

**TOTAL QUALITY MANAGEMENT PRACTICES AND EMPLOYEES
PERFORMANCE IN CHLORIDE EXIDE KENYA**

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DECLARATION

This research project is my original work and has not been submitted for award of a degree in any other university.

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LIST OF ABBREVIATIONS AND ACRONYMS

CEL:	Chloride Exide Kenya Ltd
ISO:	International organization for standardization
KDA:	K-rep Development Agency
M:	Mean
OSHA:	Occupation Safety and Health Act
QAO:	Quality Assurance Officer
SD:	Standard Deviation
SMES:	Small and Medium sized Enterprises
SPSS:	Statistical Package for Social Sciences
TQM:	Total Quality Management

OPERATIONAL DEFINITION OF TERMS

Continuous Improvement: It is an unending, systematic determination to advance products, services, processes, and organizational performance. It involves identifying opportunities for improvement, analyzing and measuring the current state, and implementing changes to achieve better results.

Customer satisfaction: Refers to a customer's awareness on how a commodity satisfy their expectations. It measures the degree to which a company's offerings fulfil a customer's needs and wants and how satisfied they are with the overall experience of purchasing and using those products or services.

Customer standards: Refers to anticipations of a customer regarding a commodity influenced by certain factors such as their needs, preferences, and past experiences. These standards include quality, price, reliability, customer service, and convenience.

Employee improvement: It pertains to an organization's continuous endeavours to improve its employees' skills, knowledge, and performance. This encompasses creating opportunities for employees to acquire new skills, enhance existing ones, and enhance their productivity and effectiveness within the work environment.

Employee performance: Refers to the employees' productivity, effectiveness, and efficiency level with which they perform their duties and responsibilities. It is

a measure of how well an employee is meeting the expectations and standards set by the organization and how effectively they are contributing to the achievement of organizational goals

Improvement Standards: Refers to the set of expectations, guidelines, and best practices used to guide and measure the continuous improvement efforts of an organization. Frequently, these approaches draw upon quality management frameworks such as Total Quality Management (TQM), Lean Manufacturing, Six Sigma, and Kaizen as their foundation.

Management support: It pertains to managers' and leaders' proactive engagement and dedication in upholding an organization's objectives, initiatives, and strategies. It involves providing resources, guidance, and direction to employees and creating a culture that supports and encourages teamwork, collaboration, and innovation.

Organizational performance: It pertains to the proficiency and productivity of an organization's goals and objectives. It assesses the extent to which the organization achieves its strategic objectives, financial targets, customer satisfaction, and employee satisfaction, indicating its overall performance.

Quality focus: It pertains to an organization's dedication to providing products or services that fulfil or surpass customer expectations regarding quality. It involves an ongoing endeavour to recognize and meet

customer needs and demands, guaranteeing that all products or services are manufactured or delivered with exceptional quality and consistency.

Quality Management: It pertains to the assurance of meeting or surpassing customer expectations for quality while also ensuring the efficient and effective operation of the organization. It encompasses a collection of principles, methods, and tools utilized to strategize, monitor, and enhance the quality of commodities, as well as the overall performance of the organization.

Teamwork: It pertains to the cooperative endeavours of a collective of individuals collaborating towards a shared objective. It entails individuals with diverse skills and expertise joining forces to accomplish a common goal, often requiring substantial interdependence and coordination.

Total quality management: It is a managerial thinking and method designed to enhance the quality and performance of an organization by engaging all employees in an ongoing process of improvement. It is a customer-centric, data-informed, and collaborative approach that highlights the significance of quality in every aspect of an organization's activities.

ABSTRACT

The study investigates the correlation between Total Quality Management (TQM) practices and employee performance in Chloride Exide, Kenya. Specifically, it sought to determine the impact of customer focus, adoption of continuous improvement, employee involvement in decision-making, and management support on employee performance. The systematic approach theory, McGregor's X and Y theories, and scientific management theory guided the research. A descriptive study design targeted 300 employees from Chloride Exide branches in Eldoret, Kisii, Kisumu, Nairobi, Mombasa, and Thika. A stratified sampling design followed by random sampling was used to obtain a sample size of 172 respondents. Data was collected through semi-structured questionnaires, with questionnaire validity and reliability pre-tested through a pilot study. The data from the questionnaire was analyzed quantitatively using SPSS, employing descriptive statistics, inferential analysis, and multiple regression to assess the extent to which dependent variables affect independent variables. The data averagely gave a Cronbach's Alpha of 80% suggesting data was fit for further analysis. The results indicated a questionnaire return rate of 97.7% and an average reliability of 0.8752. Demographic information showed that most respondents were 36-45 years old, and most had a bachelor's degree. The descriptive statistics indicated that in more than 50% of all cases of the set of survey questions, the respondents acknowledged the importance of TQM practices on employee performance in Chloride Exide Ltd. Correlational analysis indicated that continuous improvement and employee involvement are statistically significant at p -value=0.01 to employee performance at Chloride Exide Ltd. with Pearson Correlation value of 0.237 and 0.44 respectively. Customer focus positively correlated with employee performance and is statistically significant at p -value =0.05. Only top management had a weak negative relationship with employee performance, and the relationship is not statistically significant. Regression analysis results indicated that customer focus, continuous improvement, and top management had a negative linear relationship with employee performance, while only employee involvement had a positive linear relationship and was statistically significant with employee performance at Chloride Exide Ltd. The findings from the research is valuable for organizational leaders and practitioners seeking to enhance employee performance and overall organizational effectiveness based on TQM practices. Future studies need to consider the impact of TQM practices across different organizations.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

According to Saihu (2020), Total Quality Management (TQM) focuses on improving the quality of commodities through the active involvement of all individuals within an organization in a continuous enhancement process. TQM has gained popularity globally and has been implemented in various organizations worldwide. TQM is commonly known as Kaizen, which means continuous improvement in Japan (Hosono, 2020). The Japanese have been implementing TQM for many decades and have successfully improved the level of excellence of the goods and services they offer. This has made Japan one of the leading manufacturing countries in the world.

The adoption of TQM in the United States became widespread during the 1980s and 1990s (Sideras, 2022). Leading American companies, including Ford, General Electric, and Motorola, embraced TQM, resulting in a remarkable enhancement of the quality standards for their products and services. TQM also played a crucial role in establishing the prestigious Malcolm Baldrige National Quality Award, which recognizes organizations that demonstrate excellence in quality management. The influence of TQM extended beyond the United States to countries like Germany, France, and the United Kingdom in Europe, as noted by Alzafari and Kratzer (2019). In Europe, the European Foundation for Quality Management (EFQM) was established in 1989 and has actively promoted the implementation of TQM. EFQM provides a framework for TQM adoption and acknowledges organizations that have achieved excellence in quality management through its European Quality Award.

In Asia, TQM has gained popularity in countries such as China, India, and South Korea (Demir, 2021). Since the 1990s, the Chinese government has advocated for implementing TQM to enhance the quality of its commodities. India has also been implementing TQM in various sectors such as healthcare, education, and manufacturing. South Korea has been implementing TQM since the 1980s and has achieved remarkable success to enhance the excellence of its goods and services. In recent times, numerous organizations across the globe have placed significant importance on adapting and staying abreast of the rapid transformations in the global business environment. The aim of the efforts has been to maintain competitive advantage amidst the transformations. One constant amongst the changes has been the customer demand for enhanced products and services quality. This consistency has enabled business organization to realize that the only way to catch up with the demands is to adopt strategic approaches that enhance competitive advantage in the contemporary times. Qiu *et al.* (2020) argue that most companies spend considerable about of resources to enhance their strategic approaches to foster their competitive advantage. The principal emphasis of the present research assesses the influence of TQM on the performance of the organization. At the same time, other methods such as Lean Production, Concurrent Engineering, Business Process Re-engineering, and Just-In-Time have also been used in various organizations. TQM has been implemented in various African countries in recent years, with varying degrees of success (Jasti *et al.*, 2022). TQM has the potential to enhance the excellence of goods and services in Africa, which can positively impact economic development and the well-being of its people. One of the challenges of implementing TQM in Africa is the need for more resources and infrastructure (Beraki *et al.*, 2022). Many African countries need more resources and infrastructure

to support TQM implementation, such as reliable electricity, internet connectivity, and adequate training facilities. This can make it difficult to implement TQM effectively.

Another challenge is the need for a strong culture of quality in many African countries (Adam, 2020). In many cases, in order to promote better comprehension and recognition of the significance of quality and how TQM can assist organizations in enhancing their quality, there is a requirement for increased awareness. This can make gaining buy-in from employees and leaders in organizations difficult.

Despite these challenges, some African countries have successfully implemented TQM. For example, the government of Rwanda has made significant efforts to implement TQM in various sectors, such as healthcare, education, and public services (Mazhazhate *et al.*, 2021). Rwanda has achieved remarkable success in improving the quality of its public services and has been recognized as a leader in TQM implementation in Africa. Over an extended period, South Africa has consistently implemented TQM. It has achieved remarkable success in enhancing the quality of its commodities, as supported by Twum *et al.* (2022). To promote the adoption of TQM and recognize organizations that have excelled in quality management, the South African government has introduced a range of quality awards and initiatives.

TQM is widely recognized as a critical element for enhancing the performance of firms in both the private and public sectors in East Africa. According to Magutu (2010), the implementation of TQM in Tanzania has encountered challenges primarily attributed to the rising competition in the market. Studies on TQM implementation in Kenya indicates that adoption of TQM approach has been associated with attainment of customers satisfaction, good reputation and enhancement of quality assurance that fortifies competitive advantage (Kanji, 2012). Nonetheless, Magutu (2010)

observes that there are just a few studies that have focused on the concept of TQM adoption with regard to employee performance. Most of these organizations operate within the beverage, food, and banking sectors. Therefore, the study aims to investigate the impact of TQM adoption on employee performance, specifically in Chloride Exide, a company in Kenya.

In recent years, TQM has gained significant momentum in Kenya, witnessing numerous organizations embracing this approach to enhance the quality of their products and services. The Kenyan government has also tried to promote TQM implementation in various sectors, such as healthcare, education, and manufacturing (Lala *et al.*, 2021). One of the key challenges of implementing TQM in Kenya is the need for a strong quality culture in many organizations (Murenga & Njuguna, 2020). Many Kenyan organizations are still focused on meeting minimum standards and do not prioritize quality improvement as a critical objective. This can make gaining buy-in from employees and leaders in organizations difficult.

Another challenge is the need for adequate resources and infrastructure to support TQM implementation (Nange & Mkulu, 2020). Many organizations in Kenya need more resources and infrastructure to effectively implement TQM, such as reliable electricity, internet connectivity, and adequate training facilities. Despite these challenges, there are success stories of TQM implementation in Kenya. For example, the Kenya Bureau of Standards (KEBS) has been promoting TQM implementation among local manufacturers, and many have achieved notable success in improving their quality management systems (Nyaribo, 2022). In addition, various Kenyan organizations have achieved certification in international quality standards, such as ISO 9001, demonstrating their commitment to quality improvement and TQM implementation.

1.1.1 Employee Performance

Employee performance refers to the valuable contributions made by employees that lead to profitable gains for the organization, including productivity, efficiency, work quality, customer satisfaction, and adherence to organizational policies. It is influenced by skills and knowledge, motivation, job satisfaction, and the organizational culture and environment (Irwan *et al.*, 2020). Continuous investment in employee development through training programs, both within and outside the workplace, improves competencies and job performance. Motivation is crucial, driven by job satisfaction, recognition, career growth opportunities, and fair compensation. Creating a positive work culture and environment through skill development, feedback, recognition, and employee involvement in decision-making enhances motivation and engagement.

Job satisfaction is closely related to performance and is fostered by a positive workplace environment, clear job descriptions, growth opportunities, work-life balance, effective communication, and employee participation (Pancasila *et al.*, 2020). Organizational culture and environment significantly impact performance, with open communication, transparency, trust, respect, work-life balance, well-being resources, and diversity and inclusion promoting a positive culture. Effective leadership and management practices provide guidance, resources, and support, and foster communication, feedback, and recognition, further enhancing motivation and performance.

1.1.2 Total Quality Practices

TQM refers to a management philosophy emphasizing on the active participation of workers in all aspects of organizational operations. According to Magutu (2010) TQM combines the aspect of superiority enhancement and management to ensure that the production of commodities in an

organization leads to business enhancement. Conley (2015) observes that TQM emphasizes enhancing employees' abilities to improve their productivity, leading to greater customer satisfaction. Al-Saffar, and Obeidat (2020) views TQM as a strategic formation of ethos that ensures the operations of the organization are performed at the best quality possible. TQM seeks to enable the employees to do things right from the very beginning of the organizational operational engagement (Allan, 2007).

The first indicator of TQM that was instrumental in this study is customer focus. According to Adeoti (2008), TQM necessitates the development of a management approach that places the utmost emphasis on ensuring customer satisfaction. Agus and Hassan (2002) add that once an organization has a management strategy to ensure customer satisfaction. Customer focus is another critical element of TQM concept. It concentrates on the customers' satisfaction by emphasizing improving the value of clients by designing and continually improving procedures (Sallis, 2014). Further, TQM is termed people-centered since it aims to increase customer satisfaction at a continued cost reduction (Oakland, 2011). Consequently, TQM is a management perspective. Dahlgard-Park (2012) describes TQM as a company culture that prioritizes enhanced customer satisfaction and improvements, which necessitate the participation of all employees. The focus on the customer enables the ultimate determination of quality (Oakland, 2011). Consequently, to foster quality improvement, the training of employees is vital to the organization. Customers, on the other side are fundamental in determining the success of such a venture.

The next engagement of TQM is continuous improvement of all aspects of organizational operations. Continuous improvement guides TQM towards maintaining a constant enhancement of operations. Kaizen is a term used mostly when continuous improvement is discussed (Goetsch

& Davis, 2014). As a philosophy associated with the improvement of operations, Kaizen entails the identification of benchmarks of excellent. Kaizen, as an element of productions, focuses on practices that inculcate employee ownership of the processes. Some activities are in line with Kaizen, such as reduction of process time. Zahir et al. (2013) posit that TQM's primary focus is enhancing all work activities, particularly high-level strategic planning, and decision-making. TQM is rooted in the belief that errors and defects can be avoided. Thus, TQM often yields improved results across all work aspects by enhancing people's processes, technology, and machine capabilities. The key to continuous improvement is to focus on achieving better results. Allaarasan and Chandrasekar (2013) suggest that quality can only be improved by incurring significant productivity losses. Therefore, top management must provide guidance and support for quality improvement initiatives. To enhance quality, useful metrics must be established, as quality objectives constantly change. The three essential components of TQM are measurement, customers, and culture. The initial interaction with the company influences a customer's perception of quality and extends throughout the product's life cycle. Every department within the organization must strive to enhance the value of its operations. The value-oriented strategy focuses on service aspects such as reliability, promptness, confidence, understanding, and tangible elements (Alagarasan and Chandrasekar, 2013).

Employee involvement is a crucial component of TQM, as highlighted by Goetsch and Davis (2014). It is a departure from conventional quality assurance management practices, where workers simply follow instructions to perform their jobs after a decision has been reached by the management. This approach is slow, rigid, and offers little scope for innovation, particularly in the current era where quality is the driving force behind production. Muigai (2013) asserts that

employee involvement is critical to any TQM strategy. It involves establishing a system that motivates employees to utilize their skills and expertise in suggesting improvements within their respective work areas. These suggestions can encompass various aspects such as work-related issues, the work environment, the product, or the organization. Many organizations have implemented a participatory management style that encourages employees to participate in decision-making and problem-solving processes actively.

The final aspect of TQM to be examined in this study is top management support, which holds significant importance in the overall implementation of TQM. Organizational efficiency is considered in TQM because top management support is primary in fostering operations (Oakland, 2011). Consequently, the main elements of top management support are critical accomplishment and maintenance of tasks in organizations or firms. This item suggests that a team's success is seen as a success of the whole team, a primary criterion for management support effectiveness. Stanojeska et al. (2020) argued that it is essential for top management to foster an environment where employees are actively involved in the change process, which involves introducing new ideas, concepts, and assumptions to overcome their resistance to change. This approach's success largely depends on the management's ability to transform the mental frameworks of individuals within the organization. Therefore, top management must provide support and create an atmosphere where employees feel comfortable contributing to the change process.

1.1.3 Chloride Exide

The corporate entity known as Chloride Exide comprises Chloride Exide (K) Ltd, Chloride Exide (T) Ltd, Battery Masters (U) Ltd, and Chloride Exide (R) Ltd. It was founded in Kenya in 1963 as a subsidiary of Chloride Group PLC in the United Kingdom, marking its expansion into the East

African region. The primary objective was distributing Chloride Exide Batteries and retailing the group's products in East Africa. Over time, it has become the dominant distributor of batteries and solar systems in East African nations, holding the position as the largest in the region. Chloride Exide has consolidated its regional presence with 17 sub-firms within Kenya and fully established associated businesses in Uganda, Tanzania, and Rwanda. In Kenya, the Chloride Exide group has working centres and one in Uganda. CEL's ISO certification of its processes over the years is a testament to its commitment to delivering high-quality batteries, solar panels, and associated energy solutions. This commitment aims to surpass customer expectations and facilitate ongoing market expansion consistently. Over the years, Chloride has received certification in fields related to TQM practices, and it has aimed at complying with and continuously improving the standards associated with these certifications. In 2001, CEL became the first company in Kenya to receive ISO 9001 Quality Management System certification, highlighting its dedication to maintaining high-quality standards. Additionally, in 2005, CEL complied with the OSHA ACT ensures a safe working environment for its employees and the general public. In 2011, the company further demonstrated its commitment to environmental responsibility by obtaining ISO 14001:2004 Environmental Management System certification, enabling implementation of policies and objectives focused on environmental aspects within its control. To promote continuous improvement, in 2013, CEL introduced a company-wide Kaizen practitioners' course for management staff, resulting in the certification of 15 Kaizen practitioners that year. This number has since grown to 30. Furthermore 2014, CEL received the Kaizen AM Step 3 certification award. The company is working towards achieving ISO TS-16949 certification, which specifies quality management system necessities for the plan, growth, production, installation, and service of automotive-related products. Chloride Exide Limited has already applied TQM approaches in its

operational management; the element of dynamics of operations has yet to be studied, which points to a lack of any literature-related material.

1.2 Statement of the Problem

TQM has emerged as a strategic management philosophy that emphasizes continuous improvement, customer focus, employee involvement, and leadership commitment to enhance organizational performance. For Chloride Exide Kenya, a company operating in the competitive renewable energy sector, adopting TQM practices is vital not only for operational efficiency and customer satisfaction but also for enhancing employee performance—a key driver of long-term organizational success.

While TQM initiatives are expected to lead to improvements in productivity, motivation, and profitability, the effectiveness of these initiatives largely hinges on the active participation, competence, and commitment of employees. However, it remains unclear to what extent TQM practices such as customer focus, continuous improvement, employee involvement, and management support contribute to employee performance at Chloride Exide. Although existing literature broadly affirms the link between TQM and organizational outcomes, there is a noticeable gap in empirical studies specifically addressing how TQM influences employee-level outcomes, particularly within the Kenyan corporate context.

Scholars such as Daqar and Constantinovits (2020) argue that employee performance alone does not guarantee successful TQM implementation, given the diversity of employee roles and contributions. Similarly, Faraj (2022) highlights the necessity for employees to consistently perform at their full potential to realize the objectives of TQM. Nevertheless, limited research has

investigated this dynamic relationship, especially in the context of Kenya's energy manufacturing sector.

Recent studies such as Abukhader and Onbaşıoğlu, (2021), Khan et al. (2019), Wagimin et al. (2019) have pointed out that while TQM is widely recognized as an enabler of organizational performance, the empirical evidence on its direct effect on employee performance remains inconclusive. Specifically, factors such as employee motivation, job satisfaction, engagement, and the development of individual skills and knowledge within a TQM framework are yet to be fully explored.

This study seeks to address this knowledge gap by investigating how TQM practices influence employee performance at Chloride Exide Kenya. It aims to assess the extent to which customer focus, continuous improvement, employee involvement, and management support affect employee performance dimensions such as productivity, job satisfaction, and motivation. By doing so, the study will not only enrich the existing body of knowledge but also provide practical insights for management at Chloride Exide to enhance the effectiveness of TQM practices and optimize workforce engagement.

1.3 Objectives of the study

1.3.1 General Objective

The primary objective of the research is to determine the relationship between TQM practices and employee performance in Chloride Exide in Kenya.

1.3.2 Specific Objectives

- i. To establish the effects of customer focus on the employee performance of Chloride Exide in Kenya.

- ii. To examine the extent to which adoption of continuous improvement influences employee performance in Chloride Exide Kenya.
- iii. To determine the effects of employee involvement in decision making on the employees performance of Chloride Exide in Kenya.
- iv. To establish the effect of management support on the performance of employees in Chloride Exide in Kenya

1.4. Research Questions

- i. What are the effects of customer focus on employee performance?
- ii. To what extent does the adoption of continuous improvement influence employee performance?
- iii. What are the effects of employee involvement in decision-making on the employee's performance?
- iv. What is the effect of management support on the performance of employees in Chloride Exide in Kenya?

1.5 Significance of the study

The research aims to identify the key TQM practices that can enhance the performance of Chloride Exide in Kenya and identify any ineffective TQM practices within the organization and how to address them. By considering the role of effective TQM practices on quality performance, the study provided insights for management to develop strategies that improve quality and meet domestic and international standards, leading to customer satisfaction. Furthermore, the research highlights the significance of TQM performance in defining the quality and overall organizational performance, facilitating growth and development by removing obstacles hindering progress.

1.6 Scope of the study

The study examined the numerous TQM practices employed by chloride Exide in Kenya and their effects on overall employee performance. The research study was conducted in chloride Exide in Kenya. The study was conducted in the year 2023 with a view to capture the most current influence of TQM on employee's performance at the company.

The contextual scope of the study is limited to the influence of TQM on employees performance at chloride Exide in Kenya. Although employee performance may be influenced by other factors and other strategies employed in the organization, the study was limited to the influence emanating from adoption of TQM. To achieve its objectives, the study relied on the subjective opinions of managers in areas where tangible evidence is not available to support arguments and assertions. Further, the target population in this work entailed the top management, middle level employees, and lower level employees of chloride Exide in Kenya. The study was also be limited to the focus on the four factors in TQM: customer focus, employee involvement, continuous improvement, and leadership support.

1.7 Limitation of the study

The study's primary limitation is the potential for participant non-compliance, where some individuals may decline to complete the questionnaires or withhold classified information essential for providing accurate and informative responses. The possibility of participants retaining information or not completing the questionnaires could adversely impact the likelihood of reaching a conclusive outcome in the study. Nonetheless, the scholar assures the contributors that their information was solely utilized for the intended purpose. Further, the confidentiality and privacy of the respondents was assured to boost the confidence of the respondents.

1.8 Organization of the study

The research was organized into five sections, where the first section serves as an introductory chapter. Within this chapter, various aspects were covered, including the study's context, the problem statement, the objectives, the research questions, the significance of the study, and its scope and limitations. Chapter two provided a discussion of theoretical review of literature and the empirical literature review. It provided a summary of literature gaps that was established in the literature review and present a conceptual framework. Chapter three of the research encompassed the design of the study, the target population, the determination of sample size, the procedure for sampling, the data collection instruments, the assessment of validation and reliability of the research instruments, the procedure for collecting data, the methods employed for data analysis, as well as ethical considerations. On the other hand, chapter four concentrated on the analysis of the acquired results. In contrast, chapter five offered a comprehensive overview of the research findings, the conclusions derived from these findings, and pertinent recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This Chapter shall cover majorly insights into the problem in detail by looking at the previous works of different authors. The primary coverage in this Chapter is the Theoretical Review on performance, customer focus, continuous improvement, leadership support, and employee involvement regarding TQM practices and implementation.

2.2. Theoretical Literature Review

2.2.1. Systems Approach Theory

Systematic approach concept was established by Ludwig von Bertalanffy, a biologist, in the 1950s (Zhang & Ahmed, 2020). This theory proposed that systems have common characteristics and can be studied and understood as a whole rather than a collection of individual components. Other notable contributors to the systems approach include Jay W. Forrester, who developed the field of system dynamics and applied it to the study of organizational behavior and management (Richardson, 2020); Stafford Beer, who developed the viable systems model to analyze and design complex organizations (Jackson, 2022); and Peter Senge, who popularized the systems thinking approach in his book "The Fifth Discipline" (Pensieri, 2019). Today, the system approach continues to be developed and applied by scholars and practitioners in various fields, including management, engineering, ecology, and the social sciences.

The systems approach theory is a holistic approach to management that views an organization as a system of interconnected components that are in tandem to attain a mutual goal (Phillips & Ritala, 2019). This theory emphasizes the importance of considering the entire system when making

decisions and implementing changes to ensure that the changes positively impact the entire system. On the other hand, TQM is a managerial thinking that significantly emphasizes fulfilling customer requirements and expectations by continually enhancing an organization's processes, products, and services (Balamurugan, 2021). TQM also underscores the significance of engaging all employees to improve quality to ensure collective efforts to meet customer needs and expectations.

The systems approach theory and TQM share several key principles. Both theories emphasize the importance of a holistic approach to management that considers the entire system when making decisions and implementing changes (Fonseca, 2022; Filatotchev *et al.*, 2022). Both approaches also highlight the significance of inclusivity by involving all employees in the execution process and empowering them to contribute to the ongoing improvement of the organization actively. This includes the impact on employees and their performance.

One of the key principles of TQM is to involve all employees in the quality improvement process (Aniskina & Terekhova, 2019). This approach promotes employee engagement and empowerment and provides opportunities for employees partake to the organization's success. By involving employees in decision-making processes, organizations can benefit from their workforce's diverse perspectives and expertise. Similarly, the systems approach theory emphasizes the importance of considering the impact of organizational changes on employees (Nilsen *et al.*, 2020). This can include changes to work processes, organizational structure, or other aspects of the organization. By taking a holistic approach, managers can identify potential barriers or challenges that may impact employee performance and take steps to address them. By regularly monitoring and evaluating performance, organizations can identify areas for improvement and take action to address them. This can include implementing new training programs, improving communication

and collaboration, or providing additional resources and support to employees. Both theories prioritize meeting customer requirements and prospects by the organization's processes, products, and services that are consistently enhanced through ongoing improvement (Saffar & Obeidat, 2020). TQM also emphasizes the importance of collecting and analyzing data to measure and monitor performance, a key principle of the systems approach theory. Therefore, this theory instigates the second and third objective, that is, the extent to which adoption of continuous improvement influences employee performance and the effects of employee involvement in decision making on the employees' performance of Chloride Exide in Kenya.

2.2.2. McGregor Theory X and Theory Y

Douglas McGregor developed McGregor's Theory X and Theory Y in 1960, which comprise two divergent presumptions concerning human behavior within work settings. Theory X posits that employees possess inherent laziness, exhibit aversion towards work, and necessitate close supervision and control for effective job performance. This theory proposes that external incentives and penalties, such as salary increments or disciplinary measures, are required to motivate employees (Bytyqi, 2020).

Conversely, Theory Y hypothesizes that employees are intrinsically driven by derive fulfilment from their work, and actively seek responsibility and challenges in their job roles (Dharejo & Dharejo, 2022). This theory suggests that employees can be trusted to take on tasks and make decisions independently, without close supervision or control. McGregor believed that the assumptions made by managers about their employees would shape their management style and influence how they interacted with their employees. He argued that managers who subscribed to

Theory X were likelier to use strict control measures. In contrast, managers who subscribed to Theory Y were likelier to provide employees with autonomy and support their self-motivation.

McGregor's Theory X and Theory Y have implications for implementing TQM within organizations (Ravenelle, 2019). Managers who subscribe to Theory X may view TQM as increasing employee control and supervision to ensure compliance with quality standards. They may believe employees must be constantly monitored and motivated through external rewards and punishments to maintain high-performance levels. However, managers who subscribe to Theory Y are more likely to view TQM as empowering employees and providing them with the tools and resources to improve quality (Kaiseroglou & Sfakianaki, 2020). They may believe that employees can identify and solve quality problems independently. Thus, there is no need for constant supervision or control.

Managers in Theory Y may involve employees in quality improvement processes in a TQM environment (Budayan & Okudan, 2022). They encourage them to provide feedback and suggestions and provide them with training and support to help them improve their skills and knowledge. Managers may also encourage employee participation in decision-making and provide opportunities for personal and professional growth. Theory X managers may focus more on implementing strict quality control measures (Ravenelle, 2019). This also entails enforcing compliance with quality standards through external rewards and punishments. Managers may be less likely to involve employees in decision-making and provide limited personal and professional growth opportunities.

Managers adopting either Theory X or Theory Y have essential implications for the correlation between TQM, organizational employee performance, and management style. Managers who

adhere to Theory X may regard employees as naturally lazy and needing rigorous supervision and control to perform their duties effectively (Pyhäjärvi *et al.*, 2023). In a TQM environment, such managers may implement strict quality control measures and enforce compliance with quality standards through external rewards and punishments. They may also be less likely to involve employees in decision-making processes. This would provide employees with limited personal and professional growth opportunities. This management style may negatively impact employee motivation and engagement, resulting in decreased organizational employee performance.

On the other hand, managers who subscribe to Theory Y may view employees as self-motivated and needing empowerment and support to perform their jobs effectively (Touma, 2021). In a TQM environment, managers may encourage employee participation in decision-making, provide personal and professional growth opportunities, and involve employees in quality improvement processes. This management style may positively impact employee motivation and engagement, increasing organizational employee performance.

Furthermore, McGregor's Theory X and Theory Y propose that the management style implemented within an organization can substantially impact employee behavior and performance (Wangdi & Tobgay, 2022). Managers who subscribe to Theory X may create a culture of fear and mistrust, whereas managers who subscribe to Theory Y may create a culture of collaboration and empowerment. In a TQM environment, the latter is more likely to lead to sustained improvements in organizational employee performance. This theory assists as the foundation for the primary objective of examining the impact of top management support on employee performance within Chloride Exide in Kenya.

2.2.3. Scientific Management Theory

The scientific management approach, called initially Taylorism, was formulated by Frederick Winslow Taylor in 1890. The theory states that productivity of an organization can increase through application of scientific methods and establishing standards (Jex & Britt, 2014). The scientific management approach entails carefully selecting and training workers, coupled with providing supervisory assistance, to enhance productivity and efficiency.

It is guided by four main principles with the first being that scientific methods facilitate standardization of a particular way to do a given job. As the need for harmony is of critical importance in enhancing performance of employees in an organization, Awofeso (2019) cites classical theorists and notes that scientific theory trivializes the need for well-defined structure or chart in favor of building harmony among people in the organization which may not realize target effectiveness. Nonetheless, Sharang (2020) notes that Taylor's theory emphasizes on the need for the organization to establish a working formula that guides the top management and other employees to gain effectiveness. This principle anchors the current study variable of employee involvement in operations. As such, the theory's element of industrial harmony informs the significance of management synchronization in attainment of effectiveness.

The second principle of scientific management theory is clear allocation of duties and responsibilities among the members of the organization's workforce. This approach element deals with motivation as it incentivizes workers through wages by tying their pay to their output (Muigai, 2013). Scott et al. (2015) state that workers require specific guidance from their superiors to understand their roles and responsibilities, and coordination of work can only be achieved with proper planning and direction from management. However, according to Smit et al. (2011), the

principle of scientific management specifies that managers use scientific means to find the core unit of work which may leave out certain participants in the body of employees. As such, this principle anchors the study on the need to have clearly defined structure of employees' involvement. The theory also stresses the importance of establishing procedures and rules for all workers to perform the work in a specific and standardized way.

In this theory, the primary function is identifying employees and defining a clear hierarchy of authority and employee's surveillance (Muia, 2014). Every chosen employee should undergo thorough training to effectively carry out their assigned tasks. It is also essential to provide appropriate incentives to encourage their collaboration with the principles of job science. Additionally, workers must receive support through thorough planning of their work. However, Uddin and Hossain (2015) criticizes the theory of ignoring realistic fact that besides motivation and involvement of employees, structure is also important. As such, of the theory argue that efficiency of employees is dependent on the balance the organization makes between people and the organizational management structures. In this light, the element of top management support was anchored on the need to establish a balance between management and coordination of employees to realize effectiveness in the organization. The theory serves as the basis for investigating all variables in the study, including customer focus, continuous improvement, employee involvement, and top management, which collectively contribute to enhancing employee performance within the organization.

2.3. Empirical Literature Reviews

2.3.1. Customer Focus and Firm Employees performance

Adza-Awude (2012) conducted a study examining the significance of customer focus in implementing TQM. The study findings demonstrate that customer focus plays a crucial role in TQM, encompassing four objectives: customer satisfaction, surpassing competitors, long-term customer retention, and gaining market share. The study specifically focused on the importance of customer focus in TQM applications. In contrast, the current study aims to delve deeper and explore how implementing customer focus influences employee performance within a firm.

Yaacob (2014) study in Malaysia with 205 managers was sampled within the public service sector. The work examine how customer focus impacts firm performance. The researchers employed random sampling and included managers directly involved in customer focus. The collected data underwent analysis through the utilization of descriptive statistics. The research show that customer focus is critical in enhancing employee productivity, innovation, and customer satisfaction. The impact of customer focus on innovation was found to be influenced by employee satisfaction. The results suggest that effective implementation of customer focus can help public firms improve their performance. This study used multiple regression analysis to evaluate the influence of customer service within various levels of management of Chloride Exide Kenya.

Mohammed et al. (2014) examined the impact of customer focus as one of the main variables on operational performance at the largest telecommunications company in Saudi Arabia. The study used data collected from a survey of 421 employees to scrutinize the correlation among six TQM practices and operational performance. The examination of data included the utilization of

regression lines in Microsoft Excel. The study revealed a substantial connection between customer focus and company performance. In contrast, the current study aims to discover the relationship between four TQM practices and the performance of Chloride Exide in Kenya.

The main survey entailed 30 employees both from all levels of management and employees. The major data analysis shall employ multiple regression analysis by use of SPSS. Therefore, an effective management system should ensure that the organization places utmost importance on fulfilling the requirements and prospects of its customers. It involves identifying and translating customer requirements into product specifications. The organization should aim to satisfy and delight customers, recognizing that customer satisfaction results in improved performance. This study aims to investigate how a customer-oriented approach impacts customer satisfaction. The study uses these findings to examine how implementing TQM practices to enhance customer focus affects the performance of Chloride Exide employees in Kenya.

Nguyen and Nagase (2019) investigated the effect of TQM on customer satisfaction, using a quantitative approach that involved self-administered questionnaires and statistical analysis. The outcomes discovered a noteworthy relationship between implementing TQM and customer satisfaction, with TQM practices influencing customers' perceptions of service quality and ultimately impacting their satisfaction levels. In contrast, the current study examined the influence of TQM practices on employee performance in Chloride Exide, Kenya.

2.3.2. Continuous Improvement and Firms Performance

Muteti (2014) adopted an exploratory research design and focused on 2000 manufacturing SMEs in Nairobi and its environs using self-administered questionnaires and observation as two principal research instruments of data collection. It found that continuous improvement is continuous key

to firm's success which is based on performance. In this study, the organization's evaluation of product design, processes, and degree is often deterministic of the improvement practices. Also, the study focuses chloride Exide in Kenya as opposed to SMEs in Nairobi. The study used non-financial measures to investigate its hypothesis.

Khan et al. (2019) investigated the application of continuous improvement in improving employees' performance in a company. It established that applying continuous improvement in the organization reduced the operations timeline from 16 weeks to 9 weeks. It was also associated with increased profit margin of the organization with a 22 percent margin. It also indicated that a tidy, clean and organized workplace was realized in the organization. The previous study did not establish a direct connection between TQM and performance enhancement. In contrast, the present study concentrates on four specific TQM practices implemented across all processes and aims to evaluate the performance of Chloride Exide in Nairobi, Kenya.

Moono and Kasongo (2010) conducted identified the factors contributing to the positive implementation of TQM and its impact on the effective and firm performance of the Zambian tourism industry. The study concluded that continuous improvement is a continual process that necessitates integration with other organizational development enterprises and commercial policies. The study emphasized that TQM is a continuous journey that must be pursued daily to achieve success. Moono and Kasongo (2010) study used phone interviews and documentation as data collection tools. Their analysis used an inductive reasoning approach, precisely a qualitative approach to obtain in-depth information. The research findings demonstrated that the performance of companies is significantly influenced by the implementation of TQM practices. These practices encompass the involvement of top management and employees in the quality management system,

a strong emphasis on customer focus, effective management of processes and information value, and the utilization of value of tools and techniques. Though this study focuses on major TQM practices, the practices were practiced in certain areas in the organization. The study suggests that continuous improvement must be applied in all the organisation processes in chloride Exide in Kenya.

Continuously improving quality and productivity is a fundamental principle of TQM, which involves measuring success and constantly improving. Hung et al. (2011) asserts that in a competitive market, only companies that maintain a steadfast commitment to continuous improvement in quality, productivity, and services will succeed. TQM's focus on continuous improvement, using quantitative methods and employee participation, sets it apart from other productivity-improvement methods. This study aimed to enhance competitive advantage through TQM, while the current study specifically examined how TQM practices affect employee performance at Chloride Exide in Kenya.

Gitonga, Kisato, and Pete (2022) conducted a study to examined the impact of TQM on the academic outcomes of four secondary schools sponsored by the Catholic Church in Kenya. The study employed a combination of research methods to ensure data quality. The findings indicated that insufficient implementation of TQM practices, particularly in areas such as continuous improvement and benchmarking, were linked to below-average organizational performance. This study intensified on the impact of TQM implementation on the schools' performance, with a specific emphasis on student performance. In contrast, the current research is centered on investigating the influence of TQM implementation on the performance of employees at Chloride Exide in Kenya.

2.3.3. Employee Involvement and Firm Employees Performance

Muia (2014) studied the influence of TQM on employees-manager relationship. The study recognized a close connection between the successes of a project or organization depends on the employees-managers relationship. The findings indicated that the relationship anchors on the tendency of the managers or leaders to take personal responsibility for implementation, promotion and monitoring the project activities. The effectiveness of the TQM initiative relies on collaborative effort, team cooperation and synchronization between firm's staff. The present study was built upon these findings by examining how implementing TQM practices impacts employees' performance at Chloride Exide in Kenya.

Khattak et al. (2013) researched Pakistani organizations to evaluate the correlation between employee engagement and the performance of the organization. The study examined three extents of employee involvement and collected data from a questionnaire administered to 509 participants. Correlation and regression analyses were conducted on the collected data, revealing a significant contribution of employee involvement to organizational performance, ranging from 56% to 94%. The study concluded that organizations ought to actively include employees in execution at all levels. In contrast, the present study focuses on four specific TQM practices and employs multiple regression analysis to examine the data.

Joiner (2007) researched to examine the relationship between the level of TQM adoption and organizational performance and the controlling effects of co-worker support and organizational support on the connection between TQM implementation and organizational performance within the Australian Motor Vehicle assembly industry. Information was gathered via a survey distributed to employees within the chosen companies. The study revealed that adopting TQM techniques was

associated with improved organizational performance. Joiner also found a positive connection between the degree of TQM execution and organizational performance. Co-workers and organizational support were found to moderate the relationship between TQM implementation and organizational performance. In contrast to Joiner's (2007) study, the current study emphasizes on the comprehensive system and explores how implementing TQM practices influences employee performance.

Afzal et al. (2022) conducted a study to evaluate the impact of TQM practices on the performance of construction workers in Pakistan. The objective was to inspect the relationship between TQM implementation and project performance. The results indicated that the implementation of TQM practices resulted in enhanced employee involvement, leading to a positive impact on project performance. However, it is essential to note that this study specifically focused on the construction industry in Pakistan. In contrast, the current study investigated the impact of TQM implementation on employee performance within the renewable energy industry.

Basnet (2018) evaluated the impact of implementing TQM on the performance of organizations in the manufacturing sector. The study's primary objective was to investigate the relationship between the execution of TQM practices and employee engagement in their work. The study's findings demonstrated that applying TQM practices resulted in improved outcomes among employees. They manifested better engagement in their work. The current used these findings to form a foundation on which further investigation on what the use of TQM practice of employee involvement has on the performance of those employees.

2.3.4. Top Management Support and Firm Employees Performance

Sallis, (2014) study on the importance of top management support found that when TQM is effectively implemented, it realizes enhanced performance. The study found that training employees to attain necessities ensuing TQM implementation was associated with top management support. The study suggests a strong association between top management support and organizational employee performance. Additionally, top management support was found to be linked with employee motivation, which in turn yielded improved performance. It was linked with employee motivation which yielded enhanced performance. The current study focused on investigating how TQM uses the element of top management support to influence performance of employees.

Noruzi et al. (2013) explored the connection among transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance in manufacturing firms in Iran. They gathered data from 280 managers at different levels from 106 companies with more than 50 employees and used structural equation modeling to analyze the data. Their findings showed that transformational guidance had a unswerving influence on the organizational performance of manufacturing companies. In contrast, this study concentrated on a service delivery company in Kenya, meeting connection between four TQM practices and Chloride Exide. Multiple regression analysis was used as the primary analysis method.

Özer and Tmaztepe (2014) researched to inspect the effect of leaders on the performance of small and medium-sized enterprises (SMEs) in an export company in Turkey. The study utilized employees in various job positions within the company and sampled 215 respondents. The study utilized descriptive statistics to analyze the data and discovered that the leadership style employed

by SMEs played a pivotal role in their performance. In contrast, the present study examines the association between TQM practices and employee performance, specifically at Chloride Exide in Kenya. The analysis method in this study was multiple regression analysis.

Kahunyo and Waithaka (2019) study examine the impact of advocating management change practices on the performance of manufacturing firms in Kenya. The findings indicated a significant association between management practices that endorse top management support and favorable performance outcomes. However, it is essential to note that this study did not specifically concentrate on TQM practices. Therefore, the present study utilized these findings to investigate the effects of implementing TQM practices on employee performance within the renewable energy industry at Chloride Exide in Kenya.

2.4. Summary of Empirical Reviews

The synthesis of empirical analyses can be depicted in the Table 2.1.

Table 2.1: Summary of empirical reviews

Author/Year	The topic of the study	Study Variables	Findings	Knowledge Gap	Recommendation for the current study
Customer focus and organizational employee performance					
Adza-Awude (2012)	Assessment of TQM practices on organisational performance at intravenous infusions limited Koforidua, Acra, Ghana	Customer focus and TQM	Customer focus is an important part of TQM	There was no linkage between TQM and other variables.	The current study went further to establish how implementation of customer focus influences employee's performance in a firm
Yaacob (2014)	The direct and indirect effects of customers focus on performance in public firms	Independent variables: customer focus Dependent variable: customer satisfaction, cost-benefit, innovation, and	The study's findings showed that customers focus is an essential element of employee satisfaction, innovation, and	The study only used customer focus as an independent variable; hence may have failed to reflect true picture of the relationship	This study used multiple regression analysis to evaluate the influence of customer service within various levels of management of

		employee satisfaction	customer satisfaction.		Chloride Exide Kenya.
Mohammed <i>et al.</i> (2014)	Organization performance improvement using TQM	Six TQM practices	The findings revealed a robust correlation between emphasizing customer focus and prioritizing the company's goals and objectives.	The study used excels for regression analysis. Excel is known for its unstableness hence the results might be unreliable.	The current study investigated four practices of TQM relationship with chloride Exide performance in Kenya.
Nguyen and Nagase (2019)	The influence of TQM on customer satisfaction.	TQM and customer satisfaction	The findings suggest a strong association between implementing TQM and customer satisfaction.	The research employed a quantitative methodology to examine the impact of TQM practices on customer satisfaction.	The primary objective of the present study is to investigate the effects of implementing TQM practices on the performance of employees at Chloride Exide in Kenya.
Continuous improvement and organizational employee performance					
Muteti (2014)	Continuous Improvement and Operational Performance of Small and Medium Sized Manufacturing Firms in Kenya	Continuous improvement and organizational performance	Organization's evaluation of product design, processes, and degree is often deterministic of the improvement practices.	The study only linked continuous improvement as a critical tool for organization performance leaving other TQM variables	The study added other TQM variables to determine the organizational employee performance
Khan et al. (2019)	TQM practices and work-related outcomes: An examination of tertiary education establishments in Pakistan.	Continuous improvement and organizational employee performance	Application of continuous improvement in the organization reduced the operations timeline from 16 weeks to 9 weeks.	The research did not establish a direct connection between implementing TQM and performance improvements.	The current study focuses on four TQM practices at all processes and is carried out to assess the performance of chloride Exide in Nairobi, Kenya.
Moono and Kasongo, (2010).	Factors That Lead to a Successful TQM Implementation: A Case Study on the Zambian Tourism Industry	Independent variable: Top management, employee involvement, quality	The study's findings demonstrated the significance of various TQM practices, including top	The study used inductive reasoning in analysis. This might not be easy to interpret.	The study suggests that continuous improvement must be applied in all the organisation processes in

		management, system, customer focus, process Dependent variable: Operation and organisation performance	management support, employee involvement in the quality management system, customer focus, process and data quality management, and implementing quality tools and techniques. These practices were identified as critical factors contributing to the performance of firms.		chloride Exide in Kenya.
Hung <i>et al.</i> (2011)	Impact of TQM and organizational learning on innovation performance in the high-tech industry	Organizations that consistently focus on continuously improving quality, productivity, and services in the competitive market are more likely to thrive and succeed.	TQM distinguishes itself from other approaches aimed at enhancing productivity by emphasizing both quantitative methods and the active involvement of employees.	This study focused on enhancing competitive advantage through TQM.	The current research focused on the specific effect that using TQM practices has on the employees' performance in Chloride Exide in Kenya.
Gitonga, Kisato and Pete (2022)	Influence Of TQM on Performance of Catholic Private Secondary Schools On Nyahururu Diocese, Kenya	The study's primary objective was to investigate the impact of TQM on the performance of four secondary schools in Kenya that the Catholic Church sponsors.	The findings indicated that failure of the organizations to implement the TQM element of continuous improvement and benchmarking had a link with poor performance of the organizations.	The primary focus of this study was to assess the influence of implementing TQM on the overall performance of the schools, with a specific emphasis on evaluating student performance.	The current study focused on the influence of TQM implementation on employees' performance at Chloride Exide in Kenya.
Employee involvement and organizational employee performance					

Muia, 2014	Effects of TQM implementation in performance of microfinance institutions in Kenya: (a case of K-rep Development Agency (KDA))	Independent variables: Customer focus, Management leadership, Employee involvement, Intervening variable: Economic factors Dependent variables: Business performance	TQM practices having great significance in business performance.	The study made use of coded language, which is complicated to understand and interpret. The use of one practice may not bring out a clear picture	The current study used these findings to further establish what influence the implementation of TQM has on the performance of employees at Chloride Exide, Kenya.
Khattak <i>et al.</i> 2013	Relationship between Employees Involvement and Organization Performance in Milieu of Pakistan	Independent variables: employment, team orientation and capacity development Moderating variable; Cultural consistency of work Dependent variables; organization performance.	The findings indicated that organizational performance increases in ranges from 56% to 94% due to employees' involvement; hence employees must be involved in decision making	The study focuses on employees in terms of team orientation and capacity development hence neglecting other TQM variables which are also crucial in organization performance.	The current study used multiple regression analysis to analyse data.
Joiner, 2007	TQM and performance: the role of organization support and co-worker support.	Independent variable: TQM implementation Moderating variable: Co-worker support and organizational support Dependent variable: Organization performance	The results indicated a significant and positive correlation between the level of implementation of TQM practices and organizational performance. Furthermore, the study revealed that the presence of co-worker support and organizational support played a moderating role in the	The study focused on TQM implementation without specification on the exact TQM practice that impacts the organization's performance.	The current study did not only investigate the extent of TQM practices implementation but instead focuses on the whole system and how its performance is influenced by implementing TQM practices.

			relationship between TQM implementation and organizational performance.		
Afzal, Hanif and Rafique (2022)	Exploring the impact of TQM initiatives on construction industry projects in Pakistan.	The study examined the effect of TQM implementation on project performance.	The results indicated that TQM implementation yielded employees involvement and ultimately had a positive impact on project performance.	While this study examined the influence of TQM practices in an organization, it was conducted in Pakistan.	The current study examined the influence of implementing TQM in employees' performance in renewable energy industry.
Basnet (2018)	TQM practices on employees' job involvement in Nepalese manufacturing industry.	The objective of the study was to investigate the correlation between adoption of TQM practices and employees involvement in their job.	The study findings indicated that application of TQM practices, better results were experienced among employees.	The study was carried out in a Nepalese organization	The current used these findings to form a foundation on which further investigation on what the use of TQM practice of employee involvement has on the performance of those employees in a Kenyan organization.
Top management support and organizational employee performance					
Sallis, (2014)	Importance of top management support on organizational performance.	The study establishes a close link between top management support and performance of the employees in the organization.	The study establishes a close link between top management support and performance of the employees in the organization.	The study focused on the general organizational performance	The current study focused on investigating how TQM uses the element of top management support to influence performance of employees.

Noruzy <i>et al.</i> , (2013)	Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms	Independent variables: transformational leadership, organizational learning, knowledge management, organizational innovation Dependent variable: Organization performance	All the variables exhibited a favorable association with organizational performance.	The study focused on organization-based practices to examine the performance of the organization hence neglecting TQM practices.	This study, on the other hand, shall involve a service delivery firm in Kenya. The current study investigated the relationship between four TQM practices and chloride Exide in Kenya. The primary analysis shall entail multiple regression analysis.
Özer and Tinaztepe, (2014)	Effect of Strategic Leadership Styles on Firm Performance: A study in a Turkish SME	Independent variables: Transformational leadership Transactional leadership Paternalistic leadership Dependent variable: Firm performance	Transformation, the transactional and paternalistic leadership, has a more substantial effect on firm performance	The study viewed leadership as the primary determinant of firm performance, yet other performance elements are crucial.	The current study analysis was done by use of multi-regression analysis to establish the relationship between TQM practices and employees performance in Chloride Exide, Kenya.
Kahunyo and Waitthaka (2019)	Change management practices and performance: A case of commercial banks in Nyeri County, Kenya.	The study investigated the impact of implementing management change practices on the performance of manufacturing organizations in Kenya.	The study's findings suggest a strong correlation between management practices that foster top management support and positive performance outcomes.	Although this study shows a correlation of using management approaches that enhance top management support, it does not focus on TQM.	As a consequence, the current study used these findings to investigate the influence of TQM practices on the performance of employees in renewable energy sector—Chloride Exide, Kenya.

Source: Researcher (2023)

2.5. Conceptual Framework

The figure below shows the conceptual framework.

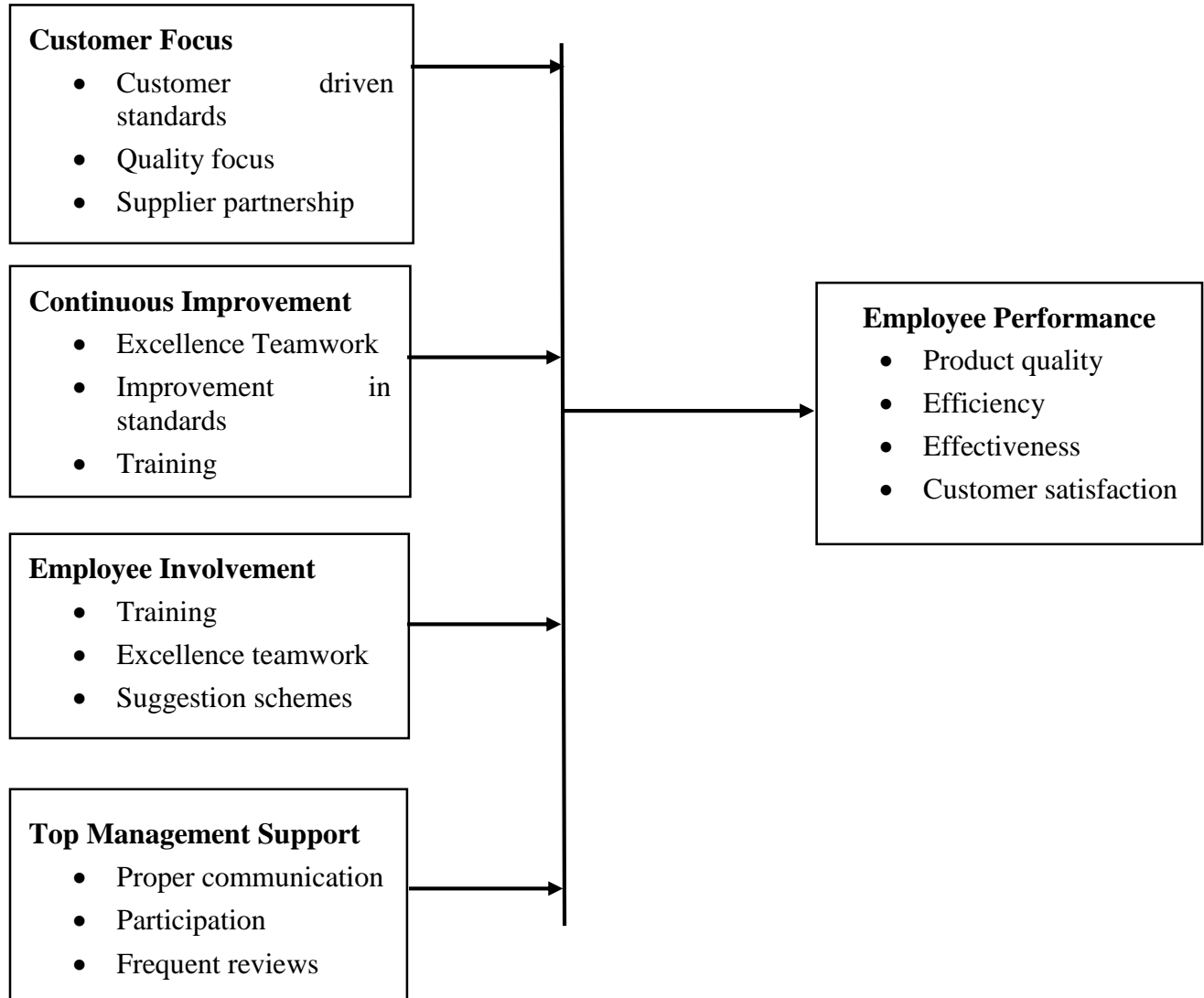


Figure 2.1: Conceptual Framework
Independent Variables

Dependent Variable

Source: Researcher (2023)

The conceptual framework in Figure 2.1 illustrates the relationship between TQM practices and employee performance within an organizational context. It is grounded in the premise that

implementing core TQM components, namely customer focus, continuous improvement, employee involvement, and top management support, can significantly enhance employee performance. Each of these TQM elements contributes uniquely to improving various aspects of employee productivity, efficiency, and job satisfaction.

Customer focus, as shown in the framework, emphasizes aligning operations with customer needs by implementing customer-driven standards, maintaining a strong focus on quality, and fostering partnerships with suppliers. These actions create an environment where employees are better equipped to meet customer expectations, thereby improving their product quality and enhancing overall customer satisfaction. Continuous improvement, another critical pillar of TQM, involves cultivating a culture of teamwork, upgrading organizational standards, and providing regular training. These practices empower employees to refine their skills, adapt to new methods, and seek better ways of performing tasks, which in turn boosts their efficiency and effectiveness.

Employee involvement is also central to the success of TQM initiatives. The framework highlights training, teamwork, and suggestion schemes as avenues through which employees actively participate in the quality improvement process. Engaging employees in decision-making and encouraging their input leads to increased motivation, ownership of tasks, and a heightened sense of responsibility, all of which positively influence their performance. Top management support plays a facilitative role by ensuring proper communication, active participation in quality initiatives, and conducting frequent reviews. When top leaders are committed to quality management and provide the necessary direction and support, employees are more likely to align their efforts with the organization's strategic goals. This alignment results in improved work morale and task execution, which enhances performance outcomes.

These TQM dimensions are expected to influence employee performance, as reflected in the outcome box on the right side of the framework. Specifically, the implementation of these practices is projected to improve product quality, efficiency, effectiveness, and customer satisfaction. The model thus presents a systematic view of how strategic quality management practices can drive employee performance, especially in a manufacturing and service-oriented company like Chloride Exide in Kenya.

CHAPTER THREE: METHODOLOGY

3.1. Introduction

This chapter provides a comprehensive overview of the research methodology for this study. It encompasses various aspects such as research design, target population, sampling strategy, data collection tools, validity and reliability measures, data analysis methods, and ethical considerations.

3.2. Research Design

A research design is a framework that helps researchers collect, analyze, and interpret data. Three categories of research designs include exploratory, descriptive, and causal. A descriptive and causal research design was used for this proposed research study. Various attributes of organizational performance were examined, and the cause-and-effect relationships among them was evaluated.

The study used a descriptive study design. Mugenda and Mugenda, (2009) state that a descriptive study seeks to collect data regarding identified problems. As such, it establishes a particular problem of the study and develops research questions which guide data collection. In the current study, data involving the opinion of the respondents about the influence of TQM on the employee's performance was collected to provide a description of the situation.

3.3. Target Population

Following Bryman's definition (2012), this research study's population encompasses the entire Chloride Exide Kenya workforce. The sample for this study was drawn from various departments within the organization, including branch managers, senior supervisors, quality assurance officers,

and sales distributors. The study population consists of 300 employees employed by Chloride Exide Kenya, which is the total employees according to human resource department.

Table 3.1: Study Population

Target Population	Frequency	Percentage
Technicians	80	27%
Sales personnel	60	20%
Customer service department	70	23%
Business development personnel	40	13%
Administration	20	7%
Supply	30	10%
Total	300	100%

Source: Author (2023)

3.5. Sample and Sampling Design

A sample population is a selected subset that aims to represent the entire population under study in a representative manner. To ensure that every sub-group of the population is represented, the study used a stratified random sampling method. Working with a 95% confidence level and 5% error, the sample size was 172 respondents. The sub-groups in the study are as shown in Table 3.5 which incorporates technicians' division, sales personnel division, customer service department, business development, administration and supply department. We use Table 3.4 to sample the frame for the study, which was created using stratified proportionate random sampling. The sample size for every stratum was established as (Mugenda & Mugenda, 2003)

$$nh = \left(\frac{Nh}{N}\right)n,$$

where nh is the sample size for stratum h , Nh represent is the size of the population for stratum h , N represents the whole population size (300 in this case), and n represents the total sample size (172 in this case). The sampling fraction was calculated using $\frac{n}{N} = \frac{172}{300}$.

Table 3.2: Study Sample

Target Population	Strata Frequency	Strata proportion	Strata Sample	Percentage
Technicians	80	$(80 \div 300) \times 172$	46	27%
Sales personnel	60	$(60 \div 300) \times 172$	34	19%
Customer service department	70	$(70 \div 300) \times 172$	41	23%
Business development personnel	40	$(40 \div 300) \times 172$	22	13%
Administration	20	$(20 \div 300) \times 172$	12	8%
Supply	30	$(30 \div 300) \times 172$	17	10%
Total	300		172	100%

Source: Researcher (2023)

3.6. Data Collection Tools and Techniques

The main method of the study data collection is through questionnaires, which effectively gather quantitative data. The choice of questionnaires is suitable for this research as they are simple to develop and administer. Due to their brevity, many participants are expected to be willing to provide their responses. Additionally, questionnaire data is easily quantifiable using research software. The respondents were presented with a list of initiatives and asked to indicate whether they are available in their organization. (Remenyi, 2013). The list included adoption of customer focus approach of TQM, continuous improvement approach application, adoption of employee improvement initiatives and top management support initiatives. The degree of concurrence or discord was assessed employing a Likert scale, and the responses was assigned codes to facilitate data analysis.

3.6.1. Validity of the study

To assess the accuracy of a study in gauging its intended purpose. During data collection, it is essential to effectively manage extraneous variables that could impact the legitimacy of the study statistics. Two primary types of validity should be considered: internal and external. Internal

validity relates to potential weaknesses or limitations within the research, such as deficiencies in the study design or problems with the research instruments used, which can undermine the accuracy of the study's findings. On the other hand, external validity concerns how the research findings can be generalized to contexts beyond the specific research setting. Various factors can influence external validity, including the population's characteristics, the study's duration, the research environment, and the interactions among the subjects involved.

To verify that the result was comprehensive to the entire population, a relevant and representative sample was chosen for external validity. The researcher gave the project supervisor the questionnaire so that it can be evaluated professionally.

3.6.2. Reliability of the Study

According to Merriam and Tisdell (2015), reliability pertains to the level of consistency observed in an experiment or test's results when conducted under similar conditions. In this particular study, the reliability of the data was evaluated utilizing Cronbach's alpha. It is a statistical measure employed to evaluate the uniformity of a scale and ascertain the extent of correlation among the items in a given set. It examines both the covariance between pairs of items and the overall score's variance. Pearson's correlation coefficient was employed to evaluate the data's reliability, which ranges from 0 to 1, with a significance level of $P \leq 0.01$. However, a coefficient of 0.7 or higher was deemed acceptable for this study.

Further, reliability was enhanced through the use of open-ended qualitative data. As Tourangeau (2020) notes open ended qualitative questions allow unlimited response from the respondents, delivery of new insights, provision of in-depth knowledge about the organization and following up on the entire customer journey.

3.7. Data Analysis and presentation

Data analysis is a structured approach to organizing and combining research data and examining hypotheses (Shaout and Trivedi, 2013). This research presents the gathered data in tables and charts and utilize statistical software like SPSS to analyze it. The analysis entailed calculating the average and conducting multiple regression analyses to determine the R-square value. The conclusions drawn are based on appropriate analysis techniques. The correlation between variables was tested using p-values at 1% significant level, that is, $p \leq 0.01$. The model equation for the study is as follows:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + e,$$

where Y is the influence of TQM on employees performance, x_1 is the customer focus, x_2 are the types of continuous improvement, x_3 is the employee involvement, x_4 , is leadership support, $\beta_i \forall i = 0,1, \dots, 4$ are the co-efficients, and e is the margin of error.

3.8. Ethical Considerations

Ethics involves being mindful of the moral entitlements of others. Hence, protecting the rights of all individuals engaged in research is crucial. Preserving privacy, obtaining informed consent, ensuring confidentiality, and maintaining accuracy are the fundamental ethical considerations that must be upheld. This research strictly adheres to all ethical principles throughout the entire research process. The National Commission for Science, Technology and Innovation (NACOSTI) provides authorization to conduct the study (See Permit in Appendix C), and participants were requested to participate voluntarily, with the freedom to withdraw at any point. The participants were duly informed that their consent is implied by completing the questionnaires. The questionnaires did not require including respondents' names, and all data collected was

confidential and used solely for this study, fulfilling the requirements for a master's degree, and the researcher carried out the research.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4.1. Introduction

This chapter presents the results and discussion of the data collected from chloride oxide employees in Nairobi, Kenya. The data were collected in line with the primary objective of the research, which was to determine the relationship between TQM practices and employee performance in Chloride Oxide in Kenya. The study specifically sought to establish the effects of customer focus on the employee performance of Chloride Oxide in Kenya; examine the extent to which adoption of continuous improvement influences employee performance in Chloride Oxide Kenya; determine the effects of employee involvement in decision-making on the employees' performance of Chloride Oxide in Kenya; and establish the effect of management support on the performance of employees in Chloride Oxide in Kenya.

4.2. Questionnaire Response Rate

The researcher targeted 172 respondents drawn from technicians, sales personnel, customer service department, business development personnel, administration and supply personnel. Out of the 172 respondents, the researcher received 168 responses thereby recording a return rate of 97.7%. Research has a consensus that a 50% response rate is acceptable, a 60% response rate is favourable, and anything exceeding 70% is regarded as a high response rate (Mugenda & Mugenda, 2003). Thus, the high response rate achieved in this study can be attributed to the meticulous organization and diligent efforts of the researcher and their research assistants in effectively engaging with respondents and adhering to established data collection procedures. This elevated response rate can also be credited to the participants' keen interest in the study topic and their unwavering commitment to it.

4.3. Reliability Analysis

The study utilized Cronbach's Alpha coefficient, a scale from 0 to 1, to evaluate the internal consistency of the research instruments. These values are generally recommended to be below 0.70 (Tavakol & Dennick, 2011). The construct reliability for the study is presented in Table 4.1.

Table 4.1: Reliability Analysis

Scale	Cronbach's Alpha	Number of Items
Customer Focus	.81	3
Continuous Improvement	.911	3
Employee Involvement	.936	3
Top Management Support	.788	3
Employee Performance	.931	4
Average	.8752	

Source: Researcher (2023)

Table 4.1 presents the Cronbach's Alpha for each of the objectives. Employee involvement had the highest reliability (.936), followed by continuous improvement (.911), then customer focus (.81), and lastly, top management support (.788). Employee performance, a dependent variable, was listed since it has 4 indicators, which all met the reliability test since the average reliability values were 0.8752, exceeding the ideal target of 0.7. Therefore, the study was reliable.

4.4. Demographic Characteristics of Respondents

This section presents the demographic information about the respondents that participated in the survey.

4.4.1. Respondents Age

The survey also inquired about the respondent's age. The age was categorized into 4 categories. The results are presented in Pie-chart in Figure 4.1.



Figure 4.1: Respondent's age

Source: Researcher (2023)

Figure 4.1 indicates that the majority (39.29%) of the respondents were 36 and 45 years old, 29.17% of the respondents indicated that they were aged between 25 and 35. 21.43% of the respondents were aged below 25 years and while the minority (10.12%) were over 45 years old. This indicated that the study respondents were from all the age groups.

4.4.2. Level of education

The survey inquired about the respondents' level of education, which were categorized into 5 levels: certificate, diploma, Bachelor's and Master's degree, Ph.D., and others. The results are presented in Figure 4.2.



Figure 4.2: Respondent's level of education

Source: Researcher (2023)

Figure 4.2 indicates that the majority (54.17%) of the respondents had a Bachelor’s degree, followed by 35.71% who had Diploma degrees. 7.14% of the respondents had certificate degrees and minority of the respondents, 2.98% had Master's degrees. The fact that more than 55% had Bachelors' and Master's degrees indicates that the Chloride Exide employee has adequate knowledge on TQM practices.

4.4.3. Employment Level/department

The research also inquired about the respondent’s department, categorized as a technician, sales personnel, customer service, business development, administrator, and supplier or procurement officer. The result is presented in Figure 4.3.



Figure 4.3: Respondent's employment level

Source: Researcher (2023)

Figure 4.3 indicates that the majority (26.51%) of the respondents are technicians, followed by 24.1% being customer service personnel. 19.88% of the respondents were sales personnel, while 12.65% were business developers, and 9.64% were supplier and procurement officers. The minority were administrators (7.23%). The study focused on all the employees and in all the departments, with 75% of the respondents having a technical understanding of TQM; hence, the survey data may be accurate.

4.4.4. Department position

The investigator desired to identify the position of the respondents in the organization. These positions were categorized into subordinate staff, sales distributors, quality assurance officers, and senior supervisors. The finding is shown in Figure 4.4.



Figure 4.4: Respondents departmental level or position

Source: Researcher (2023)

Figure 4.4 indicates that the majority (35.71%) of the respondents are sales distributors, followed by 33.93% who are subordinate staff, 24.4% are affiliated with quality assurance officers, and 5.95% are senior supervisors. This indicate that the study focused on all the department in order to have a clear picture of the TQM practices in the organization.

4.4.5. Duration of employment

The researcher wanted to know the respondents' duration in the organization. The duration was in 4 categories: below five years, 6-10 years, 11-15 years, and above 16 years. Figure 4.5 presents the findings.



Figure 4.5: Duration in organization

Source: Researcher (2023)

Figure 4.5 indicates that the majority (54.17%) of the respondents have been in the organization between 6-10 years, while the minority, 8.93% have been above 16 years. 18.45% have been in the organization between 11-15 years and similar percentage below 5 years. This indicates that the respondent's response is not biased since they have been long enough in the organization.

4.4.6. Employment status

The researcher wanted to know the status of the respondent's employment. This assesses if the respondents respond to some questions for formalities without prior ascertaining whether the finding would impact the organization. The results are presented in Figure 4.6.



Figure 4.6: Respondent’s employment status

Source: Researcher (2023)

Figure 4.6 indicates that most respondents (78.57%) are permanently employed in the organization, followed by 10.71% who are contracted, while a minority (3.57%) are casuals, and 7.14% are interns. This indicates that the response survey is valid as the employees gave information purporting to help improve their performance. This also shows that the data obtained is accurate to some degree.

4.5. Analysis of Employee performance

The researcher wanted to find out how they rate their organizational performance. The respondents were asked questions about their performance, such as their contribution to product quality, efficiency, effectiveness, and customer satisfaction. The data was collected using 5-point Likert scale in order to capture the feedback of the respondents. The respondents were also asked for their

general opinion of the organization's performance improvement. The results are presented as follows.

When asked the “to what extent does employee performance of chloride Exide ltd improved?” the respondents survey is presented in Table 4.2.

Table 4.2: to what extent does employee performance of chloride Exide ltd improved

Extent	Frequency	Percentage
No extent	16	9.5
Little Extent	17	10.1
Moderate extent	33	19.6
Great extent	34	20.2
Very great extent	68	40.5
Total	168	100

Source: Researcher (2023)

Table 4.2 indicates that 40.5% of the respondents acknowledged that the employee performance in Chloride Exide has improved to a great extent, while 20.2% agreed. The fact that $(39.5+19.8) = 59.3\%$ believe that employee performance in Chloride Exide has improved to great extent and very great extent, indicates that employee performance is improving in the organization.

Respondents were asked to rate the employee performance at Chloride Exide in terms of product quality based on Likert Scale of 1=very poor, 2=poor, 3=neutral, 4=good and 5=very good. The results are summarized in Table 4.3.

Table 4.3: Employee performance at Chloride Exide Ltd

		Very poor	Poor	Neural	Good	Very good	M	SD
How do you rate the employee performance at Chloride Exide in terms of product quality?	Frequency	17	34	16	54	47	3.48	1.353
	%	9.9	19.8	9.3	31.4	27.3		
How do you rate the employee performance at Chloride Exide in terms of efficiency?	Frequency	34	16	32	23	63	3.39	1.551
	%	19.8	9.3	18.6	13.4	36.6		
How do you rate the employee performance at Chloride Exide in terms of effectiveness?	Frequency	17	17	31	80	23	3.45	1.157
	%	9.9	9.9	18	46.5	13.4		
How do you rate the employee performance at Chloride Exide in terms of customer satisfaction?	Frequency	17	17	0	47	87	4.01	1.358
	%	9.9	9.9	0	27.3	50.6		
Overall							3.583	1.355

Source: Researcher (2023)

Table 4.3 indicated that a majority of the respondents noted that employee performance at Chloride Exide in terms of product quality is good while an approximate number noted very good. This was also supported by the mean (M)= 3.48, which translates the good and a standard deviation (SD)=1.353.

A majority of the responents also noted that the rate of employee performance at Chloride Exide in terms of efficiency is very good. The M= 3.39 \approx 3, with a SD=1.551. The survey data indicate

varied responses, as the standard deviation was greater than 1. However, 50% rated it as good and very good; thus, employee performance in terms of efficiency at Chloride Exide Ltd is good.

A majority of the respondents noted that the rate of employee performance at Chloride Exide in terms of effectiveness is good. This was supported by 23 (13.4%) rated it good, while 63 (36.6%) rated it very good. The $M=3.39 \approx 3$, with a $SD= 1.551$. The survey data indicate varied responses, as the standard deviation was greater than 1. However, 50% rated it as good and very good; thus, employee performance in terms of efficiency at Chloride Exide Ltd is good.

Table 4.3 also indicates that respondents noted that employee performance at Chloride Exide in terms of effectiveness is good. This is because 80 (46.5%) rated it good, while 23 (13.4%) rated it very good. The $M= 3.45 \approx 4$, with a $SD=1.157$. The survey data indicate varied responses, as the standard deviation was greater than 1. However, more than 60% rated it as good and very good; thus, employee performance in terms of effectiveness at Chloride Exide Ltd is good.

Table 4.3 also indicated that respondents rate the employee performance at Chloride Exide in terms of customer satisfaction as good. This is because 47 (27.5%) rated it good, while 87 (50.6%) rated it very good. The $M=4$, with a $SD=1.358$. The survey data indicate varied responses, as the standard deviation was greater than 1. However, more than 75% rated it as good and very good; thus, employee performance in terms of customer satisfaction at Chloride Exide Ltd is good.

In overall the employee performance at Chloride Exide Ltd was good, as shown by an aggregate $M=3.583 \approx 4$ which translates to good. The $SD=1.355$. The highest rating in employee performance at Chloride Exide Ltd was related to customer satisfaction. This aligns well with the principles of TQM stipulated by Sallis (2014) and Dahlgaard-Park (2012), which emphasize the paramount importance of customer focus. TQM advocates for a management approach that

prioritizes customer satisfaction, as satisfied customers are essential for the success and sustainability of any organization. The emphasis on customer satisfaction likely contributed to the positive employee performance ratings, indicating that employees effectively meet or exceed customer expectations. The results align with the observations made by Nguyen and Nagase (2019), which suggest that TQM involves creating a company culture that prioritizes customer satisfaction and improvement, requiring the active participation of all employees. In Chloride Exide Ltd, the positive employee performance ratings reflect the organization's commitment to TQM principles by fostering a culture where employees are empowered to contribute to customer satisfaction and organizational success.

4.6. Customer focus

The researcher sought to know the influence of the customer focus on employee performance at Chloride Exide. The researcher first sought the opinion of respondents in general regarding the extent to which customer focus has improved employee performance at Chloride Exide. This was assessed via a 5-point Likert scale, namely, No extent, small extent, Moderate extent, large extent, and very large extent. The results of the survey are presented in Table 4.4.

Table 4.4: To what extent does customer focus influence employee performance of Chloride Exide ltd

Extent	Frequency	Percentage
No extent	0	0
Little Extent	15	8.93
Moderate extent	34	20.24
Great extent	35	20.83
Very great extent	84	50
Total	168	100

Source: Researcher (2023)

Table 4.4 indicates that 50% of the respondents acknowledged that customer focus has influenced the employee performance in Chloride Exide to very great extent, while to great extent 20.83%.

respondents with moderate extent were 20.24% while those responding with little extent were 8.93% and no extent were 0%. The SD=1.025 \approx 1, indicating less variation in responses; hence, the conclusion can easily be drawn from data. The mean indicates the respondents greatly acknowledge the improvement in employee performance due to customer focus. Table 4.5 summarizes the respondents' responses on the indicators on the influence of customer focus on employee performance at Chloride Exide ltd.

Table 4.5: Customer focus on employee performance in Chloride Exide Ltd.

		Strongly disagree	Disagree	Neural	Agree	Strongly agree	M	SD
Customer driven standards influences employee performance in Chloride Exide	Frequency		17	32	35	84	4.11	1.044
	%		9.9	18.6	20.3	48.8		
Quality focus influences employee performance in Chloride Exide	Frequency	17	16	0	69	66	3.9	1.298
	%	9.9	9.3	0	40.1	38.4		
Supplier partnership influences employee performance in Chloride Exide	Frequency	0	17	16	49	86	4.21	0.986
	%	0	9.9	9.3	28.5	50		
Overall							4.07	1.109

Source: Researcher (2023)

Table 4.5 indicates that when respondents were asked, ‘customer-driven standards influence employee performance in Chloride Exide’, 35 (20.3%) agreed, while 84 (48.8%) strongly agreed. The $M=4.11$, with a $SD=1.044$. The survey data indicate fewer response variations, as the SD was closer to 1. However, more than 60% agreed; thus, customer-driven standards improve employee performance at Chloride Exide Ltd.

Table 4.5 indicates that when respondents were asked, ‘quality focus influences employee performance in Chloride Exide’, 69 (40.1%) agreed, while 66 (38.4%) strongly agreed. The $M=3.9 \approx 4$, with a $SD=1.298$. The survey data indicate slightly wider response variations, as the SD greater than 1. However, more than 70% agreed; thus, quality focus improves employee performance at Chloride Exide Ltd.

Table 4.5 indicates that when respondents were asked, ‘supplier partnership influences employee performance in Chloride Exide’, 49 (28.5%) agreed, while 86 (50%) strongly agreed. The $M=4.21 \approx 4$, with a $SD=0.986$. The survey data indicate lesser response variations, as the SD less than 1, thus conclusions drawn from survey data could be accurate. However, more than 70% agreed; thus, supplier partnership improves employee performance at Chloride Exide Ltd.

The results indicate that customer focus and supplier partnership significantly influence employee performance at Chloride Exide Ltd. The mean score of 4.07 for customer focus suggests a high emphasis on meeting customer needs. In contrast, the highest rating of 4.21 for supplier partnership highlights the importance of collaborative relationships with suppliers in enhancing employee performance. These findings align with previous research by Nguyen and Nagase (2019) and Mohammed et al. (2014), emphasizing the relationship between TQM practices and customer satisfaction. TQM practices, such as customer focus and supplier partnership, have positively

influenced customers' perceptions of service quality, leading to improved satisfaction levels. The results align with the literature suggesting that organizations like Chloride Exide Ltd can enhance employee performance by implementing TQM practices prioritizing customer satisfaction and establishing strong partnerships with suppliers. Organizations can improve service quality, enhance customer satisfaction, and ultimately drive employee performance by focusing on meeting customer needs and fostering collaborative relationships with suppliers.

Continuous Improvement

The researcher assessed the respondent's extent to which continuous improvement impact the employee performance at Chloride Exide and the results of the survey is presented in Table 4.6. This was assessed via a 5-point Likert scale, namely, No extent, small extent, Moderate extent, large extent, and very large extent. The results of the survey are presented in Table 4.6.

Table 4.6: To what extent does continuous improvement impact employee performance at Chloride Exide ltd

Extent	Frequency	Percentage
No extent	15	8.93
Little Extent	17	10.11
Moderate extent	17	10.11
Great extent	36	21.43
Very great extent	83	49.4
Total	168	100

Source: Researcher (2023)

Table 4.6 indicates that 49.4% of the respondents acknowledged that continuous improvement impacts the employee performance in Chloride Exide ltd to very great extent, while to great extent 21.43%. An equal percentage of respondents noted little extent or moderate extent that continuous improvement impact employee performance at Chloride Exide limited. Table 4.7 summarizes the respondents' responses on the indicators on the impact of continuous improvement on employee performance at Chloride Exide Ltd.

Table 4.7: Continuous improvement impacts employee performance in Chloride Exide Ltd

		Strongly disagree	Disagree	Neural	Agree	Strongly agree	M	SD
Adoption of excellence teamwork influences employee performance in Chloride Exide Kenya	Frequency	14	0	55	56	43	3.68	1.112
	%	8.1	0	32	32.6	25		
Adoption of improvement standards influences employee performance in Chloride Exide Kenya	Frequency	14	0	43	66	45	3.76	1.107
	%	8.1	0	25	38.4	26.2		
Adoption of training influences employee performance in Chloride Exide Kenya	Frequency	14	15	0	84	54	3.89	1.198
	%	8.1	8.7	0	48.8	31.4		
Overall							3.77	1.127

Source: Researcher (2023)

Table 4.7 indicates that when respondents were asked, ‘adoption of excellence teamwork influences employee performance in Chloride Exide Ltd’, 56 (32%) agreed, while 43 (25%) strongly agreed. The $M=3.68 \approx 4$, with a $SD=1.112$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus conclusions drawn from survey data could be accurate. However, more than 50% agreed; thus, adoption of excellence teamwork influences employee performance in Chloride Exide Ltd.

Table 4.7 indicates that when respondents were asked, ‘adoption of improvement standards influences employee performance in Chloride Exide Kenya’, 66 (38.4%) agreed, while 45 (26.2%) strongly agreed. The $M=3.68 \approx 4$, with a $SD= 1.107$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus conclusions drawn from survey data could be accurate. However, more than 50% agreed; thus, adoption of improvement standards influences employee performance in Chloride Exide Ltd.

Table 4.7 indicates that when respondents were asked, ‘adoption of training influences employee performance in Chloride Exide Ltd’, 84 (48.8%) agreed, while 54 (31.4%) strongly agreed. The mean was $3.89 \approx 4$, with a SD of 1.198. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus conclusions drawn from survey data could be accurate. However, more than 80% agreed; thus, adoption of training influences employee performance in Chloride Exide Ltd.

The results suggest that continuous improvement significantly impacts employee performance at Chloride Exide Ltd, with respondents acknowledging its importance. The $M=3.77$, $SD=1.127$ indicates a positive perception of continuous improvement initiatives, while the highest $M=3.89$, $SD=1.198$ for the influence of training adoption on employee performance highlights its significance. These findings are consistent with research by Khan et al. (2019), which demonstrated the positive effects of continuous improvement on organizational performance. Their study showed that implementing continuous improvement practices reduced operational timelines and increased profit margins. Additionally, a clean and organized workplace was associated with improved employee performance. Similarly, Gitonga, Kisato, and Pete (2022) found that insufficient implementation of Total Quality Management (TQM) practices,

particularly in areas like continuous improvement, was linked to below-average organizational performance. This underscores the importance of implementing continuous improvement strategies to enhance employee performance and organizational effectiveness. The results suggest that Chloride Exide Ltd can improve employee performance by prioritizing continuous improvement initiatives, such as training adoption and maintaining a tidy workplace. Organizations can optimize their operations, increase profitability, and enhance employee performance by implementing TQM practices effectively.

4.7. Employee Involvement

The researcher assessed the respondent's extent to which employee involvement impact the employee performance at Chloride Exide. This was assessed via a 5-point Likert scale, namely, 1=No extent, 2=little extent, 3=Moderate extent, 4=large extent, and 5=very large extent. The results of the survey are presented in Table 4.8.

Table 4.8: To what extent does employee involvement impact employee performance at Chloride Exide ltd

Extent	Frequency	Percentage
No extent	0	0
Little Extent	15	8.93
Moderate extent	34	20.24
Great extent	68	40.47
Very great extent	51	30.36
Total	168	100

Source: Researcher (2023)

Table 4.8 indicates that 29.7% of the respondents acknowledged that employee involvement impacts the employee performance in Chloride Exide ltd to very great extent, while to great extent 39.5%. The SD=0.929, indicating a less variation in responses; hence, the conclusion can easily be drawn from data. The $M=3.92 \approx 4$) indicates the respondents greatly acknowledge the

improvement in employee performance due to employee involvement. Table 4.9 summarizes the respondents' responses on the indicators on the impact of employee involvement on employee performance at Chloride Exide Ltd.

Table 4.9: Employee involvement impacts employee performance in Chloride Exide Ltd

		Strongly disagree	Disagree	Neural	Agree	Strongly agree	M	SD
Employees training influence employees performance in Chloride Exide in Kenya	Frequency	17	17	34	65	35	3.5	1.219
	%	9.9	9.9	19.8	37.8	20.3		
Employee's excellence teamwork influence employee's performance in Chloride Exide in Kenya	Frequency	17	17	34	33	67	3.69	1.353
	%	9.9	9.9	19.8	19.2	39		
Employees suggestion schemes influence employees performance in Chloride Exide in Kenya	Frequency	17	34	0	67	50	3.59	1.364
	%	9.9	19.8	0	39	29.1		
Overall							3.59	1.312

Source: Researcher (2023)

Table 4.9 indicates that when respondents were asked, 'employee's training influence employees' performance in Chloride Exide in Kenya', 65 (37.8%) agreed, while 35 (20.3%) strongly agreed.

The $M=3.5 \approx 4$, with a $SD=1.219$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn from survey data. However, more than 55% agreed; thus, employee's training influence employees' performance in Chloride Exide in Ltd.

Table 4.9 indicates that when respondents were asked, 'employees excellence teamwork influence employees' performance in Chloride Exide in Ltd', 33 (19.2%) agreed, while 67 (39%) strongly agreed. The $M=3.69 \approx 4$, with a $SD=1.353$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn from survey data. However, 49% agreed, while 34(19.8%) were neutral, thus it's not guaranteed that, employees excellence teamwork influence employees' performance in Chloride Exide in Ltd.

Table 4.9 indicates that when respondents were asked, 'employees suggestion schemes influence employee's performance in Chloride Exide in Kenya' 67 (39%) agreed, while 50 (29.1%) strongly agreed. The $M=3.59 \approx 4$, with a $SD=1.364$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn from survey data. However, more than 60% agreed; thus, employees suggestion schemes influence employee's performance in Chloride Exide in Ltd.

The results indicate that employee involvement significantly influences employee performance at Chloride Exide Ltd, with respondents recognizing its importance. The overall $M=3.59$, $SD=1.312$ suggests a positive perception of employee involvement initiatives, while the highest $M=3.59$, $SD=1.364$ for the influence of employee suggestion schemes further emphasizes its impact. These findings are consistent with research by Afzal, Hanif, and Rafique (2022), who found that implementing Total Quality Management (TQM) practices led to enhanced employee

involvement, positively affecting project performance. This suggests that when employees are actively engaged in decision-making processes and encouraged to contribute their ideas, they are more likely to perform better and contribute to organizational success. Similarly, Basnet (2018) demonstrated that applying TQM practices improved employee outcomes. This underscores the importance of fostering a culture of employee involvement and empowerment within organizations, as it can lead to enhanced performance and overall success. The findings suggest that Chloride Exide Ltd can enhance employee performance by implementing TQM practices that prioritize employee involvement, such as employee suggestion schemes. By encouraging employees to participate in decision-making processes and providing opportunities to contribute their ideas, organizations can create a more engaged and motivated workforce, ultimately leading to improved performance and outcomes.

4.8. Top Management Support

The researcher assessed the respondent’s extent to which top management support impact the employee performance at Chloride Exide Ltd. This was assessed via a 5-point Likert scale, namely, No extent, small extent, Moderate extent, large extent, and very large extent. The results of the survey are presented in Table 4.10.

Table 4.10: To what extent does top management support impact employee performance at Chloride Exide ltd

Extent	Frequency	Percentage
No extent	14	8.33
Little Extent	13	7.74
Moderate extent	13	7.74
Great extent	84	50
Very great extent	44	26.19
Total	168	100

Source: Researcher (2023)

Table 4.10 indicates that 26.19% of the respondents acknowledged that top management support impacts the employee performance in Chloride Exide ltd to very great extent, while to great extent 50%. Table 4.11 summarizes the respondents’ responses on the indicators on the top management support on employee performance at Chloride Exide Ltd.

Table 4.11: Top Management support impacts employee performance in Chloride Exide Ltd

		Strongly disagree	Disagree	Neural	Agree	Strongly agree	M	SD
Proper communication influences the performance of employees in Chloride Exide Ltd.	Frequency	17	0	32	67	52	3.82	1.177
	%	9.9	0	18.6	39	30.2		
Participation influences the performance of employees in Chloride Exide Ltd.	Frequency	17	17	34	48	52	3.60	1.296
	%	9.9	9.9	19.8	27.9	30.2		
Frequent reviews influence the performance of employees in Chloride Exide Ltd.	Frequency	17	34	0	85	49	3.79	1.253
	%	9.9	19.8	0	49.4	28.5		
Overall							3.74	1.242

Source: Researcher (2023)

Table 4.11 indicates that when respondents were asked, ‘proper communication influences the performance of employees in chloride Exide in Ltd., 67 (39%) agreed, while 52 (30.2%) strongly agreed. The $M=3.82 \approx 4$, with a $SD=1.177$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn

from survey data. However, 69.2% agreed, thus it's guarantees that, proper communication influences the performance of employees in Chloride Exide in Ltd.

Table 4.11 indicates that when respondents were asked, 'participation influences the performance of employees in Chloride Exide Ltd., 48(27.9%) agreed, while 52 (30.2%) strongly agreed. The $M=3.60 \approx 4$, with a $SD=1.296$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn from survey data. However, 58.1% agreed, thus it's guarantees that, participation influences the performance of employees in Chloride Exide Ltd.

Table 4.11 indicates that when respondents were asked, 'frequent reviews influence the performance of employees in Chloride Exide Ltd., 85(49.4%) agreed, while 49(28.5%) strongly agreed. The $M=3.79 \approx 4$, with a $SD=1.253$. The survey data indicate slightly wider variation of response, as the SD greater than 1, thus, there is no guaranteed accuracy in the conclusions drawn from survey data. However, 78.3% agreed, thus it's guarantees that, frequent reviews influence the performance of employees in Chloride Exide Ltd.

The results suggest that top management support significantly influences employee performance at Chloride Exide Ltd, with respondents recognizing its importance. The overall $M=3.74$, $SD=1.242$ indicates a positive perception of top management support, while the highest $M=3.82$, $SD=1.177$ for the influence of proper communication further highlights its impact. These findings align with research by Kahunyo and Waithaka (2019), who found a significant association between management practices that endorse top management support and favorable performance outcomes. This indicates that when top management is supportive and communicates effectively with employees, it can improve performance and organizational success. However, implementing TQM

in Africa, including at Chloride Exide Ltd, faces challenges due to limited resources and infrastructure, as Beraki et al. (2022) noted. Many African countries need more resources and infrastructure to support effective TQM implementation, such as reliable electricity, internet connectivity, and adequate training facilities. These challenges can hinder organizations' ability to fully leverage TQM principles, including top management support and effective communication, to improve employee performance and organizational outcomes. This also explains why the highest M=3.82 was associated with proper communication. Despite these challenges, organizations like Chloride Exide Ltd can still benefit from TQM practices by maximizing available resources, investing in employee training, and leveraging technology where possible.

4.10 Inferential Statistics

The inferential statistics, comprising of correlation and regression analysis, are presented in this section.

4.10.1 Correlation Analysis

Correlation analysis shows the strength of relationship between dependent variable (employee performance) and independent variables (customer focus, continuous improvement, employee involvement and top management support). The analysis informs the researcher how the changes in independent variables affects dependent variable. In this study, Pearson correlation coefficient, r , which quantifies the strength and direction of the linear relationship between dependent and independent variables is used. It ranges from -1 to 1: a positive correlation ($r > 0$) indicates that as one variable increases, the other tends to increase as well. A negative correlation ($r < 0$) indicates that as one variable increases, the other tends to decrease. An r -value of 0 means there is no linear relationship between the variables. The correlation analysis is presented in Table 4.12.

Table 4.12: Correlation analysis between independent variables and dependent variable

		Customer focus	Continuous improvement	Employee involvement	Top management support	Employee performance
Customer focus	Correlation	1	.801**	.607**	.036	-.022
	Sig. (2-tailed)		.000	.000	.647	.773
Continuous improvement	Correlation	.801**	1	.825**	.023	.237**
	Sig. (2-tailed)	.000		.000	.763	.002
Employee involvement	Correlation	.607**	.825**	1	.006	.440**
	Sig. (2-tailed)	.000	.000		.936	.000
Top management support	Correlation	.036	.023	.006	1	-.009
	Sig. (2-tailed)	.647	.763	.936		.908
Employee performance	Correlation	-.022	.237**	.440**	-.009	1
	Sig. (2-tailed)	.773	.002	.000	.908	

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

Source: Researcher (2023)

Table 4.12 indicates that the relationship between all independent variables with employee performance, except top management support, is statistically significant. The results suggest that a study at Chloride Exide, found a weak negative correlation ($r = -0.022$, $p = 0.773$) between customer focus and employee performance, suggesting little to no association. This differs from literature like Nguyen and Nagase (2019), which linked TQM practices to customer satisfaction. However, the study's focus on TQM's impact on employee performance rather than customer satisfaction distinguishes it. The weak negative correlation implies other factors, such as organizational culture and leadership, may outweigh customer focus in influencing performance. Although prioritizing customer focus and employee performance is vital, Chloride Exide should address broader internal factors to enhance overall performance and meet objectives. This

highlights the complexity of organizational dynamics and the need for multifaceted strategies beyond solely customer-oriented approaches.

The results suggest that a study at Chloride Exide found a weak positive but statistically significant correlation ($r=0.237$, $p=0.002$) between continuous improvement and employee performance. Although not strong, this suggests a positive relationship between the two. Supporting literature, like Khan et al. (2019), observed similar positive effects of continuous improvement on operational efficiency and workplace organization. Gitonga, Kisato, and Pete (2022) highlighted the importance of effective implementation of continuous improvement, even in different contexts like educational institutions, for organizational success. Despite the weak correlation, investing in continuous improvement initiatives at Chloride Exide could lead to gradual enhancements in employee performance, aligning with broader findings on the benefits of such practices.

The study reveals that at Chloride Exide, there is a positive and statistically significant correlation ($r=0.444$, $p=0.000$) between employee involvement and satisfaction, suggesting a meaningful relationship. This aligns with Afzal, Hanif, and Rafique's (2022) findings in the construction industry, linking TQM practices to enhanced employee involvement and project performance. Basnet (2018) similarly demonstrated TQM's positive impact on employee engagement in manufacturing, indirectly indicating increased satisfaction. Thus, implementing TQM practices fostering employee involvement can boost satisfaction at Chloride Exide. This underscores the importance of involving employees in decision-making and cultivating a supportive work environment to enhance overall performance and organizational success.

The correlation between top management and employee performance at Chloride Exide was weak negative and statistically insignificant ($r=-0.009$, $p=0.908$), indicating no meaningful relationship.

This aligns with research by Özer and Tinaztepe (2014) on leadership styles in SMEs in Turkey and Kahunyo and Waithaka (2019) study on management change practices in Kenyan manufacturing firms, which didn't focus on Total Quality Management (TQM). Despite using these findings to explore TQM's effects on employee performance in Chloride Exide's renewable energy sector, the lack of correlation suggests other factors may dominate. Chloride Exide should delve deeper into the relationship between top management, TQM implementation, and employee performance, possibly through additional research or targeted interventions to identify and address barriers to effective TQM implementation and performance improvement.

4.10.2 Diagnostic Test

The diagnostic test conducted on the data collected in the study included the multicollinearity test, normality test and test for heteroscedasticity.

4.10.2.1 Multicollinearity Test

Table 4.13 presents the tolerance and variation inflation factor (VIF) statistics for the collinearity among the independent variables.

Table 4.13: Tolerance and VIF Measures

Model		Collinearity Statistics	
		Tolerance	VIF
1	Customer focus	.307	3.253
	Continuous improvement principle	.193	5.17
	Employee involvement	.319	3.137
	Top management support	.999	1.001

a. Dependent Variable: to what extent does employee performance of chloride Exide ltd improved

Source: Researcher (2023)

The study adopted the Kalnins and Praitis (2023) threshold value, who stated that a VIF of 4.0 represents a high multicollinearity status. From Table 4.13 customer focus had VIF of 3.253,

continuous improvement principle had a VIF of 5.17, employee involvement had a VIF of 3.137, while top management support had a VIF 1.002. The findings illustrated that all the independent variables realized a high tolerance value, which explains that the beta values of the regression equation of the independent variable would be stable with low standard error terms. Tolerance is regarded as part of the denominator in calculating the confidence limits on the partial regression coefficient. As a rule of thumb, the VIF of independent variables that exceed 10 is considered collinear (Kalnins & Praitis, 2023). Therefore, gauging this rule of thumb suggests that there was no collinearity among the independent constructs.

4.10.2.2 Normality Test

The normality test sought to establish the normal distribution for the employee performance based on the response on Chloride Exide. This was tested for Gaussian distribution using numerical and graphical methods. According to Liu and Wang (2021) many data analysis methods like t-test, ANOVA and regression analysis depend on the assumption that data was sampled from a Gaussian distribution.

Table 4.14: Kolmogorov-Smirnov and Shapiro-Wilk tests for Employee Performance

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Employee performance	.235	168	.000	.831	168	.000

a. Lilliefors Significance Correction

*Lower bound of true significance

Source: Researcher (2023)

The results from the Kolmogorov-Smirnov and Shapiro-Wilk tests indicate minimal statistical differences, as evidenced by a p-value of 0.000, suggesting that employee performance follows a normal distribution. The overall pattern is normally distributed. The insignificant test statistics

indicate that the normality of the dependent variable holds. Shelvin and Miles (2010) noted that these findings suggest that the significance test results for this data are reasonably precise.



Figure 4.7: Normal Curve Plot

Source: Researcher (2023)

Figure 4.7 indicate the visual distribution of random variables of difference between an observed distribution and theoretical distribution of employee performance. At very low values of the variable, some minimal deviation from normality is considered normal.

4.10.2.3 Test for Heteroscedasticity

The study tested for the heteroscedasticity using the Breusch-Pagan/Cook-Weisberg test. The results are presented in Table 4.15.

Table 4.15: Breusch-Pagan/Cook-Weisberg test Results

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variables: fitted values of employee performance

Chi2 (1) = 0.188

Prob > chi2 = 0.6096

Source: Researcher (2023)

Based on the results, the chi-square value was negligible, indicating that heteroscedasticity was not an issue, or if it was present, it did not vary multiplicatively with the predicted values. Furthermore, the p-value of 0.6096 exceeded the significance threshold of 0.05, suggesting no evidence of homoscedasticity violation. One critical assumption of linear regression is the absence of heteroscedasticity in residuals (Klein et al., 2016).

4.10.3 Regression Analysis

The regression analysis shows the linear relationship between dependent and independent variable. The primary goal of regression analysis is to understand how changes in the independent variables are associated with changes in the dependent variable. Table 4.13 presents the results for the regression analysis.

4.10.3.1 Model Summary

The model summary presents the R , R^2 and adjusted R^2 and the standard error of the estimate. These are used to determine the strength between the dependent and independent variables.

Table 4.16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.440 ^a	.193	.188	1.207

a. Predictors: (Constant) Customer focus, Continuous improvements, employee involvement, top management.

Source: Researcher (2023)

Table 4.16 presents a model overview containing R^2 , adjusted R^2 and the standard error of estimate. R represents the multiple correlation coefficient, indicating the predictive accuracy of the dependent variable. R^2 serves as a statistical measure of the proximity of the data points to the

fitted regression line, often referred to as the coefficient of determination or multiple determinations for multiple regressions. Adjusted R^2 , reveals the coefficient of determination, explaining the percentage of variance in the dependent variable attributable to alterations in the independent variable.

Table 4.16 shows the value of adjusted R^2 was 0.188, an indication that there was variation of 18.8% on employee performance due to customer focus, continuous improvements, employee involvement and top management at 95% confidence level. R is the correlation coefficient which shows the relationship between the study variables, and from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.44.

An adjusted R^2 of 0.188 implies that the four TQM variables, customer focus, continuous improvement, employee involvement, and top management support, collectively explain 18.8% of the variation in employee performance. This means that these four predictors account for a modest portion of the changes observed in employee performance outcomes within Chloride Exide, while the remaining 81.2% of the variation is explained by other factors not included in the model. Although statistically significant at the 95% confidence level, this result suggests that while TQM practices do have a measurable impact on employee performance, there are other external or internal organizational factors, such as reward systems, leadership styles, employee demographics, work environment, or external market conditions, that may also strongly influence employee outcomes and should be considered in future research.

4.10.3.2 ANOVA test

ANOVA is employed to assess the extent of variation or resemblance among sets of data groups. This aids in examining whether the overarching regression model adequately corresponds to the

dataset. The ANOVA result presented in Table 4.17 shows examination, employee performance serves as the dependent variable. Particularly, significant associations exist between the dependent variable and the independent variables customer focus, continuous improvements, employee involvement and top management.

Table 4.17: Summary of ANOVA test results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.969	1	57.969	39.783	.000 ^b
	Residual	241.882	166	1.457		
Total		299.851	167			

a. Dependent Variable: employee performance

b. Predictors: (Constant), customer focus, continuous improvements, employee involvement and top management

Source: Researcher (2023)

Table 4.17 sums up the observed means for each dependent variable across experimental state and the associated F ratios and *p* values obtained from the one-way ANOVAs conducted for the primary analyses. From the findings, the p-value was 0.00 which is less than 0.05 and hence the model is good in predicting how the four independent variables (customer focus, continuous improvements, employee involvement and top management) influence employee performance at Chloride Exide. Further, the F-calculated (39.783) was more than the F-critical (3.9). This illustrates that the model was capable of forecasting the impact of the independent variables on the dependent variable. When F-calculated is greater than F critical, the null hypothesis is rejected.

Table 4.18: Regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.219	.558		2.182	.031
	Customer Focus	-.174	.160	-.133	-	.280
	Continuous Improvement	-.286	.154	-.287	-	.065
	Employee Involvement	1.111	.174	.770	6.398	.000
	Top Management Support	-.005	.078	-.004	-.062	.951

Dependent Variable: Employee performance at Chloride Exide Ltd

Source: Survey Data (2023)

Table 4.13 is used to construct regression analysis equation as follows:

$$E_p = 1.219 - 0.174C_f - 0.286C_I + 1.111E_I - 0.005T_{MS} + \varepsilon \quad \text{Equation 4.1}$$

where E_p is employee performance, C_f is customer focus, C_I is continuous improvement, E_I is employee involvement, T_{SM} is top management support and ε is error term. The results in Equation 4.1 suggest that customer focus has a negative linear relationship with employee performance at Chloride Exide and is not statistically significant at a p-value of 0.05, since $0.28 > 0.05$. This implies that for every unit of customer focus, employee performance reduces by 0.174 units.

The results in Equation 4.1 suggest that continuous improvement has a negative linear relationship with employee performance at Chloride Exide and is not statistically significant at a p-value of 0.05, since $0.065 > 0.05$. This implies that for every unit of continuous improvement, employee performance reduces by 0.286 units.

The results in Equation 4.1 suggest that employee involvement has a positive linear relationship with employee performance at Chloride Exide and is statistically significant at a p-value of 0.05, since $0.000 < 0.05$. This is the greatest positive effect on employee performance and is in line with observation made by Afzal et al. (2022) and Basnet (2018) who noted that enhanced employee involvement, leading to a positive impact on project performance. This implies that for every unit of employee involvement, employee performance increases by 1.111 units.

The results in Equation 4.1 suggest that top management support has a negative linear relationship with employee performance at Chloride Exide and is statistically significant at a p-value of 0.05, since $0.951 > 0.05$. This implies that for every unit of top management, employee performance reduces by 0.005 units. The observation is in line with that of Kahunyo and Waithaka (2019) who noted that top management support affects employee performance. When all coefficients of TQM practices are zero, then employee performance will increase with 1.219 units. This implies that TQM have positively influences employee performance. This observation is in line with Stanojeska et al. (2020) who argued TQM foster an environment where employees are actively involved in the change process, thus positively impacting their performance.

The findings from regression, descriptive statistics, and correlation analyses shed light on the relationship between customer focus and employee performance at Chloride Exide Ltd. Regression analysis indicates a non-significant negative linear relationship between customer focus and employee performance, challenging the expectation of direct improvement. However, descriptive statistics show that customer focus significantly affects employee performance, emphasizing meeting customer needs. This discrepancy underscores the complexity of this relationship and the need to consider multiple factors in organizational dynamics. The correlation analysis found a

weak negative link between customer focus and employee performance, supported by literature from Nguyen and Nagase (2019) and Mohammed et al. (2014), emphasizing TQM's positive impact on customer satisfaction. This suggests organizational culture and leadership influence performance. While customer focus and TQM are crucial, their direct impact on employee performance may be intricate. Chloride Exide Ltd should adopt many-sided strategies to enhance overall performance effectively.

The findings from regression, descriptive statistics, and correlation analyses offer insights into the relationship between continuous improvement, employee performance, involvement, and satisfaction at Chloride Exide Ltd. The regression analysis indicates a non-significant negative linear link between continuous improvement and employee performance. However, descriptive statistics reveal a significant impact of continuous improvement on employee performance, consistent with Khan et al. (2019) and Gitonga, Kisato, and Pete (2022). The correlation analysis shows a weak but significant positive correlation between continuous improvement and employee performance, supporting literature on its positive effects. This highlights the importance of gradual improvement through continuous strategies. Additionally, a significant positive correlation exists between employee involvement and satisfaction, aligning with Afzal, Hanif, and Rafique (2022) and Basnet (2018), emphasizing the role of TQM practices. Implementing TQM practices that foster involvement can enhance satisfaction, underlining the importance of employee involvement and supportive environments for organizational success at Chloride Exide Ltd.

The results from regression, descriptive statistics, and correlation analyses offer comprehensive insights into the relationship between employee involvement, performance, and satisfaction at Chloride Exide Ltd. Regression analysis reveals a significant positive linear link between

employee involvement and performance, echoing findings by Afzal et al. (2022) and Basnet (2018). Enhanced involvement positively impacts project performance, indicating that actively engaging employees in decision-making improves outcomes. Descriptive statistics confirm the significant influence of employee involvement on performance, consistent with previous studies. Implementing TQM practices prioritizing involvement leads to a more engaged workforce, boosting performance and organizational success. Correlation analysis demonstrates a significant positive link between employee involvement and satisfaction, aligning with prior research. Fostering a culture of involvement and empowerment enhances satisfaction and performance. In conclusion, Chloride Exide Ltd can enhance performance and satisfaction by prioritizing employee involvement through TQM practices. Involving employees in decision-making and creating a supportive environment fosters engagement, driving improved outcomes.

The results from regression, descriptive statistics, and correlation analyses provide insight into the nuanced relationship between top management support, employee performance, and TQM practices at Chloride Exide Ltd. Regression analysis suggests a significant negative linear link between top management support and employee performance, echoing Kahunyo and Waithaka's (2019) findings. However, descriptive statistics show respondents' positive perception of top management support, emphasizing its influence on performance, consistent with Kahunyo and Waithaka's observations. Despite positive perceptions, implementing TQM in Africa, including at Chloride Exide Ltd, faces challenges highlighted by Beraki et al. (2022), such as limited resources and infrastructure. Correlation analysis reveals a weak, statistically insignificant link between top management support and employee performance, aligning with Özer and Tinaztepe's (2014) and Kahunyo and Waithaka's (2019) studies. Despite utilizing these findings to explore TQM's effects

on performance, the lack of correlation suggests other factors may dominate. In conclusion, while regression analysis indicates a negative relationship, the discrepancy with positive perceptions in descriptive statistics suggests additional factors influence performance. Chloride Exide Ltd should conduct further research or targeted interventions to address barriers to effective TQM implementation and performance improvement.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

The chapter presents the overall findings of the study. These findings are linked to research questions. The conclusion and recommendations in this chapter is important to Chloride Exide and other companies who would find the report informative.

5.2. Summary

This research, conducted at Chloride Exide Ltd. in Kenya, focused on understanding the impact of various factors on employee performance. The study addressed specific questions related to customer focus, continuous improvement, employee involvement, and top management support. A survey involving 172 respondents from different departments was conducted to gather data.

The general outlook of employee performance at Chloride Exide Ltd. indicated that adopting Total Quality Management (TQM) practices had a positive effect. Respondents acknowledged improvements in employee performance indicators such as product quality, efficiency, effectiveness, and customer satisfaction.

Customer focus, measured by customer-driven standards, quality focus, and supplier partnerships, positively influenced employee performance. Continuous improvement, including teamwork, improvement standards, and training, was also recognized as contributing to enhanced employee performance. Employee involvement was identified as a significant factor in improving employee performance, with training, employee excellence, and suggestion schemes playing key roles. Top management support was deemed supportive of employee performance, with proper communication, participation, and frequent reviews highlighted as influencing factors.

The analysis included correlation and regression. Correlation findings indicated that employee involvement had the strongest and statistically significant positive relationship with employee performance. However, top management support showed a weak and statistically insignificant negative relationship with employee performance.

Regression analysis visualized the linear relationships. Customer focus and continuous improvement were found to have a negative and statistically insignificant linear relationship with employee performance. On the other hand, employee involvement demonstrated a positive and statistically significant linear relationship. Top management support displayed a negative and statistically significant linear relationship with employee performance.

In summary, the research suggests that at Chloride Exide Ltd., employee performance is positively influenced by customer focus, continuous improvement, and, most significantly, employee involvement. However, despite having a negative relationship, top management support was deemed statistically insignificant. These findings provide valuable insights for understanding the dynamics affecting employee performance in the context of Chloride Exide Ltd.

5.2.1 Customer focus on the employee performance

On this objective, the researcher sought to assess the influence of the customer focus on employee performance at Chloride Exide. The results indicated that the respondents greatly acknowledged the improvement in employee performance due to customer focus. A detail analysis of the results suggested that the customer focus on employee performance in Chloride Exide Ltd was good as since the overall mean was 4.07. Correlation analysis indicate that customer focus has negative relationship with employee performance and the relationship is not statistically significant. Regression analysis also indicated that customer focus has a negative linear relationship with

employee performance at Chloride Exide and is not statistically significant. These findings were similar to those of Nguyen and Nagase (2019) and Mohammed et al. (2014) who noted there is relationship between implementing TQM and customer satisfaction, with TQM practices influencing customers' perceptions of service quality and ultimately impacting their satisfaction levels as employee performance improves.

5.2.2 Adoption of continuous improvement influences employee performance

In this objective, the researcher assessed the respondent's extent to which continuous improvement impact the employee performance at Chloride Exide ltd. Descriptive analysis indicated that respondents acknowledged that continuous improvement impacts the employee performance in Chloride Exide ltd. In summary, the respondents agree that continuous improvement impacts employee performance in Chloride Exide Ltd since the overall mean was $3.77 \approx 4$. Correlation analysis indicate that continuous improvement has positive relationship with employee performance and the relationship is highly statistically significant. Regression analysis indicated that continuous improvement has a negative linear relationship with employee performance at Chloride Exide and is not statistically significant. These findings were line with those of Khan et al. (2019), Gitonga, Kisato, and Pete (2022) whose findings indicated that insufficient implementation of TQM practices, particularly in areas such as continuous improvement and benchmarking, were linked to below-average organizational performance.

5.2.3 Employee involvement on the employee's performance

In this objective, the researcher assessed the respondent's extent to which employee involvement impact the employee performance at Chloride Exide. The descriptive analysis indicated that the respondents acknowledged that employee involvement impacts the employee performance in

Chloride Exide ltd. In summary, the respondents agreed that employee involvement impacts employee performance in Chloride Exide Ltd since the overall mean was 3.59 \approx 4. Correlation analysis indicate that employee involvement has positive relationship with employee performance and the relationship is highly statistically significant. Regression analysis also suggest that employee involvement has a positive linear relationship with employee performance at Chloride Exide and the relationship is statistically significant. The findings in were similar to that of Afzal, Hanif, and Rafique (2022) whose study indicated that the implementation of TQM practices resulted in enhanced employee involvement, leading to a positive impact on project performance. The results were also similar to that of Basnet (2018) study findings who demonstrated that applying TQM practices resulted in improved outcomes among employees.

5.2.4 Management support on the performance of employees

In this objective, the researcher assessed the respondent's extent to which top management support impact the employee performance at Chloride Exide Ltd. The descriptive statistics indicated that the respondents acknowledged that top management support impacts the employee performance in Chloride Exide ltd. In summary, the respondents agreed that top management support impacts employee performance in Chloride Exide Ltd since the overall mean was 3.74 \approx 4. Correlation analysis indicate that management support has negative relationship with employee performance and the relationship is not statistically significant. Regression analysis suggest that top management support has a negative linear relationship with employee performance at Chloride Exide and is statistically significant. The results are similar to those by Kahunyo and Waithaka (2019) study who indicated a significant association between management practices that endorse top management support and favourable performance outcomes.

5.3. Conclusion

The study at Chloride Exide Ltd. in Kenya has yielded valuable insights into factors influencing employee performance. Guided by four key questions, the research highlighted the significant impact of adopting Total Quality Management (TQM) practices, showcasing improvements in product quality, efficiency, effectiveness, and customer satisfaction. Customer focus negatively influences employee performance, with enhancements seen in customer-driven standards, quality focus, and supplier partnerships. Continuous improvement shows contrasting findings based on regression and correlation analysis as non-significant negative and weak but significant positive, respectively. Continuous improvement practices, including teamwork, improvement standards, and training, were identified as crucial contributors to improved employee performance. Employee involvement in decision-making processes, encompassing participation, training, excellence, and suggestion schemes, was a key driver of enhanced employee performance. The study also underscored the positive impact of top management support, mainly through effective communication, participation, and regular performance reviews.

Statistical analyses, including correlation and regression, supported these findings. The adjusted R^2 value of 0.188 indicated that customer focus, continuous improvement, employee involvement, and top management support collectively explained 18.8% of the variation in employee performance at Chloride Exide. While this demonstrates that TQM practices have a meaningful influence, a significant portion of performance variation is attributed to other unexamined factors. This suggests the need for a more comprehensive approach that integrates additional organizational, individual, or external variables to fully enhance employee performance. Employee involvement emerged as the strongest positive influencer of employee performance, while top

management support, though statistically significant, displayed a weakest negative relationship. Customer focus and continuous improvement did not exhibit statistically significant linear relationships with employee performance. The research underscores the pivotal roles of employee involvement and top management support in fostering positive employee performance outcomes at Chloride Exide Ltd. These findings offer valuable insights for organizational leaders and practitioners aiming to enhance overall organizational effectiveness through improved employee performance.

5.4. Recommendations

This research provides valuable insights into enhancing employee performance at Chloride Exide Ltd. in Kenya. Key findings emphasize the positive impact of TQM, customer focus, and continuous improvement practices on performance. Employee involvement and top management support are crucial drivers. Recommendations include fostering a culture of TQM, continuous improvement, and active employee involvement while strengthening leadership support and ongoing training. These insights can guide organizational leaders toward improving employee performance and overall effectiveness. Future studies need to consider the impact of TQM practices across different organizations. Future studies should also explore broader determinants to develop a more predictive and holistic model of employee performance.

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APPENDICES

Appendix A: Introductory Letter

From: **OUMA ERICK OLUOCH**

To: Respondent

Dear Respondent,

RE: **Questionnaire**

I am currently enrolled as a student at Kenyatta University, pursuing a Master's degree in Business Administration. As a component of my academic curriculum, I am obligated to undertake research within my field of study. Consequently, I am currently engaged in a study focused on **TOTAL QUALITY MANAGEMENT PRACTICES AND EMPLOYEE PERFORMANCE IN CHLORIDE EXIDE KENYA.**

Please fill out the enclosed questionnaire to facilitate the completion of my study. Please be aware that all information provided was handled with the utmost confidentiality, following academic research ethics. The data collected was used solely for this study. Thank you for your cooperation and dedication to completing the questionnaire.

Yours sincerely,

OUMA ERICK OLUOCH

D53/OL/CTY/20119/2020

Appendix B: Questionnaire

This survey aims to analyze the influence of TQM on employee performance. The information gathered was strictly utilized for academic purposes and treated as confidential. If desired, a summary of the research findings was shared with the participating organization. Your valuable cooperation in completing this questionnaire would be highly appreciated.

SECTION A: GENERAL RESPONDENT INFORMATION

1. What is your age?

- Below 25 years
- 25-35 years
- 36-45 years
- Above 45 years

2. Kindly specify your highest level of educational attainment

- Certificate
- Diploma
- Bachelor Degree
- Master's Degree
- PhD

Others (Please specify) _____

3. Kindly state your departmental position or level within Chloride Exide Kenya.

- Subordinate staff
- Sales distributor
- Quality assurance officer
- Senor supervisor
- Branch manager

4. Kindly specify your current employment status at Chloride Exide Kenya

- Permanent
- Contracted
- Casual
- Intern

5. Kindly specify the duration of your employment at Chloride Exide Kenya

- Below 5 years

- 6-10 years
- 11-15 years
- Above 16 years

6. To what degree has Chloride Exide Kenya embraced Total Quality Management?

- Very great extent
- Great extent
- Moderate extent
- Little extent
- No extent

SECTION B: TO ESTABLISH THE EFFECTS OF CUSTOMER FOCUS ON THE EMPLOYEE PERFORMANCE OF CHLORIDE EXIDE IN KENYA

7. Kindly indicate to what extent customer focus has improved employee performance at Chloride Exide? No extent Small extent Moderate extent Large extent Very large extent

8. Kindly indicate how the following indicators have influenced employee’s performance in your firm (based on a Likert scale of use a Likert scale of strongly disagree

[1] Disagree [2] Neutral [3] Agree [4] Strongly agree [5])

Customer focus on the employee performance of Chloride Exide in Kenya	Strongly disagree	Disagree	Neural	Agree	Strongly agree
Customer driven standards influences employee performance in Chloride Exide					
Quality focus influences employee performance in Chloride Exide					
Supplier partnership influences employee performance in Chloride Exide					

SECTION C: EFFECTS OF CONTINUOUS IMPROVEMENT ON EMPLOYEES' PERFORMANCE

9. Overall, to what extent does the principle of customer focus impact employee performance at Chloride Exide Ltd, Nairobi?

Very great extent Great extent Moderate extent Little extent No extent

Continuous Improvement influences employee performance in Chloride Exide Kenya	Strongly disagree	Disagree	Neural	Agree	Strongly agree
Adoption of excellence teamwork influences employee performance in Chloride Exide Kenya					
Adoption of improvement standards influences employee performance in Chloride Exide Kenya					
Adoption of training influences employee performance in Chloride Exide Kenya					

SECTION D: EFFECTS OF EMPLOYEE INVOLVEMENT ON EMPLOYEES' PERFORMANCE

10. To what extent has Chloride Exide Ltd adopted employee involvement?

No extent Small extent Moderate extent Large extent Very large extent

Effects of Employee Involvement in decision making on the employees performance of Chloride Exide in Kenya	Strongly disagree	Disagree	Neural	Agree	Strongly agree
Employees training influence employees performance in Chloride Exide in Kenya					

Employees excellence teamwork influence employees performance in Chloride Exide in Kenya					
Employees suggestion schemes influence employees performance in Chloride Exide in Kenya					

SECTION E: INFLUENCE OF TOP MANAGEMENT SUPPORT ON THE PERFORMANCE OF EMPLOYEES IN CHLORIDE EXIDE IN KENYA

11. Kindly indicate to what extent chloride Exide ltd has adopted top management support to fortify preferable working environment to enhance their productivity.

No extent [] Small extent [] Moderate extent [] Large extent [] Very large extent []

Influence of management support on the performance of employees in chloride exide in Kenya	Strongly disagree	Disagree	Neural	Agree	Strongly agree
Proper communication influences the performance of employees in chloride exide in Kenya.					
Participation influences the performance of employees in chloride exide in Kenya.					
Frequent reviews influence the performance of employees in chloride exide in Kenya.					

SECTION E: PERFORMANCE OF CHLORIDE EXIDE IN KENYA

12. Kindly indicate to what extent does employee performance of chloride Exide ltd improved?

No extent [] Small extent [] Moderate extent [] Large extent [] Very large extent []

	Very poor	Poor	Neural	Good	Very good
How do you rate the employee performance at Chloride Exide in terms of product quality					
How do you rate the employee performance at Chloride Exide in terms of efficiency					
How do you rate the employee performance at Chloride Exide in terms of effectiveness					
How do you rate the employee performance at Chloride Exide in terms of customer satisfaction					

We appreciate your valuable time and effort in completing the questionnaire. Thank you.

Appendix C: NARCOSTI PERMIT

