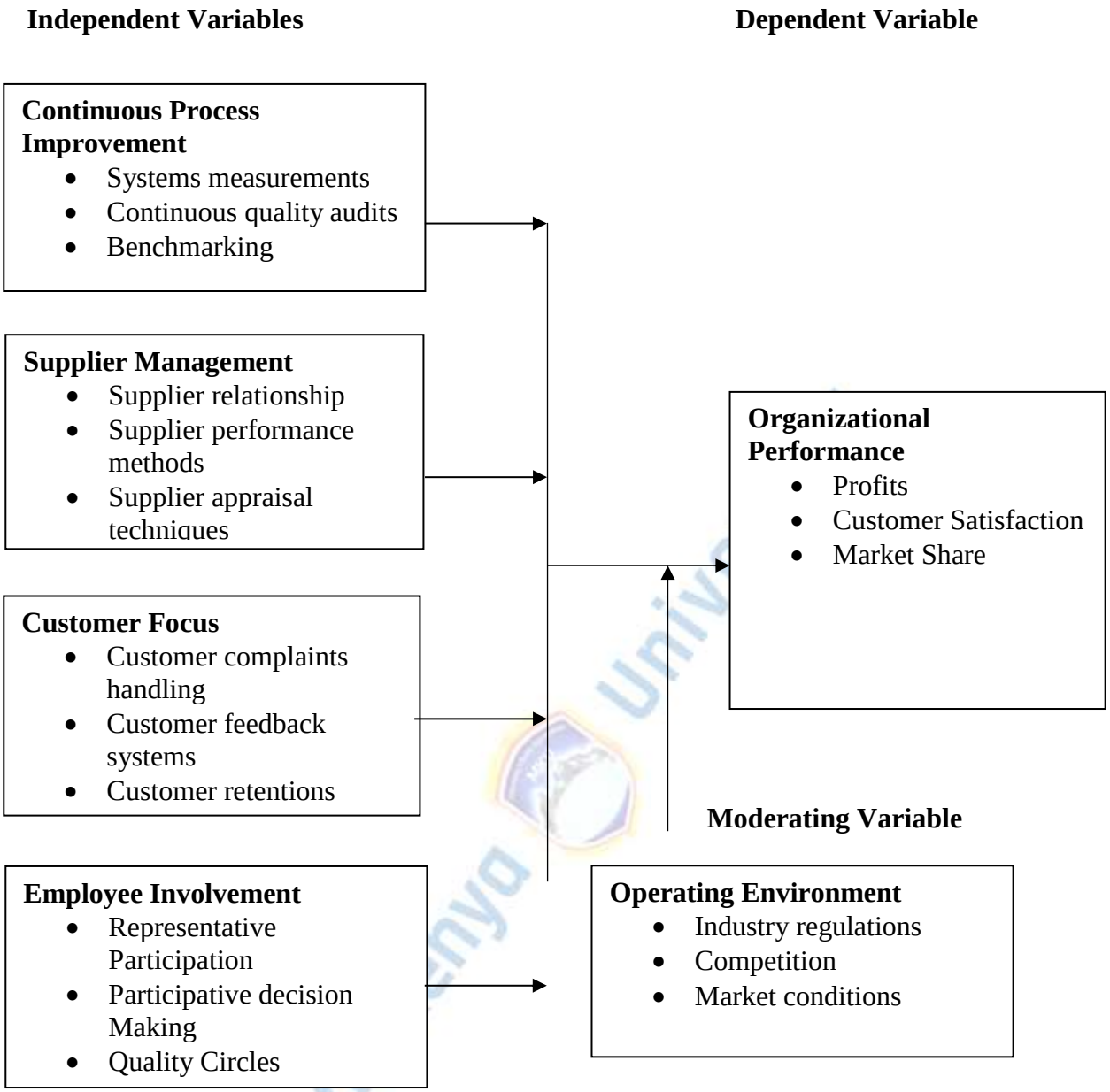

Figure 1: Conceptual Framework

2.5 Research Gaps

The literature reviews also presented some gaps which include; methodological gaps, contextual gaps, conceptual gaps and empirical gaps. Khan et al. (2019) and Makini et al. (2020) studies adopted a case study research design; David (2018); Maina (2021); Yang and Zhang (2017); Nyaberi (2020); Oduro et al. (2020); Mokhtar (2018) and Roslin et al. (2019) studies adopted a descriptive research design; Ajmal et al. (2016) used a

correlation research design, whereas Khan et al. (2018) used a desktop research approach. Every one of these investigations revealed a methodological flaw.

Past studies have also presented contextual gaps. Khan et al. (2018); Ajmal et al. (2016) studies were done in Pakistan, Yang and Zhang (2017) study was done in China. All of these studies were conducted in different countries, showing substantive discrepancies. This research is being conducted in Kenya. David (2018) focuses on high school colleges in Machakos County, Kenya, Njeru et al. (2017) focusing on higher education institutions in Kenya, Oduro et al. (2020) focused on hospital performance in the context of emerging markets, Ajmal et al. (2016) focuses on telecommunication organizations in Pakistan, Ambani (2017) focused on the Kenya Medical Research Institute, thus showing a conceptual gap. This study focused on New KCC Limited.

Khan et al. (2018); Mokhtar (2017); Maina (2021); Jeru and others. (2017); Ajmal et al. (2016); only focused on total quality management practices that have conceptual gaps. This study focuses on four comprehensive quality management methods; continuous process improvement, supplier relations, customer orientation and employee participation. Obi and Visser (2017) concentrate on how the workplace affects logging operations' technical efficiency. In one study, the work environment is an independent variable; in this one, it serves as a moderating variable. Makini et al. (2020) used a case study of a company that is listed on the Nairobi Stock Exchange to investigate the moderating impact of work environment on corporate governance and firm performance. However, several components of the all-inclusive quality management plan are not included in the research. The moderating role of the workplace environment in the relationship between the organizational performance of Kenyan processing enterprises and their complete quality management plan, therefore, was the main focus of this study. In Kenya, one such company is New KCC Limited.

CHAPTER THREE

RESEARCH METHODOLGY

3.0 Introduction

The following sections make up this chapter: research design, target population, sample techniques, data collecting, and data collection methodologies. In addition, a pilot study examining the validity and dependability of the research tool were presented in this chapter. Ethical considerations, operationalization and measurement of variables, and data analysis and presentation were all included in this chapter.

3.1 Research Methodology

The research methodology that was adopted was survey methodology. According to Kerlinger (1973), a survey is an investigation of large and small populations, in which the target population is sampled to find relationships. Therefore, survey methodology was applicable in this research.

3.2 Research Design

A research design is a strategy for gathering, organizing, and evaluating data (Kothari, 2009). The most suitable explanatory research approach was used since the objective of the investigation was to gather quantitative information in order to determine the correlation between the independent and dependent variables (Akhtar, 2016). For the purpose of assessing the correlation between Kenyan processing firms' organizational performance and their overall quality management plan, the design was essential.

3.3 Location of the Study

The study was carried out in new KCC headquarters based in Nairobi City County. The study was therefore carried out in Nairobi County, Kenya.

3.4 Target Population

The research population is a group of options that must be chosen from (Kothari & Garg, 2015). This represents the full range of options for the studied population's trait of interest. In this study, the population consisted of new KCC management staff. The management staff were 110 as shown in Table 1.

Table 1: Study Population

	Population	Percentage (%)
Senior managers	10	9.1
Middle level managers	35	31.8
Supervision level managers	65	59.1
Total	110	100

Source: New KCC head office (2023)

3.5 Sampling Design

This study utilized census method. Census technique refers to a statistical examination in which information is gathered for each component or unit of the population (Gupta & Gupta, 2022). Due to the small population, the census approach was chosen for the study. If time and resources allow, Mugenda and Mugenda (2003) state that there is no reason to take a sample from a small population, which improves dependability.

3.6 Research Instrument

A questionnaire was used to gather primary information. A letter outlining the purposes of the survey was delivered to the sample respondents after an application for authorization to collect data was submitted to the appropriate agency. Researchers can

get quantitative data by using structured questionnaires with closed questions. According to Sekaran and Bougie (2013), the questionnaire is an important data collection tool because it allows researchers to know clearly what is needed and how to measure various relevant variables, and is easy to manage and analyze.

3.7 Pilot Study

Pilot studies to refine data collection tools are underway (Hazzi & Maldaon, 2015). According to Malhotra, Nunan, and Birks (2017), the questionnaire is designed with the aim of observing respondents' responses and correcting questions that tend to be ambiguous. A sample size of 27 employees, actually representing 10% of the total workforce was tested. The trial was conducted among 27 Brookside Dairy Limited employees. As a general rule, trials only require 10% of the sample (Wandera, 2018). It is appropriate for evaluating the viability of study strategies, data collection methods, and analytical approaches (Blumberg et al., 2014). The final analysis excluded pilot study participants.

3.7.1 Reliability of the Instrument

Creswell (2014) defined reliability as the extent to which measurements yield consistent results each time. As such, consistency may be seen in the comparability of findings acquired by one administration to those of other administrations, which is shown in reliability. Therefore, it was assumed in this study that Cronbach's alpha coefficient measures how similar the items under consideration are internally. According to Geyer (2015), the likelihood of internal dependability increases as the coefficient gets closer to 1. Items were removed from the study if their internal consistency was deemed to be insufficient by Cronbach's alpha to be less than 0.7.

3.7.2 Validity of the Research Instrument

The extent to which a research tool captures the data it is intended to capture is referred to as validity. Thus, it has to do with how accurate the measuring device is, or whether it measures what it is supposed to measure and doesn't introduce random errors (Kothari, 2015). Construct validity and content validity were used in this investigation. The questionnaire was divided into parts for construct validity in order to guarantee that each component evaluated data for a specific purpose and that it was closely related to the conceptual framework of this study. Two senior members of the Brookside Dairy Limited team were chosen at random to carefully review the questionnaire to verify content validity. The relevancy of the statements in the questionnaire were rated by the supervisor. Before final data collection, the instrument was modified in light of the evaluation. The review comments were utilized to boost the content's credibility.

3.8 Data Collection Procedures

With the assistance of two study partners, the researcher delivered the questionnaire. The KCC staff got 268 surveys from the researchers. Respondents were informed by the data researcher that their replies would be kept private and that the tools supplied would only be used for study. Prior to collecting data, researchers also got a letter of introduction from the university. The study employed the drop and pick later strategy (Bhattacherjee, 2012). To increase response rates, questionnaires were also sent by email.

3.9 Data Analysis Procedures

Heeringa et al. (2017) defined data analysis as the process of looking over the gathered data and coming to conclusions. The mean, standard deviation, percentage, and frequency are examples of descriptive statistics. Data analysis was done using inferential statistics. Descriptive statistics, according to Heeringa et al. (2017), can be used to

characterize grouping tendencies and data features. Regression analysis and correlation analysis are two instances of inferential statistics that are used to show the relationship between variables.

The research findings were analysed using the Statistical Package for the Social Sciences (SPSS Version 22). A multiple linear regression model helped determine whether an independent variable predicts a specific dependent variable, improving the estimation's accuracy. According to Zikmund et al. (2010), the regression model helps explain how changes in one of the independent factors, while the other independent variables remain stable or constant, affect the dependent variable's normal value. The results were displayed using tables and graphs.

3.9.1 Data Analysis Model

$Y= \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$

Where:

Y= Organization Performance

β_0= Constant

βi = Coefficients

X_1= Continuous process Improvement

X_2= Supplier management

X_3=Customer Focus

X_4= Employee Involvement

e= Error term

Table 3: Operationalization of Variables

Variable	Type of variable	Indicators	Type of Questions	Tool of Analysis
Organizational Performance	Dependent	• Profits • Customer Satisfaction • Market Share	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.
Continuous process improvement	Independent	• Systems measurements • Continuous quality audits • Benchmarking	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.
Supplier management	Independent	• Supplier relationship • Supplier performance methods • Supplier appraisal techniques	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.
Customer focus	Independent	• Customer complaints handling • Customer feedback systems • Customer retentions	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.
Employee involvement		• Representative Participation • Participative decision Making • Quality Circles	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.
Operating Environment	Moderating	• Industry regulations • Competition • Market conditions	Questionnaire-Likert scale	Descriptive, Correlation, regression Analysis.

3.10 Ethical Considerations

Respondents were asked for their informed consent, and data was kept anonymous and confidential both before and after the research (Connelly, 2014). The Mount Kenya University Graduate School and NACOSTI both approved the research. The Mount Kenya Ethics Review Board gave its ethical blessing. The respondents had the option to withdraw from participating in this study at any given point in the process of data collection. Furthermore, the respondents were assured of security of the data and that it would only be used for academic purposes. Data collected was not shared to any unauthorized persons.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The chapter consists of the findings of the research as well as the discussion of the results. Specifically, the chapter is divided into sections which present and discuss results of the pilot test, response rate, background information of the respondents, descriptive analysis, diagnostic tests, correlation analysis, regression analysis and finally a discussion of the hypotheses tests results.

4.2 Pilot Test of Research Instrument

A pilot study was conducted using a sample size of 27 employees of 27 Brookside Dairy Limited. The research instrument's dependability was evaluated using the data gathered during the pilot study. During the pilot study, the research instrument's validity was also evaluated.

4.2.1 Test of Reliability

To evaluate the reliability of the questionnaire, Cronbach's alpha was employed. The intrinsic similarity between the items in question is determined using Cronbach's alpha coefficient. Items with a Cronbach's alpha of 0.7 or above would be retained, while those with a value below 0.7 would be removed due to the fact that a Cronbach's alpha of 0.7 or above is regarded as reliable. Table 4 presents the results of the reliability test.

Table 4: Reliability Test Results

Variable	Number of Items	α>0.7	Comments
Continuous Process Improvement	7	0.741	Reliable
Supplier Management	5	0.707	Reliable
Customer Focus	5	0.7	Reliable
Employee Involvement	6	0.783	Reliable
Operating Environment	7	0.783	Reliable
Organizational Performance	6	0.791	Reliable

The test findings showed that every item on the questionnaire had a Cronbach's alpha greater than 0.7. This implied that the items provided a reliable means of measuring the study variables.

4.3 Response Rate

The researcher distributed 110 questionnaires to senior managers, middle level managers and supervision level managers of new KCC. The questionnaires were filled but some were not well filled and some did not complete filling in the questionnaires. There were 88 questionnaires that were thoroughly filled out, indicating an 80% response rate. According to Burns et al. (2008), response rates of at least 70% are preferred, while response rates of 60% to 70% are also acceptable. In certain cases, however, response rates of less than 60% may be appropriate for contentious themes. Booker, Austin, and Balasubramanian (2021) state that a rate of 80% or over is regarded as exceptional. As a result, it was decided that this study's 80% response rate was adequate for making conclusions. Table 5 displayed the response rate data.

Table 5: Response Rate

Number of questionnaires	Frequency	Percentage
Returned	88	80%
Not Returned	12	20%
Total	**110**	**100%**

4.4 Background Information

The researcher sought to understand the background characteristics of the study respondents. Some of the demographics that were analyzed in the study include, the gender, level of education attained and the duration one ad worked at KCC.

4.4.1 Gender of the Respondents

In the questionnaire, the respondents were asked to specify their gender by the researcher. This would help to know the gender representation in the management of new KCC. This information was considered useful for the study since gender diversity in the management would lead to complementing the skills and competencies that would be useful in implementing the total quality management strategies. The results of the gender were as in Figure 2. .

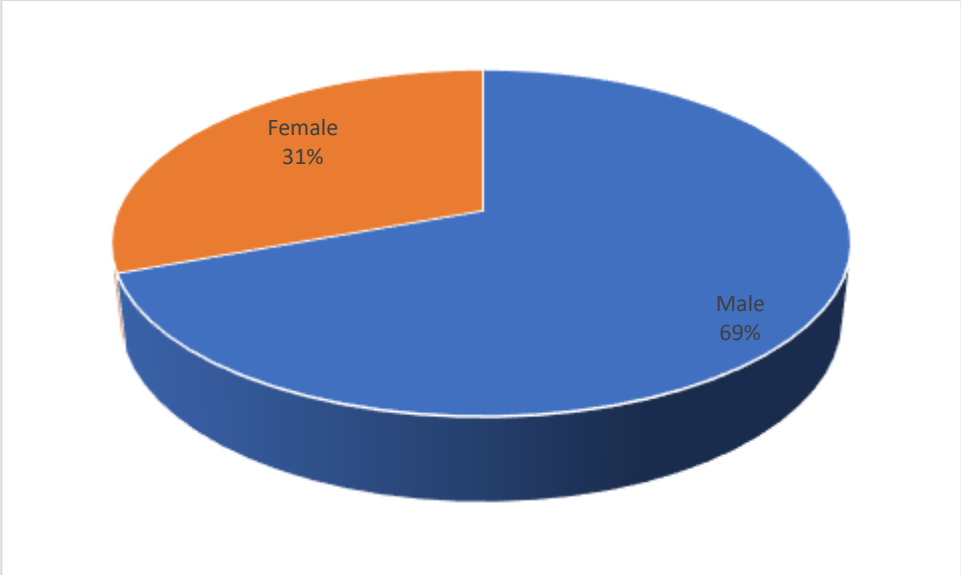

Figure 2: Gender Representation

The results showed that the male respondents represented 69% while female respondents represented 31%. This indicated that the majority of the respondents were male which implied that there were more male managers at new KCC. However, it was observed that

the company had achieved the one third rue of women in management. It can therefore be deduced that there are complimenting skills and competencies in the management of new KCC. Gender diversity and firm performance have a positive relationship according to Ferrary and Déo (2019) supporting the notion that gender diversity at firms has a greater positive impact than same-sex populations do. Further, higher levels of gender diversity in leadership positions are associated with improved performance. Gender diversity also increases creativity leading to higher performance. Gender also affects the leadership behavior and the general quality management This implies that having both male and female managers at the new KCC brings diversity in the TQM is implemented hence increasing performance. Pourrajab and Ghani (2014) discovered, however, that there is no discernible variation in TQM levels between managers who are male and female. According to Isnaini, Hanum, and Prasojo (2021), women are given preference for leadership roles since they are viewed as competent and deserving of such roles based on their skill set. According to Arun and Yildirim Özmutlu (2023), women could approach decision-making in a different way, taking a broader range of viewpoints into consideration and trying to reach an agreement. These decision-making procedures may have an effect on how plans are developed and carried out.

4.4.1 Highest Level of Education

According to the study, the respondents were also asked to indicate the highest degree they had received. This would help determine if the managers of new KCC had acquired adequate education to help them take management roles. The level of education determines the skills one has acquired. Figure 3 shows the results for the level of education.

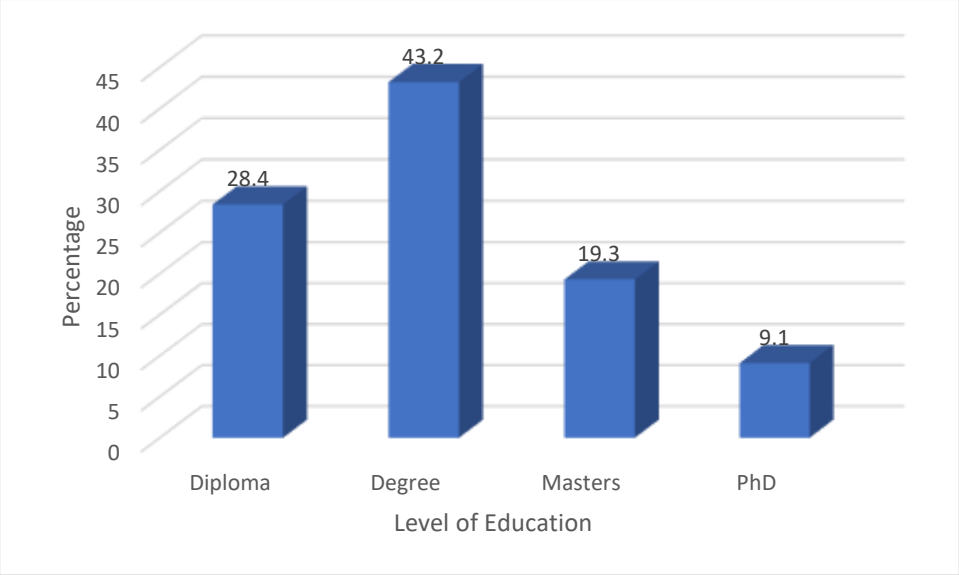

Figure 3: Level of Education

According to the results in Figure 3, most of the respondents had a bachelor's degree representing 43.2%. The respondents who had a diploma represented 28.4% while those with masters represented 19.3% and those with PhD represented 9.1%. This revealed that most of the managers of new KCC had acquired adequate education that enabled them to have the right skills and competencies to take management roles. Having managers who are well educated means that they are able to understand the concept of total quality management and hence are able to apply it well in the organization hence strengthening the effect of TQM on performance. Being highly educated also means that the managers have the required prerequisite knowledge on matters TQM and its application in the firm. This ensures that TQM strategies are well implemented and hence increasing its effect on performance of the firm. Therefore, having highly educated managers at new KCC increases the levels of TQM implementation hence increasing performance of the firm. This is complemented by Fernandez-Malpartida and Dextre-Beteta (2023) who established that manager's level of education influences positively on their performance in their role.

4.4.3 Duration Worked at New KCC

The researcher also attempted to ascertain how long the responses had been employed by the organization. The length of time spent working for a company would supplement the experience gained in the position. Figure 4 shows the results.

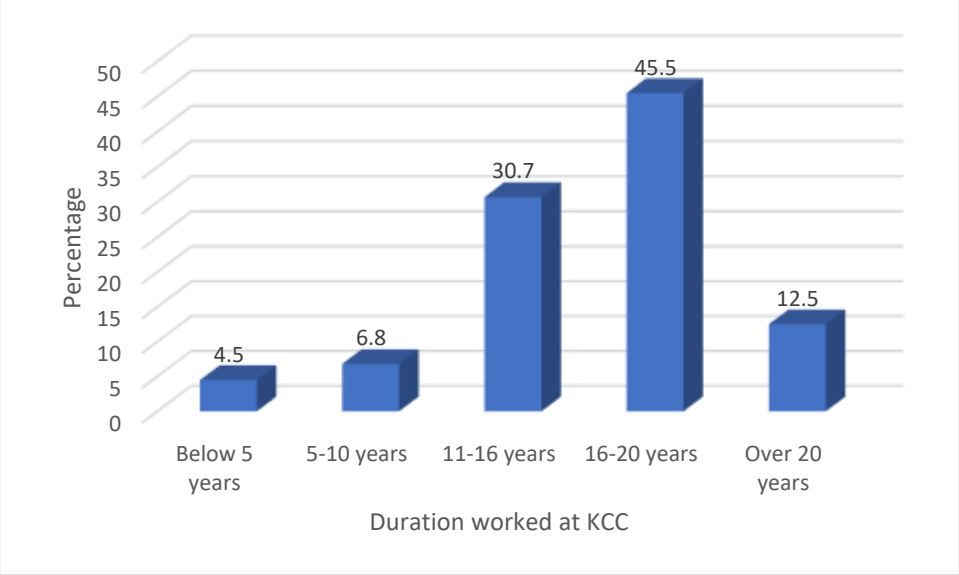

Figure 4: Duration Worked at New KCC

The results indicated that close to half of the respondents (45.5%) had worked in the organization for 16-20 years and those who had worked for 11-16 years followed at 30.75 representation. Those who had worked in the organization for over 20 years represented 12.5% and those who had been in the organization for 5-6 years and below 5 years represented 6.8% and 4.5% respectively. According to Sujatha et al. (2013), employees with 0–5 years of experience exhibit a higher level of dedication to continuous improvement. Consequently, the results suggested that most managers had been with the company long enough to be dedicated to their positions and, as a result, were aware of how to apply TQM techniques. Managers who have been in an organization for a long tenure are well integrated into the firm's system making them well able to understand how things work in the organization. More so, managers who have been in the

organization for a long duration have gained a large set of skills and competence in their role and therefore increase their capability to produce high performance. Therefore, having managers at new KCC who have been in the company for a long time means that they are able to implement TQM with ease due to high skills, competence and being well integrated into the organization hence improving the overall performance of the company.

4.5 Descriptive Analysis of Study Variables

The purpose of the study was to determine the effect of total quality management strategy on organizational performance of processing firms in Kenya. A case of New KCC limited. The variables of the study were continuous process improvement, supplier connections, customer focus, staff engagement, organizational performance and operating environment. Descriptive analysis was done to understand the basic features of the variables.

4.5.1 Descriptive Analysis for Continuous Process Improvement

The variable continuous process improvement was measured by systems measurements, continuous quality audits and benchmarking. A Likert scale measuring the agreement levels of the respondents on the statements relating to the variable was used. The scale had 5 points where 1 was strongly disagree, 2- disagree, 3- neutral, 4- agree and 5- strongly agree. The responses with a mean above 3 were therefor considered to mean agree while responses with a mean less than 3 were considered disagree. Table 6 shows the results.

Table 6: Descriptive Analysis of Continuous Process Improvement

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev
We have implemented continuous improvement philosophy	6.80%	15.90%	13.60%	30.70%	33.00%	3.67	1.28
The management establishes the roles and powers of several functional departments.	6.80%	11.40%	13.60%	36.40%	31.80%	3.75	1.22
The management resolves problems with departmental interfaces.	9.10%	6.80%	13.60%	23.90%	46.60%	3.92	1.31
Personnel from many departments draft the quality system processes for the management.	8.00%	9.10%	11.40%	28.40%	43.20%	3.90	1.28
Work instructions are integrated into current work documents by the management.	10.20%	9.10%	8.00%	28.40%	44.30%	3.88	1.35
The organization does bench marking with other organizations	6.80%	6.80%	13.60%	31.80%	40.90%	3.93	1.20
The organization has a quality manual	6.80%	6.80%	4.50%	30.70%	51.10%	4.13	1.20
Composite						**3.88**	**1.26**

The majority of respondents, 63.7%, agreed that they have applied the continuous improvement concept, according to the descriptive analysis results shown in Table 6. The

statement's standard deviation was 1.28 and its mean was 3.67. The results showed that most respondents (68.2%) also agreed that the organization determines the responsibilities and duties of different functional departments. This was supported by a mean of 3.75 and a standard deviation of 1.22. The results showed that 70.5% of respondents agreed with the assertion that management fixes interface issues across different departments. This was further supported by a mean of 3.92 and a standard deviation of 1.31. It was also discovered that the majority of respondents, or 71.6%, agreed with the assertion that management develops quality system procedures in collaboration with personnel from various departments. The results were confirmed by a mean of 3.90 and a standard deviation of 1.28.

With a mean of 3.88 and a mean of 1.35, the majority of respondents (72.7%) also concurred that management incorporates current work materials into job instructions. With a mean of 3.93 and a standard deviation of 1.20, the majority of respondents (78.7%) also agreed that the company benchmarks with other businesses. The organization has a quality manual, according to the majority of respondents (81.8%), and the mean score was 4.13 with a standard deviation of 1.20. 3.88 was the composite mean, and 1.26 was the standard deviation. This suggested that the majority of respondents supported the claims made about ongoing process improvement. This was consistent with David's (2018) research, which showed that information, communication, and technology integration, internal promotion, and infrastructure modernization can all lead to ongoing improvements in organizational operations.

4.5.2 Descriptive Analysis for Supplier Management

The variable supplier management was measured by supplier relationship, supplier performance methods and supplier appraisal techniques. Table 7 shows the results.

Table 7: Descriptive Analysis for Supplier Management

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Our organization has a good relationship with the suppliers	2.30%	0.00%	1.10%	36.40%	60.20%	4.52	0.74
Our organization applies supplier performance methods	0.00%	2.30%	1.10%	39.80%	56.80%	4.51	0.64
Our organization applies supplier appraisal techniques	2.30%	1.10%	4.50%	27.30%	64.80%	4.51	0.83
Company allows for a mutual relationship between the vendor and the buyer	0.00%	1.10%	2.30%	28.40%	68.20%	4.64	0.59
Supplier relationship management assists in cost reduction	0.00%	2.30%	0.00%	33.00%	64.80%	4.60	0.62
Composite						**4.56**	**0.68**

The majority of respondents (96.6%) agreed, according to Table 7's data, that their company has positive relationships with its suppliers. A mean of 4.52 and a standard deviation of 0.74 provided evidence in favor of this. Based on the data, 96.6% of respondents agreed that our company applies supplier performance methodologies. This was further supported by a mean of 4.51 and a standard deviation of 0.64. Additionally, it was found that 92.2% of respondents agreed with the assertion that our organization used supplier appraisal techniques. A mean of 4.51 and a standard deviation of 0.83 supported the findings.

With a mean of 4.64 and a mean of 0.59, the majority of respondents (96.6%) also concurred that the company permits a reciprocal relationship between the vendor and the buyer. In a similar vein, the majority of respondents (97.8%) agreed that supplier relationship management (with a mean of 4.60 and a standard deviation of 0.62) helps reduce costs. The standard deviation was 0.68 and the composite mean was 4.56. This suggested that the respondents agreed with the supplier management-related assertions. This indicated that KCC had used TQM techniques. This was consistent with the findings of Nyaberi (2020), who discovered that supplier evaluation, technical skill and information sharing, and supplier selection can all improve supplier development.

4.5.3 Descriptive Analysis for Customer Focus

The variable customer focus was measured by customer complaints handling, customer feedback systems and customer retentions. Table 8 shows the results.

Table 8: Descriptive Statistics for Customer Focus

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
The organization is focused on customer needs	4.50%	15.90%	30.70%	21.60%	27.30%	3.51	1.18
The organization has a customer feedback system	2.30%	9.10%	17.00%	23.90%	47.70%	4.06	1.11
The organization has a high customer retention	3.40%	6.80%	13.60%	23.90%	52.30%	4.15	1.11
Quality-related customer complaints are treated with top priority	0.00%	4.50%	9.10%	29.50%	56.80%	4.39	0.84
The company has made investments to educate consumers about its newest products.	6.80	8.00%	15.90%	31.80%	37.50%	3.85	1.21
Composite						**3.99**	**1.09**

Nearly half of the respondents (48.9%), according to Table 8's data, agreed that the company is customer-focused. This assertion was supported by a mean of 3.51 and a standard deviation of 1.18. The data indicates that 70.6% of respondents agreed with the statement that the organization had a customer feedback mechanism. This was further supported by a mean of 4.06 and a standard deviation of 1.11. Additionally, it was found that the majority of respondents, or 76.2%, agreed with the statement that the business has an excellent client retention rate. A mean of 4.15 and a standard deviation of 1.11 supported the findings. With a mean of 4.39 and a mean of 0.84, the majority of respondents (86.3%) also concurred that customer complaints regarding quality are given high importance. In a similar vein, the vast majority of respondents (69.3%) concurred that the company had made an investment in educating consumers about its new items, which had a mean of 3.85 and typical deviation of 1.21. The standard deviation was 1.09 and the composite mean was 3.99. This suggested that the majority of respondents agreed with the consumer focus statements. This agreed with Nyaga and Gakobo's (2017) whose findings revealed that adopting customer-centric practices is something that every firm should think about doing if they want to boost their organization's success.

4.5.4 Descriptive Analysis for Employee Involvement

The variable employee involvement was measured by representative participation, participative decision making and quality Circles. Table 9 shows the results.

Table 9: Descriptive Analysis for Employee Involvement

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Workers freely express concerns and challenges.	4.50%	3.40%	2.30%	37.50%	52.30%	4.30	1.01
Workers openly impart their expertise.	3.40%	1.10%	2.30%	35.20%	58.00%	4.43	0.88
Workers actively look for ways to improve their skill, expertise, and experience.	4.50%	3.40%	2.30%	35.20%	54.50%	4.32	1.01
Workers assess their own performance in relation to their individual aims and objectives.	3.40%	2.30%	1.10%	27.30%	65.90%	4.50	0.91
Workers acknowledge that they are responsible for solving problems and take ownership of them.	3.40%	1.10%	4.50%	39.80%	51.10%	4.34	0.90
Workers are aware of the significance of their input and position within the company.	2.30%	2.30%	3.40%	31.80%	60.20%	4.45	0.86
Composite						**4.39**	**0.93**

The majority of respondents, or 89.8%, agreed that employees discuss concerns and issues openly, according to the results of the descriptive analysis shown in Table 9. The statement had a mean of 4.30 and a standard deviation of 1.01 in this analysis. The majority of respondents (93.2%) to the survey agreed, according to the results, that employees freely share their knowledge and experience. This was supported by data with a mean of 4.43 and a standard deviation of 0.88. The majority of poll participants, or 89.7%, concurred with the statement that workers actively seek out chances to advance their expertise, knowledge, and experience. This was further supported by a mean of 4.32

and a standard deviation of 1.01. Furthermore, it was found that the majority of respondents, or 93.2%, agreed with the statement that employees evaluate their performance in connection to their personal goals and objectives. A mean of 4.50 and a standard deviation of 0.91 supported the findings.

With a mean of 4.34 and a mean of 0.90, the majority of respondents (90.9%) likewise concurred that employees assume ownership of problems and their duty for solving them. In a similar vein, the majority of respondents (92%) felt that staff members comprehend the significance of their function and contribution inside the company, with a mean score of 4.45 and a standard deviation of 0.86. The standard deviation was 0.93 and the composite mean was 4.39. This implied that majority of the respondents agreed with the statements relating to employee involvement. This was in line with Ambani's (2017) who found that managers talk to their staff members about the organization's future plans. This study also identified representative participation as an important means of engaging employees to work effectively.

4.5.5 Descriptive Analysis for Operating Environment

The variable operating environment was measured by industry regulations, competition and market conditions. Table 10 shows the results.

Table 10: Descriptive Analysis for Operating Environment

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Industry competition limits a firm's ability to compete.	11.40%	9.10%	2.30%	40.90%	36.40%	3.82	1.33
A company's ability to compete is hampered by the inadequate industry infrastructure.	10.20%	9.10%	2.30%	33.00%	45.50%	3.94	1.33
New competitors in the industry pose a danger to a firm's competitive position.	13.60%	8.00%	4.50%	37.50%	36.40%	3.75	1.38
Currency exchange rates and inflation volatility have a negative impact on a company's ability to obtain loans.	10.20%	4.50%	3.40%	47.70%	34.10%	3.91	1.22
Consumer behavior determines demand for firm products	9.10%	5.70%	2.30%	37.50%	45.50%	4.05	1.24
Industry regulation affects the operations of the company	10.20%	5.70%	1.10%	45.50%	37.50%	3.94	1.24
The external market conditions affect the market of the company	9.10%	3.40%	3.40%	42.00%	42.00%	4.05	1.19
Composite						**3.92**	**1.28**

The majority of respondents, or 78.3%, agreed that industry competition limits a firm's ability to compete. This was indicated by the descriptive analysis results shown in Table 10, which had a mean of 3.82 and a standard deviation of 1.33. The findings also revealed that most respondents (78.5%) agreed that a firm's ability to compete is hampered by a lack of industry infrastructure. This finding was supported by a mean of 3.94 and a standard deviation of 1.33. The data indicates that 63.9% of respondents agreed with the statement that new industry entrants threaten a firm's competitive position. This was further supported by a mean of 3.75 and a standard deviation of 1.38. It was also found that 81.8% of respondents, or most of the sample, agreed with the statement that inflation and shifting exchange rates negatively affect a firm's capacity to secure financing. A mean of 3.91 and a standard deviation of 1.22 supported the findings.

With a mean of 4.05 and a mean of 1.24, the majority of respondents (83%) likewise concurred that customer behavior influences the demand for company products. Comparably, the majority of respondents (83%) felt that industry regulation had an impact on the business's operations; this was shown by a mean score of 3.94 and a standard deviation of 1.24. Finally, the information revealed that 84% of participants concurred that external market conditions have an effect on the company's market. 4.05 was the average response rate, and the standard deviation was 1.19. The standard deviation was 1.28 and the composite mean was 3.92. This implied that the majority of responders agreed with the statements made about the operational environment.

4.5.6 Descriptive Analysis for Organizational Performance

The variable operating environment was measured by profits, customer satisfaction and market share. Table 11 shows the results.

Table 11: Descriptive Analysis for Organizational Performance

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev.
Over the past five years, our company's return on asset has increased.	2.30%	2.30%	1.10%	37.50%	56.80%	4.44	0.83
Over the past five years, our company's return on equity has increased.	5.70%	3.40%	2.30%	40.90%	47.70%	4.22	1.06
Our company has been able to retain most of its employees	3.40%	4.50%	1.10%	50.00%	40.90%	4.20	0.94
Over the past five years, our company's market share has increased.	0.00%	0.00%	0.00%	48.90%	51.10%	4.51	0.50
Customers complaints have been reducing in the last 5 years	0.00%	0.00%	0.00%	51.10%	48.90%	4.49	0.50
The company has a high level of customer retention	5.70%	2.30%	4.50%	39.80%	47.70%	4.22	1.04
Composite						**4.35**	**0.81**

The majority of respondents, 94.3%, agreed that our company's return on asset has increased over the past five years, according to the results of the descriptive analysis shown in Table 11. The statement's mean was 4.44, and its standard deviation was 0.83. The majority of respondents (88.6%) to the survey also agreed that our company's return on equity had increased during the previous five years. A mean of 4.22 and a standard deviation of 1.06 backed this up. The majority of respondents, or 90.9%, agreed with the assertion that our organization has been able to retain the bulk of its personnel, according to the data. This was further supported by a mean of 4.20 and a standard deviation of 0.94. The majority of respondents, or 99%, were found to concur with the assertion that

our company's market share has expanded over the last five years. A mean of 4.51 and a standard deviation of 0.50 supported the findings. The majority of respondents (99%) agreed that there had been a decrease in customer complaints over the preceding five years, with a mean score of 4.49 and a mean score of 0.50. In a similar vein, with a mean score of 4.22 and a standard deviation of 1.04, the majority of respondents (87.5%) believed that the company keeps a sizable portion of its customers. The composite mean was 4.35, while the standard deviation was 0.81. This suggested that the claims regarding organizational effectiveness were supported by the majority of respondents.

4.6 Diagnostic Tests

This section provides diagnostic tests outcome.

4.6.1 Multicollinearity Test

A VIF value that is above 10 and tolerance values exceeding 2 shows presence of multicollinearity. Table 12 presents the results.

Table 12: VIF Test for Multicollinearity

	Collinearity Statistics	
	Tolerance	**VIF**
(Constant)		
Continuous Process Improvement	0.815	1.227
Supplier Management	0.885	1.13
Customer Focus	0.857	1.167
Employee Involvement	0.887	1.128

The results indicated that the variable continuous process improvement had a VIF of 1.227 and a tolerance value of 0.815. The variable supplier management had a VIF of 1.13 and a tolerance value of 0.885 while customer focus had a VIF of 1.167 and a tolerance value of 0.857. The variable employee involvement had a VIF value of 1.128 and a tolerance value of 0.887. This implied that all the variables had a VOF less than 10

and a tolerance value less than 2. Hence, it was deduced that there was no multicollinearity.

4.6.2 Heteroskedasticity Test

The test for Heteroskedasticity was achieved by the use of Breusch Pagan test. The Breusch Pagan test uses the chi-square test to detect heteroscedasticity by running an auxiliary regression on squared residuals. Table 13 presents the results for the test.

Table 13: Breusch Pagan Test for Heteroskedasticity

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.347	0.025		174.861	0.000
Unstandardized Residual	0	0.132	0.000	0.000	1.000

The P value was less than 0.05, according to the results. Consequently, it was not possible to reject the homoscedasticity null hypothesis. It was therefore concluded that there was no heteroscedasticity.

4.6.3 Normality Test

Skewness and Kurtosis were used to test for normality in this study. According to Bryne (2010), data is deemed normal if the kurtosis falls between -7 and +7, while the skewness falls between -2 and +2. The results were presented in Table 14.

Table 14: Skewness and Kurtosis Test for Normality

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Continuous Process Improvement	88	-1.633	0.257	2.349	0.508
Customer Focus	88	-1.263	0.257	1.556	0.508
Supplier Management	88	-0.947	0.257	1.161	0.508
Employee Involvement	88	-2.324	0.257	8.3	0.508
Operating Environment	88	-1.174	0.257	0.524	0.508
Organizational performance	88	-0.402	0.257	-0.165	0.508

The skewness values for all the variables were ranging between -2 and +2 and all the variables also presented kurtosis values that were ranging between -7 and +7. Hence, the data was normally distributed.

4.7 Correlation Analysis

Correlation analysis was conducted in the study to test the association between the independent variables of the study and the dependent variable. Pearson's correlation varies from -1 to +1. A positive value indicates that when one variable changes, the other value changes in the same direction. However, when the value is negative, it implies that when one variable changes, the other one changes in the opposite direction. Table 15 presents the results for correlation analysis in the study.

Table 15: Correlation Analysis Results

		Continuous Process Improvement	Supplier Management	Customer Focus	Employee Involvement	Organizational performance
Continuous Process Improvement	Pearson Correlation					
	Sig. (2-tailed)	1.000				
Supplier Management	Pearson Correlation	.243*	1.000			
	Sig. (2-tailed)	0.023				
Customer Focus	Pearson Correlation	.319**	.273*	1.000		
	Sig. (2-tailed)	0.002	0.01			
Employee Involvement	Pearson Correlation	.310**	0.199	0.159	1.000	
	Sig. (2-tailed)	0.003	0.064	0.14		
Organizational performance	Pearson Correlation	.502**	.520**	.541**	.479**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	88	88	88	88	1.000

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

From the results in Table 15, the Pearson's correlation value (r) for the variable continuous process improvement and organizational performance was 0.502 and the P value was 0.000. This suggested that there is a positive and significant correlation between continuous process improvement and organizational performance. Therefore, it was deduced that when continuous process improvement increases, organizational performance also increases. The correlation was also found to be above average. This was in line with Khan et al. (2019) who established that adopting continuous

improvement methodologies decreased project lead times, improved project and financial forecasts and boosted profit margins.

The Pearson's correlation value (r) for the variable supplier management and organizational performance was 0.520 and the P value was 0.000. This suggested that there is a positive and significant correlation between supplier management and organizational performance. Therefore, it was concluded that when supplier management increases, organizational performance also increases. The correlation was also found to be above average. The results concurred with those of Fiona and Muli (2022) who showed that, supplier segmentation, information slow, supplier collaboration and supplier development were positively and significantly correlated with performance.

The results also showed that the P value was 0.000 and the Pearson's correlation value (r) for the variable customer focus and organizational performance was 0.541. This suggested that there is a positive and significant correlation between customer focus and organizational performance. Therefore, it was deduced that when customer focus increases, organizational performance also increases. The correlation was also found to be above average. This concurred with Han et al. (2021) who found that customer centricity and profitability are positively correlated. This also concurred with Nyaga and Gakobo's (2017) who found that customer centricity has a positive and significant impact on the performance of businesses. According to the study's findings, adopting customer-centric practices is something that every SACCO manager should think about doing if they want to boost their organization's success.

Finally, the the Pearson's correlation value (r) for the variable employee involvement and organizational performance was 0.479 and the P value was 0.000. This suggested that there is a positive and significant correlation between employee involvement and organizational performance. Therefore, it was deduced that when employee involvement increases, organizational performance also increases. The correlation was however found to be above weak.

4.8 Regression Analysis

Regression analysis was performed in order to test the research hypotheses.

4.8.1 Multiple Regression Analysis

Multiple linear regression analysis was used to determine the relationship between the independent variables and the dependent variable. The R squared, F test and beta coefficients were interpreted.

Table 16: Model of Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775a	0.600	0.581	0.193692

a Predictors: (Constant), Employee Involvement, Customer Focus, Supplier Management, Continuous Process Improvement

The results showed that the R square value was 0.600. This implied that the independent variables in the study that is continuous process improvement, supplier management, customer focus and employee involvement accounted for 60% of the changes in the dependent variable which was organizational performance. The remainder percentage which is 40% could be explained by other strategies that the study did not include.

The ANOVA results showing the F statistics was as in Table 17.

Table 17: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.676	4	1.169	31.161	0.000
	Residual	3.114	83	0.038		
	Total	7.79	87			

a Dependent Variable: Organizational performance
b Predictors: (Constant), Employee Involvement, Customer Focus, Supplier Management, Continuous Process Improvement

The F test was 31.161 and the p value was 0.000. This suggested that organizational performance was the dependent variable and that the model being estimated for the association between supplier management, employee involvement, customer focus, and continuous process improvement as the independent variables was significant. As a result, the model showed statistical relevance in explaining how comprehensive quality management strategies affect Kenyan businesses' organizational performance.

Table 18: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.469	0.296		4.955	0.000
Continuous Process Improvement	0.086	0.029	0.227	2.958	0.004
Supplier Management	0.266	0.062	0.316	4.279	0.000
Customer Focus	0.151	0.034	0.336	4.475	0.000
Employee Involvement	0.166	0.042	0.293	3.977	0.000

From the results, it was observed that the coefficient for the relationship between continuous process improvement and organizational performance was positive and significant (β=0.086, P=0.004). This suggested that the performance of organizations and continuous process improvement had a favorable and statistically significant association. Thus, an increase of one unit in continuous process improvement results in a 0.086 unit gain in organizational performance. This was in line with Maina's (2021) findings, which showed a robust and favorable correlation between performance and continuous improvement techniques.

Evidently, the coefficient for the relationship between supplier management and organizational performance was positive and significant (β=0.266, P=0.000). This suggested that supplier improvement and organizational success were positively and statistically significantly correlated. Thus, an increase of one unit in supplier

improvement results in a 0.266 unit gain in organizational performance. This was consistent with research by Rajab, Ngugi, and Kiarie (2021), who found that supplier relationship management significantly affects organizational performance. This aligned with the results of Yehuala's (2023) investigation into the effects of supplier relationship management tactics on organizational efficacy.

In a similar way, it was observed that the coefficient for the relationship between customer focus and organizational performance was positive and significant (β=0.151, P=0.000). This suggested that the association between organizational success and customer focus was both statistically significant and beneficial. Thus, an increase of one unit in customer focus results in a 0.151 unit improvement in organizational performance. This was in line with Mokhtar's (2017) findings, which showed a statistical relationship between new product performance and consumer focus. This was also consistent with research done in 2016 by Ajmal, Aslam, and Ullah, which demonstrated a positive and robust relationship between customer focus and organizational success.

Finally, the coefficient for the relationship between employee improvement and organizational performance was positive and significant (β=0.166, P=0.000). This suggested that the success of the organization and employee development were positively and statistically significantly correlated. Thus, an increase of one unit in personnel improvement results in a 0.166 unit gain in organizational performance. This was in line with the findings of Roslin et al. (2019), who discovered that a key organizational skill that influences organizational performance is the integration of employee empowerment and involvement.

4.8.2 Moderating Effect of Operating Environment on the relationship between total quality management strategies and organizational performance

The study sought to assess the moderating effect of operating environment on the relationship between total quality management strategies and organizational performance. A hierarchical regression analysis was used where the interaction terms for the independent variables and the moderating variable were included in the second model. The results were as presented in this section.

Table 19: R Square Change

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775a	0.6	0.581	0.193692
2	.795b	0.632	0.595	0.190457

The model of fitness results revealed that the R square before the introduction of the moderating variable was 0.60 which improved to 0.632 when the moderating variable operating environment was added to the model. This suggested that the connection between the independent and dependent variables was influenced in some way by the moderating variable. This was consistent with the findings of Wanjiru et al. (2019), who showed that the external working environment moderates the association between corporate strategy and business performance.

Table 20: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.676	4	1.169	31.161	.000b
	Residual	3.114	83	0.038		
	Total	7.79	87			
2	Regression	4.924	8	0.616	16.97	.000c
	Residual	2.866	79	0.036		
	Total	7.79	87			

The ANOVA results indicated P value of 0.000<0.05, after the variable operating environment was added. Therefore, the model with operating environment was

statistically significant. Therefore, operating environment was considered to have a moderating effect on the relationship.

Table 21: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.469	0.296		4.955	0.000
	Continuous Process Improvement	0.086	0.029	0.227	2.958	0.004
	Supplier Management	0.266	0.062	0.316	4.279	0.000
	Customer Focus	0.151	0.034	0.336	4.475	0.000
	Employee Involvement	0.166	0.042	0.293	3.977	0.000
2	(Constant)	1.495	0.316		4.731	0.000
	Continuous Process Improvement	0.152	0.121	0.403	1.257	0.212
	Supplier Management	0.329	0.256	0.391	1.284	0.203
	Customer Focus	0.438	0.181	0.973	2.42	0.018
	Employee Involvement	-0.179	0.269	-0.317	-0.666	0.508
	Continuous Process Improvement *Operating Environment	-0.009	0.028	-0.127	-0.333	0.74
	Supplier Management* Operating Environment	-0.014	0.061	-0.149	-0.233	0.817
	Customer Focus* Operating Environment	-0.073	0.045	-0.911	-1.625	0.108
	Employee Involvement* Operating Environment	0.077	0.061	0.909	1.258	0.212

The results showed that the coefficient for the interaction term between continuous process improvement and operating environment was -0.009 and the p value was 0.74>0.05. This suggested that the relationship between continuous process improvement and organizational performance is moderated, albeit negatively, by the operational environment. The findings also revealed that the operational environment and supplier management had an interaction term with a coefficient of -0.014 and a p value of 0.817>0.05. This suggested that the relationship between supplier management

and organizational performance is moderated, albeit negatively, by the operational environment. The results also showed that the operating environment and customer focus had an interaction term with a coefficient of -0.073 and a p value of 0.108>0.05. This suggested that the relationship between customer focus and organizational performance is moderated, albeit negatively, by the operational environment. Conversely, the operational environment and employee participation interaction term had a coefficient of -0.077 and a p value of 0.212>0.05. This suggested that there is a small but favorable moderating influence of the operational environment on the association between employee involvement and organizational performance. This, however, was at odds with the findings of Wanjiru et al. (2019), who discovered that the external working environment moderates the association between corporate strategy and business performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The contents of this chapter are: summary of the study findings, conclusions based on the study findings and recommendations for practice, policy and contribution to knowledge based on the conclusions of the study. Suggestions for further research are also provided in the chapter.

5.2 Summary of Findings

The main objective of the study was to determine the effect of total quality management strategy on organizational performance of processing firms in Kenya. A case of New KCC limited. The precise objectives were to determine how supplier management, customer focus, employee involvement, and operating environment affected the relationship between New KCC Limited's organizational performance and its overall quality management strategy in Kenya; similarly, the effects of employee involvement and continuous process improvement on the latter two's organizational performance were to be determined. Managers at the supervisor, intermediate, and senior levels provided data for the study using a structured questionnaire. The data was analyzed using three different methods: regression, correlation, and descriptive.

5.2.1 Continuous Process Improvement and Organizational Performance

The first objective of the study was to establish the influence of continuous process improvement on organizational performance of New KCC limited in Kenya. Organizational performance and continuous process improvement were found to be positively and significantly correlated based on the analysis results. Additionally, a

favorable and substantial association between organizational performance and continuous process improvement was found using regression analysis results. This suggested that as a company's continuous process improvement increases, so would organizational performance. Thus, an improvement in continuous process improvement will result in an improvement in the performance of the organization.

5.2.2 Supplier Management and Organizational Performance

The second objective of the study was to determine the influence of supplier management on organizational performance of New KCC limited in Kenya. The results of the correlation research showed that supplier management and organizational performance are positively and significantly correlated. Regression study results also showed that supplier management and organizational performance have a favorable and statistically significant association. Consequently, it was deduced that improved supplier management would enhance organizational performance.

5.2.3 Customer Focus and Organizational Performance

The third objective of the study was to establish the influence of customer focus on organizational performance of New KCC limited in Kenya. Customer focus and organizational performance were shown to be favorably connected based on the results of the correlation analysis. Regression research revealed a favorable and statistically significant relationship between customer focus and organizational success. This led to the conclusion that improving the focus on the customer will improve organizational performance.

5.2.4 Employee Involvement and Organizational Performance

The fourth objective of the study was to determine the influence of employee involvement on organizational performance of New KCC limited in Kenya. A strong and favorable correlation between employee involvement and organizational performance was found through correlation analysis. Additionally, it was found that employee involvement and organizational performance have a statistically significant and beneficial link. Thus, it was inferred that improved employee involvement would likewise improve organizational performance.

5.2.5 Operating Environment, Total Quality Management Strategy and Organizational Performance

The last objective sought to determine the moderating influence of operating environment on the relationship between total quality management strategy and organizational performance of New KCC limited in Kenya. There was observed to be an increase in R square when the interaction terms of the moderating variable operating environment and the independent variables was introduced. The entire model was also shown to be significant, suggesting that the relationship between organizational performance and the variable operating environment is significantly moderated. Nevertheless, it was found from the coefficient results that the operational environment variable had a negligible moderating effect on the link between the individual independent variables and organizational performance.

5.3 Conclusion

The study found that continuous process improvement has a positive and significant relationship with organizational performance. This study therefore concluded that

continuous process improvement has a positive effect on organizational performance. Firms that practice continuous process improvement will register a higher organizational performance than if they did not adopt the continuous process improvement strategy. Companies can carry out benchmarking, continuous quality audits, and systems measurements by defining the roles and responsibilities of various functional departments and resolving departmental interface problems. Quality system procedures are developed by management through collaboration across departments. By incorporating current work documents into work instructions and benchmarking against other companies, processes can be enhanced, which will boost the organization's performance by growing its market share, improving return on asset, and producing happier consumers.

The study also found that there is a positive and significant relationship between supplier management and organizational performance. The study hence made conclusion that supplier management has a positive effect on organizational performance. Firms may increase their performance by adopting strategies that are related to improvement in the quality of supplier relationship such as improving supplier relationship, supplier performance methods and supplier appraisal techniques. This may be achieved by having a mutual relationship with the suppliers which leads to cost reduction hence increasing the return on assets. Having a mutual supplier buyer relationship has the benefit of reaching out to a larger market since this may increase the firm supplies.

The study further found that customer focus has a positive relationship with organizational performance. This led to the conclusion that customer focus has appositive effect on organizational performance. Firms may therefore increase their performance by adopting total quality strategies that are customer oriented. These strategies include

customer complaints handling, customer feedback systems and customer retentions. A customer feedback system, giving top emphasis to quality-related customer complaints, and investing in educating customers about new products are some ways to do this. This will lead to customer retention and hence enable an organization maintain its performance while also drawing more customers increasing the market share.

The study also shown a strong and positive correlation between organizational performance and employee involvement. The study hence concluded that employee involvement has a positive effect on organizational performance. Firms can get a high return on asset and also increase their market share and improve on customer satisfaction by adopting quality management strategies that will increase employee involvement in the organization. These strategies include representative participation, participative decision making and quality circles. Companies can do this through giving staff members a forum where they can freely share knowledge and experience and discuss difficulties and concerns in an open and honest manner. They might also allow staff members chances to improve their proficiency, expertise, and experience. Additionally, let the staff members assess their own performance in relation to their own aims and objectives. As a result, workers will take accountability for issues they encounter and realize how important it is for them to contribute to the business, which will boost output.

Finally, the study found that operating environment significantly moderates the relationship between TQM strategies combined and organizational performance. The association between certain TQM strategies and organizational performance is not statistically moderated by the operational environment, nevertheless. The study hence concluded that operating environment will affect the effect of TQM strategies on organizational performance when they are adopted as a whole but will negatively affect the effect of each strategy when adopted alone. Therefore, industry regulations, competition and market conditions will lead to a better performance of a firm when all TQM strategies that is continuous process improvement, supplier management, customer

focus and employee involvement are adopted together but lead to poor performance when only one strategy is adopted.

5.4 Recommendations

Based on the conclusions of the study, the following are the recommendations for practice, policy and the contribution to knowledge.

5.4.1 Recommendations for Practice

The study established that all the TQM strategies studied in this study that is continuous process improvement, supplier management, customer focus and employee involvement have a positive effect on organizational performance. The study hence makes suggestions that firms in Kenya should adopt these TQM strategies. Firms are recommended to adopt practices such as quality process audits to determine the best quality and benchmarking from other firms that are succeeding and whose brands are selling betters. Firms are also recommended to come up with ways to improve the relationship with suppliers and also appraising them. Additionally, the report suggests that businesses prioritize cultivating relationships with their clients by implementing a system for collecting client feedback and giving grievances high attention. Furthermore, firms are recommended to ensure employee involvement in decision making which will make them own their responsibilities and seek to solve the problems that may arise themselves. Finally, the study recommends that firms should adopt the TQM strategies as a package so as to reduce the negative effect of their operating environment on their performance.

5.4.2 Recommendations for Policy Makers

Based on the study findings, policy makers in government are recommended to formulate policies that will address the negative effect of the firms operating environment on the

effect of TQM strategies on organizational performance. The government should therefore come up with strategies that will regulate competition in the market and also drop regulations that are harsh towards the adoption of TQM in firms. The government should also regulate the entry of new competitors so as to protect the existing firms.

5.4.3 Contribution to Knowledge

This study found that TQM strategies have a positive effect on organizational performance. This study hence makes contribution to the body of knowledge on the relationship between TQM strategies and performance. The study compliments the existing studies that have established a positive effect while addressing the inconclusively that existed on the topic. Further, the study makes literature available on the relationship between TQM strategies and organizational performance in the context that had not been covered. Additionally, the study supports the already existing theories.

5.6 Suggestions for Further Studies

This study sought to determine the effect of continuous process improvement, supplier management, customer focus and employee involvement on organizational performance of firms in Kenya specifically new KCC limited. The study found that the TQM strategies that were investigated in this study explain 60% of the variations in organizational performance. Therefore, there remains other strategies that would explain the remaining 40%. This study hence suggests that future researchers should undertake studies to determine the effect of such TQM strategies as system integration, strategic and systematic approach, communication, customer relationship management and effective leadership on organizational performance.

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APPENDICES

Appendix I: Consent Form

CONSENT FORM

Dear Respondent,

My name is Nicera Wangiri Ndwiga an MBA student at Mount Kenya University conducting a research study on the topic; *An analysis of total quality management strategy on organizational performance of processing firms in Kenya. A Case of New KCC Limited*" The purpose of this questionnaire is to collect information relating to the topic. This questionnaire will take about 15 minutes to complete. Any information shared is for academic purposes only. Kindly complete the questionnaire as per the instructions given. Your identity will remain anonymous, and you have the right to accept or decline to be part of the research study. Your honest opinion on the information given will be highly appreciated.

Regards.

Appendix II: Questionnaire

SECTION A: GENERAL INFORMATION

1. Kindly indicate your gender

   Male ( ) Female ( )
2. Kindly indicate your highest level of education.

   Certificate ( ) Diploma ( ) Degree ( ) Masters ( ) PhD ( )

   Any other……..
3. For how long have been working at KCC?

   Below 5 years 5- 10 years 10-15 years 15-20 years over 20 years

SECTION B: Continuous Process Improvement

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
We have implemented continuous improvement philosophy					
The management establishes the roles and powers of several functional departments.					
The management resolves problems with departmental interfaces.					
Personnel from many departments draft the quality system processes for the management.					
Work instructions are integrated into current work documents by the management.					
The organization does bench marking with other organizations					
The organization has a quality manual					

SECTION C: Supplier Management

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
Our firm has a good relationship with the suppliers					
Our organization applies supplier performance methods					
Our organization applies supplier appraisal techniques					
Company allows for a mutual relationship between the vendor and the buyer					
Supplier relationship management assists in cost reduction					

SECTION D: Customer Focus

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
The company prioritizes the demands of its clients.					
The organization has a customer feedback system					
The organization has a high customer retention					
Customer complaints about quality are given top priority.					
The company has made investments to educate consumers about its newest products.					

SECTION E: Employee Involvement

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
Workers freely express concerns and challenges.					
Workers openly impart their expertise.					
Workers actively look for ways to improve their skill, expertise, and experience.					
Workers assess their own performance in relation to their individual aims and objectives.					
Workers acknowledge that they are responsible for solving problems and take ownership of them.					
Workers are aware of the significance of their input and position within the company.					

SECTION F: Operating Environment

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
Industry competition limits a firm's ability to compete.					
A company's ability to compete is hampered by the inadequate industry infrastructure.					
New competitors in the industry pose a danger to a firm's competitive position.					
Currency exchange rates and inflation volatility have a negative impact on a company's ability to obtain loans.					
Consumer behavior determines demand for firm products					

Industry regulation affects the operations of the company					
The external market conditions affect the market of the company					

SECTION G: Organizational performance

State your agreement with the following aspects using the scale: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree.

Statement	**1**	**2**	**3**	**4**	**5**
Over the past five years, our company's return on asset has increased.					
Over the past five years, our company's return on equity has increased.					
Our company has been able to retain most of its employees					
Over the past five years, our company's market share has increased.					
Customers complaints have been reducing in the last 5 years					
The company has a high level of customer retention					

Appendix III: Research permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 743271

Date of Issue: 15/November/2023

RESEARCH LICENSE

This is to Certify that Ms. Nicira Wangui Ndwiga of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: AN ANALYSIS OF TOTAL QUALITY MANAGEMENT STRATEGY ON ORGANIZATIONAL PERFORMANCE OF PROCESSING FIRMS IN KENYA. A CASE OF NEW KCC LIMITED for the period ending : 15/November/2024.

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