

**INFLUENCE OF GEMBA-KAIZEN STRATEGY ON PERFORMANCE  
OF BAMBURI CEMENT PLC IN KENYA**

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## DECLARATION

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

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

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## **DEDICATION**

I dedicate this project to my parents, who encouraged me to pursue a Master of Business Administration degree.

## **ACKNOWLEDGEMENT**

I do acknowledge God for strength and peace during my accomplishment of this research program. I also recognize my family for their unwavering and unconditional support throughout the program. I finally thank my supervisor Dr. Muya Ndambuki for the continued guidance and support during the research process.

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## **ABBREVIATIONS AND ACRONYMS**

- TOC:** Theory of Constraints
- TP:** Thinking process
- RML:** Roto Molders limited
- TQM:** Total Quality management
- TPM:** Total Productive Maintenance
- RBV:** Resource-Based View

## **ABSTRACT**

The study sought to determine the influence of Gemba-Kaizen strategy on performance of Bamburi Cement Limited in Kenya. The study was anchored on the dynamic capabilities theory and the theory of lean management. The study employed a case study research design. Data was collected through an interview guide. Respondents included four managers who are mainly involved in the Kaizen process: the Territory Manager, Regional Sales Manager, Customer Excellence Manager, and Production Manager. Data was analyzed through content analysis. The content analysis assisted in determining the presence of keywords or concepts in the text. Referencing was performed on the received questionnaires, and questionnaire items were coded to facilitate data entry. The study results on the influence of the Kaizen principle on the performance of Bamburi Cement Limited revealed that the Kaizen approach had a substantial impact on the organization's employees' integrity and understanding of the value of pleased customers. The application of Gemba Kaizen concepts has a significant impact on staff performance and the overall performance at Bamburi Cement Limited. Since this strategy affects employee and customer satisfaction, it is critical to an organization's long-term success. According to the study's recommendations, more research should be conducted in other manufacturing industries, particularly those dealing with cement, to determine how well Gemba Kaizen's strategic ideas have been implemented and their impact on overall performance. Furthermore, it is critical to consider how far these firms have taken the Kaizen principle, the difficulties they encountered in implementing it, and the impact it has had on their overall performance.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the Study

Gemba Kaizen is a model from the Japanese of continuous improvement that is intended to boost processes of an organization while reducing wastage of resources (Imai, 1986). Kaizen is pertinent in performance of organization currently as it views an organization as a unit and therefore endorses for bit-by-bit improvements which are always there and are continuous (Ang et al.,2015). These scholars discuss that most of the time the proposed ideas are not those that would need key changes in an organization, but Kaizen is founded on making little changes constantly on productivity improvement, effectiveness and safety while slowly reducing on waste. This concept of continuous improvement of quality and productivity is perfect where there is no work stress, good social condition for employees, fair salary, wide organization group activity based on Kaizen mindset and employees that are self-disciplined, many organizations are benefiting from implementing Kaizen management technique which actually reflects on an organizations' performance (June, 2011). These recommendations given are not restricted to a given area like; production and marketing. Kaizen is founded on creating changes in areas which are considered to be in need of some improvements Rezaeian (2014). Many organizations and manufacturing companies have registered great improvement on their performance as a result of implementing Gemba-Kaizen strategy in their processes (Fredric et al.,2015).

This study is anchored on three theories; Dynamic capabilities theory and lean management theory. Theory of Lean Management was developed by (Krafcik, 1988). The main focus of this theory is on improving processes. Dynamic capabilities theory was brought forth by Teece and Pisano (1994) as an allowance from the then already existing theory; resource-based view (RBV) of an organization (Barney, 1986, 1991). Dynamic capabilities theory is discussed as the state of a firm being able to reconfigure, integrate and create internal and external competences to align to the dynamic environments.

There are six firms in the cement manufacturing in Kenya that have made a remarkable impact over the past a quarter century including: Bamburi Cement Limited, East African Portland Cement Limited, Savannah Cement Limited, Athi River Mining Cement and

National Cement limited Mombasa Cement limited (Kenya Cement Industry Brief, 2015). The cement firms that manufacture cement in Kenya are currently being faced with the challenge of entry of new firms in the industry. Other challenges include; high cost of electricity which is sometime in short supply and expensive due to the high tariffs imposed and high cost of fuel, high cost of coal which has to be imported and subjected to taxes (Murunga, 2016).

In light of competition and other challenges faced by the cement manufacturing firms in Kenya, the firms have implemented different strategies such as outsourcing, Gemba kaizen and others in pursuit of efficiency and effectiveness (Murunga, 2016). The demand for cement in the country is estimated at about 6.1 million tons per year of which Bamburi Cement limited produce 3.3 million tons (CW Group, 2020). The increased cement demand in the country and even with the neighboring regions is attributed to steady increase in the demand for housing and accommodation, increased private building projects and also increased government spending on roads and building projects (Murunga, 2016). Some of the cement is also exported to other neighboring countries such as DRC Congo, Somalia, Rwanda, South Sudan, Burundi and Mozambique (Mumero, 2011).

### **1.1.1 Gemba Kaizen Strategy**

The word 'kaizen' is derived from two Japanese words, "kai," that means change, and "zen," to mean good or also meaning for the better (Six Sigma LLC, 2004; Ant, 2019). Hoyle (2017) notes that kaizen is actually the Japanese word that means improvement or "change for the better" and this carries the suggestion in all the activities in the different industries that happened in Japan place of work to boost the operations and environment of the firms. The "change for the better" phrase is used to imply any given change however minimal that was as a result of improvement that could be either quality of the outcome or other factors that customers and even an organization views it to be of value such as innovation, easy to use, delivery on time, being durable, flexibility in operations, customer experience and satisfaction and low cost (Zimmerman, 1991; Imai, 2019).

The Western philosophy can be summed up as, "if it isn't broke, don't fix it." The Kaizen philosophy however which is different is "do it better, make it better, and improve it even

if it isn't broken, because if we do not, we cannot compete with those that do” Brunet (2003). The Japanese management views kaizen as “continuous improvement” that involves the whole workforce which is from the top on the hierarchy up to the middle managers and the entire workers (Gharakhani et al.,2018). Imai (1986) discusses that Kaizen means continual improvement of production and quality of the output, that is based on a process that is participatory which involves the whole workforce therefore, the popular meaning of Kaizen is continuous and stepwise improvement in every aspect of a given firm.

It is a productivity approach that is low-cost to and quality enhancement that requires minimal investment, it therefore is a low-cost approach. Kaizen can be applicable to other sectors like organizations that are public, service sector and not for profit organizations and not applicable to only to the manufacturing industry. The kaizen movement origin was the method of quality control which was the imported during the post-World War II era from the USA. Japan assimilated and developed Kaizen as its own method of management practice which later surpassed the performance in the USA. The method that was adapted which was kaizen, spread very fast in the Japanese companies which included several small and medium-sized enterprises and it afterward spread overseas (Schroeder & Robinson, 1991; Gupta & Jain, 2017).

In the western management styles, Hoyle (2017) discusses that the kaizen methodology is often contrasted as kaizen attributes importance to the place of work where real operations are conducted and the workforce is the epitome of the set of the kaizen activities. However, the managers and owner are still the ones in charge and in control decision making and guiding the team, but the workers are the vital people who share their proposals on areas that need improvement and implementation these therefore leads to adoption of a management style that is bottom –up which allows the workers freely give suggestions. One vital feature of kaizen is that developments occur with minimal investment, because the key target and concentration is on waste minimization and reduction on duplication.

Generally, kaizen is an approach that is low-cost on production improvement since kaizen does not require capital investment that is huge, technology that is expensive or even high-end research and development as it intends to put to use equipment that is existing

equipment and human resources in an efficient and waste free manner, the strategic goal of kaizen is to bring out the internal capability of a given firm (Imai, 1986; Imai, 1997; Imai, 2016). Therefore, kaizen is suited for firms that are in low-income countries that have problems accessing financial assistance (Shamabro, 2018).

The fundamentals of kaizen strategy are similar in a way; upholding a positive attitude, being liberal minded seeking solutions instead of making excuses and taking action. Implementation of ideas immediately, doing what needs to be done, not seeking for perfection, recognizing the available source currently and maximizing the knowledge available in the team. Equality is consciously ensured to all members as each member makes a contribution that is important in the company whether big or small.

### **1.1.2 Firm Performance**

Performance is a function of an organization that propels it to attainment of the set goals and objectives by utilizing resources that are available fully, exhaustively and in an efficient and effective way (West & Fair, 1996). Nzavalwa (2017) defines performance as the measure of how effective and efficient a firm uses the available resources for revenue generation. It is related to the quantity and the quality of the output, job presence, and timeliness of the output, how efficient and effective was the task that has been completed (Prathap, 2011). Performance is characterized by four distinct dimensions in the manufacturing industry; cost of production, time or speed taken to complete a task efficiently, flexibility of operations and quality of the output (Anot, 2019). Corbett and van, (1993) note that these manufacturing companies' dimensions of performance determine competition in the market with a focus on; place, price and product.

Different organizations measure performance for various reasons these may include; to guide on product improvement and delivery of service, for purposes of customer satisfaction and for continuous improvement (Kaplan & Norton, 2001). Measuring performance of an organization has been a key issue to many scholars as it lacks its individual parameters which can be used to regulate financial performance (Bititci, 2007). Performance is made up of three parts of a firm's outcomes: financial performance, performance in the market and returns for shareholder (Divenney et al., 2008).

Performance is common in organizational research, since it is viewed as an unconscious assumption which makes the firm. However, performance is never considered openly as an essential area in some organizations (Devinney et al., 2005). This study therefore seeks to understand if Gemba Kaizen strategy has been adopted by Bamburi cement limited and if so, the influence it has the influence of Gemba Kaizen strategy on performance of Bamburi Cement Limited.

### **1.1.3 Bamburi Cement PLC**

Bamburi Cement PLC is a Lafarges' Company subsidiary, which is a member of Holcim Group, and is the leader in the manufacturing of quality cement and marketing Company in Eastern Africa region according to the Lafarge website consumer update report of July 2021. The company has remained in operation for 67 years. The company has three subsidiaries; Hima Cement Ltd based in Uganda, Lafarge Eco Systems Limited, Bamburi Special Products Limited and Binastore Ltd. Bamburi Cement PLC has two plants in Kenya; Athi River and Mombasa respectively. It gives solutions on cement, blocks and ready-mix concrete to construction companies and individuals. Bamburi cement is a key player in the cement manufacturing industry it is very vital in the economy of the country; offer job opportunities, paying taxes and sustains the construction industry (Mwanzia, 2009). The company has maintained its position as the leading cement manufacturer and marketing company in Eastern Africa and this is as a result of its strong line up high-quality cement and concrete products.

It prides itself in being the strongest, highly and most respected cement and concrete manufacturer in the Eastern Africa region, its' core value is on Health and safety, has quality that is high, wide and properly differentiated portfolio of product and has very competitive capacity on innovation on the technical and production which is flexible and delivers on construction projects that are highly demanding. Bamburi Cements' other operations are in sustainable waste management, it has a Geocycle brand which partners with other organizations to dispose of their waste at its cement kilns at the plants in Nairobi and Mombasa and this is done through a unique and sustainable industrial process called co-processing. Natural resources are becoming scarce and so Bamburi cement uses its wastes to create solutions through innovation and developing new and ways that are

sustainable in using waste to create products that very important and surpasses the purpose for which they were made for initially.

The cement manufacturers in Kenya are faced with different challenges such as; entry of new firms in the industry, high cost of electricity which is sometime in short supply and expensive due to the high tariffs imposed and high cost of fuel, high cost of coal which has to be imported and subjected to taxes (Murunga, 2016). In light of competition and other challenges faced by the cement manufacturing firms in Kenya, Bamburi Cement PLC has implemented different competitive strategies such as outsourcing, Gemba kaizen, sustainability, diversification among others in pursuit of efficiency and effectiveness (Ndegwa, 2013).

## **1.2 Research Problem**

Bamburi Cement Limited has consistently produced impressive profit growth results. However, the cement company, like most manufacturing firms, saw a drop in performance in the aftermath of COVID 19, which affected employee performance and disrupted the global supply chain. The company has also faced challenges in minimizing waste and optimizing workforce performance through continuous improvement. Furthermore, the market's dynamic nature has a negative impact on the company's performance, necessitating the adoption of strategies that can help maintain consistency in performance. The adoption of the Gemba-Kaizen principle will help improve the company's performance. The principle will aid in developing a culture in which employees strive to improve the quality of their products and create long-term value, which will lead to the company's overall growth.

Gemba Kaizen is becoming popular in different management contexts internationally with proven results. The studies that have paid attention on the techniques of manufacturing in Japan each showed the significance of Kaizen on organization performance (Liker, 2004; Emiliani, Stec, Grasso & Stodder, 2007). Kaizen has gotten so much thoughtfulness as a significant tool and has been strategic to Japan's competitive success (Imai, 1986). Gemba Kaizen has also been described as a sure strategic practice that has had weighty impact on the organization performance within the last 30 years with its hyped relevance being

witnessed after the 2007/2008 global financial crunch (Abdallah, Phan & Matsui, 2018). Manufacturers in Kenya are confronted with different challenges including but not limited to; technological gap and limited knowledge on various managerial strategies like lean and kaizen. The practices of kaizen vary in the levels they are adopted and executed by the manufacturing firms in Kenya to help solve continuously these challenges and this inadvertently affects the performance of the organization (Nderi, 2012). The relevance and effectiveness of Gemba Kaizen on organizational performance has been witnessed in all the economic and business sectors in China, Nigeria, Australia, USA, and Rwanda among others. In Japan manufacturing firms like Toyota registered improved performance in the middle of the global financial crisis as a result of adoption and implementation of the Gemba Kaizen strategy (Abdallah, Phan & Matsui, 2018).

Some challenges that need to be addressed have been experienced in the implementation of kaizen such as inadequate management support, economic constraints and negative attitude from the employees. The Cement manufacturing companies experience different challenges like entry of new firms in the industry, high cost of electricity that is a necessity in production which is sometimes in short supply and expensive and high cost of fuel, high cost of coal as it is imported hence taxes have to be paid (Murunga, 2016). These challenges have necessitated for survival strategies such as outsourcing, adopting Gemba kaizen amongst others in pursuit of efficiency and effectiveness (Murunga, 2016).

Several studies have been conducted around Gemba Kaizen and its' influence on organizational performance; A study was done by Aoki, (2008) that was on Japanese Kaizen transfer exercises to plants overseas that were based in China using secondary data using a case study design. The results of the study showed some characteristics that were common in successful management practices in the adoption of Kaizen practices were team-based rather than individual-based. The results indicate a gap between the successful management practices that would propel or have an effect on kaizen implementation that needs to be looked into. Nderi (2012) conducted a study on effects of application of kaizen practices on performance of manufacturers in Kenya using contextual study research design and found out that performance improvement is definitely affected by selection of kaizen method. The study adopted a cross-sectional descriptive research design targeting

the manufacturing companies in Lusaka and the Copper belt region. The finding was that improvement on performance is definitely affected by selection of kaizen methodology also indicated that the greatest level of influence was on knowledge since it relates to employees understanding the need for change which extends to understanding the need for kaizen. The study brought out an existing gap that there is a need to institutionalize the principle of Gemba kaizen.

Another study by Gitonga (2014) was on the impact of managerial training intervention on performance of businesses in Kariobangi Jua kali sector in Nairobi, Kenya and found that short-term basic training can improve their management practices. The study sought to analyze the impacts of teaching the very basics of KAIZEN, an approach to management that is inexpensive and reasonable but still emphasizes on the reduction of waste materials and activities to small businesses hence improving their performance. Nzavwala (2017) carried out a study on effect of kaizen strategy on performance of Roto motors limited and found that kaizen strategy has greatly improved the performance of RML. Further it discovered that demotivated workers are as a result of; not being included by management in decision making, no promotion, recognition of the hard working team, no training amongst others. These are the factors that affect kaizen practices in the organization. It recommended that management should use bottom up approach to effectively implement kaizen as well as to explore factors that influence acceptability and feasibility of Kaizen in manufacturing firms in Kenya.

Kipngetich & Bett, (2018) did a study on practices of total quality management and performance of the Savannah Cement Limited in Kenya. The study established that customer focus, Continuous improvement, top management and team work commitment had significant influence on performance. The data used for this study was from just only cement manufacturing company which is a small representation of the other cement manufacturing companies, its structures too are aligned specifically to its set goals. There existed a gap on employee involvement strategies to positively influence performance. A study by (Lala et al., 2021) on perception of Gemba kaizen's on upper management commitment and attitude on employee performance in Kenya wildlife service in Tsavo east national park. This study adopted a descriptive research design and collected data through

pre-tested copies of questionnaire and showed that the commitment and attitude of the upper management towards Gemba Kaizen significantly influences employee performance in the Kenya Wildlife Service. It recommended a need for a research to examine each Gemba Kaizen principle individually and the performance of organizations in the wildlife protection sector.

A study done by Linton (2019) in New Zealand on upper management commitment found out that top/upper management plays a key role on performance of manufacturers using cross sectional research design. The finding was that management team always has close associations with the personnel in charge of quality control, purchase and the supply chain management team and in turn their management roles affects the performance of the firms. Abdallah, Phan & Matsui, (2018) in their study on practices of quality management and competitive performance of manufacturing companies in Japan did confirm that TQM influences the performance of manufacturing companies. Emakwu and Teryima, (2016) conducted a study in Nigeria and found out that tools of TQM have an effect on the attainment of set goals by an organization such as large market share, customer satisfaction, attainment of profit and quality product. Hassan (2019) did a study in Ethiopia and did confirm that TQM has an influence on performance of cement manufacturing companies. The data was collected by use of a structured survey questionnaire across several companies.

On the influence of rewards and recognitions, Muhammad *et al.*, (2019) did a study on the connection between Rewards and performance of Employee in Pakistan's Cement manufacturing Industry and it adopted a quantitative research. The finding was; there is a direct and strong relationship between extrinsic, intrinsic rewards and employee performance. It also found out that the techniques of recognition that are used by cement manufacturers are good for maximum performance. This study used a small sample in a company so the results cannot be used to generalize or represent all the companies. Gateye (2018) carried out a study on effect of kaizen employment on organization performance of a service provider in a public institution of the management of Ethiopian institute. The finding was that putting into practice of kaizen practices in Ethiopian Management Institute is clearly related to organizational performance improvement.

Across Africa, Murray (2019) just like Nzavwala, (2017) and Omondi (2018) argue in their studies that compensation systems and rewards will always be a motivator to employees and as a result makes the employees give their maximum efforts in the given tasks. These scholars argued that rewards affects the satisfaction of an employee, and this influences the performance of the employee which is directly linked to the performance of manufacturing firms which is extended to their reception on introduction of new strategies like adoption of kaizen.

It is critical to note that most of these studies were for specific companies hence the findings and recommendations may not be applicable to all the cement manufacturing companies in Kenya. Further, most of the studies done in Gemba kaizen and performance have looked at the differentials of the two concepts. However, none seems to have captured the gap postulated in this study where the researcher seeks to study how much performance is influenced by adoption of Gemba kaizen. This study therefore seeks to respond to the following research question; what is the influence of Gemba-kaizen on performance of Bamburi Cement Limited in Kenya?

### **1.3 Research Objective**

The objective of this study is to determine the influence of Gemba-Kaizen strategy on performance of Bamburi Cement Limited in Kenya.

### **1.4 Value of the Study**

The study will add value to the existing pool of knowledge and literature in relation to Kaizen Strategy and the performance of manufacturers in Kenya. This information can be used as a secondary source of data for other scholars hence support the given research work that would refer to this work as it will document literature on the ground relating to the performance of cement manufacturing companies that have effectively and efficiently implemented the Gemba Kaizen strategy.

The study will further be of great use to the management of various cement manufacturers in Kenya and beyond. Managers will be furnished with timely and accurate information in relation to the relevance and importance of the kaizen principles and practices and the

influence it has on the organization performance as well as help the management team of the cement manufacturers in making decisions that prop a firm to greater performance level.

Finally, the study will be of use by the policy makers in the national governments and other agencies in charge of making policies in the cement manufacturing industry in Kenya. These policy makers will be able to get the information on the present performance of the cement industry and the projected future performance based on adopting continuous performance strategies. The relations between kaizen strategy and firms' performance will guide the policy formulators on the kaizen techniques and practices that are appropriate and can be adopted in their firms.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This section outline literature review and the various theories used to inform the study, the various documented literature evidences in relation to Gemba kaizen strategic principles or practices, the conceptual framework and summary of literature review.

### **2.2 Theoretical Framework**

This section studies theories which are related to Gemba-Kaizen and performance. The theories are as follows; Dynamic capabilities theory, Lean management theory and theory of constraints. These theories are discussed a below.

#### **2.2.1 Dynamic Capabilities Theory**

Theory of Dynamic capabilities was proposed by two scholars; Teece and Pisano (1994) as an extension from resource-based view (RBV) of the firm (Barney, 1986; Barney,1991). This theory was derived from the Resource Based Theory to compensate for its shortcomings. The origin of the dynamics capabilities theory is tied to a number of shortcomings of the resource based view. Teece, Pisano & Shuen (1997) view dynamic capabilities theory to be the ability of a firm to incorporate, reconfigure and build internal and external capabilities to align with the dynamic environments. Dynamic capabilities are therefore the organization and strategic Practices as a means by which firms achieve resources that are new conformations as markets are emerging, spilt, evolve collide and die (Eisenhardt & Martin, 2000).

Teece (2007) was a major contributor to Dynamic capabilities theory by giving more information on micro-foundations for; sensing, seizing and transforming. Zahra and George, (2002) do not look at dynamic capabilities as the ability of a firm and as processes but instead they view it as competences to match customer demands and strategies of the competitor. The dynamic capabilities foundation is based on evolutionary economics (Munuhe, 2014). The essence of dynamic capabilities approach is that competitive achievement is as a result of continuous development, reconfiguration and alignment of specific assets of a firm (Teece et al., 1997; Augier & Teece, 2006). Production planning

and allocation of resources are continuing issues that face many organizations daily.

Intense criticisms have however been brought forth against Dynamic Capabilities Theory; like on the term itself and the complications in shaping up the merits of the theory outcome (Zahra, Sapienza & Davidson, 2006). Not being able to understand the nature of the dynamic capability theory and there is no clear models that can be used to measure the said capabilities and the manner in which it affects organizational performance (Zott, 2003). In the evolution of strategic management and organizational performance, the RBV attracted a number of criticisms that include ignoring the determinants that surrounds resources but not assume that they exist.

Considerations on resources development, the manner in which they are integrated in the firm and then released later on have been under-explored have an effect on the performance of a firm. Dynamic capabilities approach tries to attempt to fill the existing gaps by embracing a process approach that acts as shock absorber between firm resources and the unpredictable business environment. It therefore in a way foresee results of the strategies that a firm can adopt to reduce on production cost, maximize on the available resources as it improves its performance. Dynamic resources aids a firm in adjusting its resource mix and this helps to maintain the sustainability of competitive advantage of a firm which might be eroded quickly if otherwise hence affecting the performance of a given firm (Munuhu, 2018).

### **2.2.2 Lean Management Theory**

Lean management was advanced by Krafcik in (1988). The main focus of this theory is on continuously improving processes and streamlining the same. The lean management model further argues that every phase a project goes through from the initial to the final stage is reviewed in continuous improvement or TQM be Gemba Kaizen. This theory foreshadows that duplication of effort or wastage in given processes is identified and eradicated to the possible extent. There is an establishment of a system of "continuous improvement" that monitors the outcome continuously and on a continuing basis.

This theory is relevant as the study seeks to equip and encourage the cement manufacturing companies to adopt a manufacturing model that is keen on waste management, reduce

duplication, encourage improvement and lean production. The weakness of this theory is that it assumes that adoption of the lean development model in the companies guarantees success due to the fact that each person at the workplace uses the applicable strategies.

### **2.3 Empirical Review**

A study was done by Aoki, (2008) that was on Japanese Kaizen transfer exercises to plants overseas that were based in China using secondary data using a case study design. The results of the study showed some characteristics that were common in successful management practices in the adoption of Kaizen practices were team-based rather than individual-based. The results indicate a gap between the successful management practices that would propel or have an effect on kaizen implementation that does need to be looked into. This study suggests there is a need for the researchers and practitioners of kaizen to deliberate on a healthy balance between three types of organizational capabilities which encourage workers' self-initiative, facilitate cross-functional communication, and discipline workers.

Nderi (2012) conducted a research on effects of kaizen implementation on performance of manufacturers in Kenya. This study employed a cross-sectional descriptive research design with the target population being manufacturing companies in Lusaka and the Copper belt region. The finding was that improvement on performance is definitely affected by selection of kaizen methodology and the findings indicated that the greatest level of influence was on knowledge since it relates to employees understanding the need for change which extends to understanding the need for kaizen. The study brought out an existing gap which was there is a need to institutionalize kaizen. A study was conducted by (Muthengi, 2005) looked at suitability of the system of Kaizen in financial performance improvement in Kenyan firms that had adopted technique of kaizen for more than 10years. The results indicate a gap for a need for forfeit and duty in acing the viability of the kaizen framework that has been received that needs to be looked into. Nzavwala (2017) carried out a study on effect of kaizen strategy on performance of Roto motors limited. The finding was that kaizen strategy has improved greatly the performance of RML, further it discovered that motivated workers; not being included by management in decision making, no promotion, recognition of the hard working team, no training amongst others to be the

factors that affect kaizen practices in the organization.

Therefore, this study recommends that management should use bottom up approach to effectively implement kaizen and motivate employees using both monetary and non-monetary rewards for better performance and involve them in the processes. The study suggests a need to carry out a study to identify the relationship between financial performance before introduction of Kaizen strategy and after its introduction but over a longer period say five to 10years to bring out the inferences from a long term point. The further recommends for a study to explore the factors that influence acceptability and feasibility of Kaizen in manufacturing firms in Kenya. Kipngetich & Bett (2018) did a study on practices of total quality management and performance of Savannah Cement Limited, Kenya. The study established that customer focus, Continuous improvement, top management and team work level of commitment to have a major influence on performance. The data used for this study was from just one cement manufacturing company which is a small representation of the other cement manufacturing companies, its structures too are aligned specifically to its set goals. The study recommend that top management of all cement manufacturing companies should put in employee involvement strategies to positively influence performance.

A study by (Lala et.al., 2021) on Perception of Gemba kaizen's on upper management commitment attitude on employee performance in Kenya wildlife service in specifically Tsavo east national park. This study adopted a descriptive research design and collected data through pre-tested copies of questionnaire showed that the Gemba Kaizen the commitment and attitude of the upper management commitment significantly influences employee performance in the Kenya Wildlife Service. A significant linear relationship between the Kaizen Principle of upper management commitment and employees' understanding how their role contributes in the performance of the organization since employees only increase their outputs, when the top management is gets committed and starts by communicating the importance of meeting regulatory requirements, putting in place a quality policy, ensuring quality objectives are time-honored, conducting reviews on management and ensuring resources are available.

There is need for research to examine each Gemba Kaizen strategic principle individually

and the performance of organizations in the wildlife protection sector. A study done by Linton (2019) in New Zealand on upper management commitment and found out that top/upper management plays a key role on performance of manufacturers. The finding was that management team always has close associations with the personnel in charge of quality control, purchase and the supply chain management team and in turn their management roles affects the performance of the firms. Abdallah, Phan & Matsui (2018) carried a study on practices of quality management and competitive performance of manufacturers in Nigeria and did confirm that it TQM influences the performance of manufacturing companies. Emakwu and Teryima (2016) conducted a study in Nigeria and found out that TQM tools have substantial effect on attainment of organizational goals like; large market share, attainment of profit, customer satisfaction, and quality of product.

Hassan (2019) did a study in Ethiopia and did confirm that TQM has an influence on performance of cement manufacturing companies and finding was that TQM elements which is made up of, management of people, leadership, management of process, strategic planning, focus on customer, information & analysis has a substantial amount of influence on performance of an organization in cement manufacturing sector of Ethiopia. The data was collected by use of a structured survey questionnaire across several companies. On the influence of rewards and recognitions, Muhammad *et al.* (2019) did a study on the connection between Rewards and performance of Employee in the Pakistan's' Cement manufacturing Industry and it adopted a quantitative research using some previous measurement scale that had been collected in a different study in the cement industry.

The finding was that there is a direct and strong relationship between extrinsic, intrinsic rewards and employees' performance also found out that the techniques of recognition that are used by cement manufacturers are good for the maximum performance. However there are some limitations in this research study; this study used a small sample in a company so the results cannot be used to generalize or represent all the companies. Gateye, (2018) carried out a study on the effect of implementation of kaizen on performance of organization of service providers in public institution the case of Ethiopian management institute. The findings were that kaizen practices implementation in Ethiopian Management Institute are clearly related to organizational performance improvement.

Across Africa, Murray (2019) just like Nzavwala (2017) and Omondi (2018) argue that rewards and compensation arrangements motivate employees to give their best towards the assigned work. Systems of compensation delivers extra objectives like legal compliance, control of labour cost perceived fairness towards employees and improvement of performance of employee to achieve productivity of high level and satisfaction customer. Conclusively, in their studies, Murray (2019), Nzavwala (2017) and Omondi (2018) proposed that rewards have an effect on employee satisfaction and this has a direct influence on the employee performance which is directly linked to the performance of manufacturing firms.

#### **2.4 Summary and Knowledge Gaps**

The studies done in Kenya have ignored the cement manufacturing industry especially Bamburi Cement Limited, while some studies have been done in a foreign context. Aoki(2008) study on Kaizen was done in China, Linton(2019) on performance of cement firms was done in New Zealand, Abdallah, Phan and Matsui (2018) and Emakwu and Teryima (2016) based their studies on TQM of manufacturers in Nigeria. Further there were studies by Hassan(2019) in Ethiopia and Muhammad et al(2019) in Pakistan who both delved into TQM and performance of Cement firms. Due to different operating environments there is need for a local study on Gemba Kaizen and performance of the cement manufacturing industry in Kenya.

In Kenya, Nderi (2012) conducted a research on effects of kaizen implementation on performance of manufacturers in Kenya. Nzavwala (2017) carried out a study on effect of kaizen strategy on performance of Roto motors limited. Kipngetich & Bett (2018) did a study on practices of total quality management and performance of Savannah Cement Limited, Kenya. Lala et.al. (2021) studied perception of Gemba Kaizen's on upper management commitment attitude on employee performance in Kenya wildlife service in specifically Tsavo east national park. Gateye, (2018) carried out a study on the effect of implementation of kaizen on performance of organization of service providers in public institution the case of Ethiopian management institute. There is need for more studies in the cement manufacturing industry especially Bamburi Cement Limited.

It is critical to note that these studies have explored the influence of Gemba kaizen on organization performance in other sectors and not consciously conducting a study that out rightly discusses the effects of Gemba-kaizen on performance of manufacturers of cement in Kenya. This study seeks to comprehensively, research, discuss and share its findings on the two variables in Bamburi cement manufacturers in Kenya. This study thus seeks to breach the existing gap by examining influence of Gemba-kaizen on performance of Bamburi Cement in Kenya.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter looks into the research methodology implemented by this study. It therefore encompasses; research scheme, population, data collection as well as analysis techniques to be utilized in the analysis of the study.

### **3.2 Research Design**

A research design is a strategy for organizing and conducting research to find answers to research questions or test research hypotheses (Kerlinger, 1986). A case study research design is used in this study. It is suitable due to the accuracy and correctness it provides by describing events in a well-defined manner.

It also provides a comprehensive account of a given research study, allowing the researcher to focus on the interrelationships between all of the factors that comprise the case study, such as people, policies, groups, and technology. A research case study design entails deconstructing a unit in great detail. The case study research design entails recounting a unit in great detail, and it can be an intensive, holistic, and descriptive analysis of a unit (Oso & Onen, 2005). The case study examines the success of other organizations that have used the Gemba kaizen principle to improve performance.

### **3.3 Data Collection**

This research study made use of data gathered through an interview guide. Respondents included four managers who are mainly involved in the Kaizen process: the Territory Manager, Regional Sales Manager, Customer Excellence Manager, and Production Manager. Interviews as a data collection method are advantageous in that they aid in the acquisition of reliable and valid information (Mark,2003). The data is critical in responding to the research question, and this aids in achieving the study's objective and comprehending the reasons, opinions, and mannerisms of the respondents.

The study relied on primary data gathered through in-depth interviews conducted by the researcher using an interview guide created specifically for this purpose. An open-ended

interview guide was used to gather primary data. The use of open-ended questions encouraged respondents to provide more information without feeling constrained by the subject under study.

The interview guide was divided into sections to ensure the accuracy of the data collected; section A contains the respondent's background information, which helped understand their role in the company. Section B contained questions about the impact of the Gemba-Kaizen strategy on firm performance.

### **3.4 Data Analysis**

Data analysis comprises examining, categorizing then tabulating the responses so as to deal with Data analysis entails examining, categorizing, and tabulating responses in order to address the research problem query (Yin, 1994). The information gathered during the interview was analyzed using content analysis. Researchers commonly use content analysis to make inferences by methodically and objectively identifying specific features and using them to refer to or compare related trends (Kung'u, 2015). The data was first organized around key central questions before being used in pattern matching and explanation building. This was done to see if it would pass or fail the research questions.

The collected data was cleaned and coded to remove any errors that may have occurred during the data entry process. The qualitative data analysis was carried out using content analysis and interview questions, and the results were presented in simple paragraph form. The information gathered was presented in a qualitative manner and analyzed using content analysis. The content analysis assisted in determining the presence of keywords or concepts in the text. Referencing was performed on the received questionnaires, and questionnaire items were coded to facilitate data entry.

### **3.5 Performance Metrics**

The analysis was also based on performance metrics of the company. It is critical to establish performance measures when evaluating the impact of Gemba-Kaizen on the performance of Bamburi cement. The primary goal of business is to make a profit, so the primary performance metric is the amount of revenue that the company can generate and was considered in the analysis the case of Bamburi Cement Limited. Furthermore, the

ability of a company's managers to use effective management strategies to improve the quality of its services and products determines its performance. In today's environment, modern manufacturing companies are constantly looking for ways to expand and enhance their businesses in terms of quality to increase performance. Kenyan manufacturers have improved their performance by implementing quality management principles. Customers, on the other hand, remain dissatisfied with the quality of manufactured goods. Quality management procedures help improve overall business performance by raising awareness in all areas of an organization about the importance of eliminating waste and minimizing errors.

## **CHAPTER FOUR: DATA ANALYSIS AND RESULTS**

### **4.1 Introduction**

This chapter will discuss the study's outcomes after analyzing and interpreting the collected data from the interview guides. This chapter is in line with the research objective. The findings of the study are compared to previous empirical studies.

### **4.2 Research Findings**

The only way to maintain competitiveness in a globalized market is to maximize productivity. Lean manufacturing, as a strategic tool, eliminates waste while increasing productivity and competitiveness. By eliminating wasteful tasks, lean manufacturing aims to increase the value customers receive from their purchases. Due to the high level of competition in today's market, businesses that can meet or exceed their customers' expectations have an advantage. Bamburi Cement Limited has implemented lean manufacturing practices. The purpose of this study was to determine the extent to which these practices have been implemented. These include the drivers and barriers to effective implementation and the benefits of implementing lean manufacturing practices at Bamburi Cement Limited. The case study method was used in Bamburi Cement Limited's research. According to the findings, Bamburi Cement Limited employs lean manufacturing and Gemba Kaizen (Akoth, 2016). However, if the performance strategy is not practical or well implemented, the organization will not reap the full benefits. Bamburi Cement Limited has implemented Kaizen principles such as continuous improvement, work standardization, 5S, and total productive maintenance.

Lean manufacturing is motivated by increased industry competition, a desire to reduce costs and conserve natural resources, attract and retain qualified employees, improve performance, and produce high-quality products and services to meet customer needs. Improved work environments, increased organizational performance, cost control, and a better culture are just a few of the benefits that lean manufacturing can provide for a business. The most important benefit is the preservation of positive customer relationships by delivering high-quality products and services at the appropriate time and location (Marshall, 2019). Employee education on Gemba Kaizen will aid in the strategy's

implementation. Furthermore, the management team of Bamburi Cement Limited must devise a method for assessing the effectiveness of each plan and ensuring that procedures and structures are constantly assessed and improved. In addition, the company can conduct a value stream mapping exercise and implement just-in-time delivery.

#### **4.3 Discussion of the Findings**

According to the four Bamburi Cement Limited employees, the company started using Kaizen in 2013 as a way to analyze and improve the company's overall performance. A Kaizen Institute consultant assisted them in developing long-term strategic goals for the organization, which were then communicated to staff and volunteers. The first goal was to respond to various processes that increased worker performance while reducing industrial waste within the organization (Akoth, 2016). The goal was to increase the organization's profitability and sales volume by increasing brand loyalty and reducing production waste through efficient manufacturing processes. All interviewees agreed that management established this performance procedure and informed and involved all employees.

The results have been impressive in companies that have implemented Gemba Kaizen principles, such as Bamburi Cement. It has been demonstrated in several organizations that it has a significant impact on a company's success. According to some sources, the application of Gemba Kaizen concepts has significantly benefited the country's industrial sector. According to research conducted in 2014, the implementation of Gemba Kaizen concepts in Bidco Oil Refineries-Kenya had a significant impact on the company's performance (Imai, 2018). According to the study's findings, Bamburi Cement's exceptional performance can be attributed to a high level of staff involvement and participation.

The majority of Gemba Kaizen research has concentrated on the importance of improving organizational performance, with little emphasis on the importance of improving employee performance. The impact of Gemba Kaizen-inspired techniques on employee performance at Kenya's Bamburi Cement Limited and private sector firms was investigated in this study (Marshall, 2019). In contrast to the private sector businesses discussed elsewhere in this book, this one is a government-owned enterprise.

#### **4.4 Principles of Kaizen Strategy**

Adopting a Kaizen work ethic help in the creation of a successful Operational Excellence culture within your organization. This necessitates individuals engaging in hands-on problem solving by visiting their own workplace (gemba). The steps that follow involve dealing with the actual product (gembutsu) and establishing the facts of the problem at hand (genjitsu). The phrase "see, look" translates as "see, look." It is based on the assumption that value creation is best understood – and problems solved – in the context of actual work. It's worth noting that there are numerous Gemba Kaizen principles that can help users effectively implement the approach in their organizations.

The first principle states that executives must physically walk to the bottom of the pit in order to recognize and appreciate problems from all angles before attempting to solve them (Willis, 2017). When it comes to the second principle, remember that gembutsu is a technique for inspecting machines and tools and rejects and customer complaints to identify minor factors that may have contributed to the initial problem. Another idea is that interim countermeasures should be implemented right away, which necessitates managers acting quickly to resolve the issue and demonstrate the importance of change to others. This is the only way to persuade others that change is required (Gupta & Jain, 2014). Furthermore, management must determine what caused the problem in the first place. The fourth principle states that management must comprehend the situation, create and evaluate alternative scenarios to develop solutions to similar problems, develop a dummy application, and synthesize the presented scenario using a new technique. Finally, the fifth principle requires the manager to standardize processes and procedures in order to avoid reoccurring problems (Cheser, 1998). To avoid a recurrence of the problem, it is critical to improving identified alternative solutions. According to managers interviewed, these five principles have aided Bamburi Cement Limited in enhancing its operations in that sector.

The concepts provide the necessary insights and practical actions for implementing Gemba Kaizen in the operations of a business. According to Imai (2013), businesses that embrace Kaizen concepts benefit by operating more efficiently and producing more than they would otherwise. Because of their holistic approach to an organization and advocacy for ongoing and continuous incremental improvements, the Kaizen principles articulated by Ang,

Mohd, and Nik (2015) have become increasingly important to organizational performance in recent years. To be clear, Ang et al. (2015) show that, in the majority of cases, these are ideas for regular incremental improvements aimed at continuously improving productivity, safety, and effectiveness. As demonstrated in this case study, this results in a significant increase in the percentage of improvement over time. Teamwork, upper-level commitment, Kaizen recognition and prizes, and total quality management have fueled enterprise acceptance of Kaizen perspectives (Imai 2014).

Implementing a Kaizen-focused change strategy demonstrates a people-centred approach to change. According to Kobayashi (1990), the essence of Kaizen is that those who perform a specific task are the most knowledgeable about that task; as a result, by incorporating them and demonstrating trust in their abilities, ownership of the process is elevated to its highest level. Furthermore, by involving employees at all levels, the team effort promotes innovation and change, allowing for the removal of artificial organizational barriers and creating space for more productive advancements. Instilling a strong sense of Kaizen in employees, according to Sivaraman (2018), allows the firm to grow sustainably while also assisting the individual in becoming a more successful person in general. Kaizen helps to reduce waste, simplify processes, increase safety, and increase employee and customer happiness. In recent years, Bamburi Cement Limited has made significant progress in these areas, giving them a competitive advantage.

#### **4.5 Elements of Kaizen Principle**

The Kaizen standard is a Japanese management philosophy that emphasizes gradual and continuous development. It is used to help organizations improve their efficiency. The Kaizen technique focuses on areas of a company's operations that may be refined, improved, and made more consistent, resulting in increased efficiency and output. Kaizen is a philosophy that emphasizes small-scale changes and is focused on eliminating waste from all corporate activities through the usage of five basic components.

##### **4.5.1 Teamwork**

One of Kaizen's core ideas is that every employee brings something valuable to the company's success. An employee's position should not restrict her from expressing an

opinion or offering a recommendation that help them improve their job function in Kaizen. Kaizen places a premium on collaboration and encourages all employees to feel empowered to submit even the most insignificant ideas. Supervisors, according to Kaizen, must create an environment in which employees are not afraid to offer improvements.

#### **4.5.2 Personal Discipline**

Personal discipline is also emphasized in the Kaizen standard for all employees, particularly supervisors and those in higher management roles. Employees who practice personal discipline are willing to assume responsibility for their work performance under any circumstances. To adopt Kaizen, businesses must define criteria for each job function and hold employees accountable for meeting those requirements. Employees recognize that they are part of a team and that failing to do their allocated jobs successfully has a negative impact on the overall production process.

#### **4.5.3 Suggestions for Improvement**

According to the Kaizen principle, continuous improvement is necessary in all aspects of an organization, from human resources to quality control. Kaizen improvement recommendations must come only from individuals who do the work on a regular basis for it to be successful. Employees are instructed to regularly monitor their performance and to keep track of any hurdles or delays that prevent them from performing to their full potential. To properly implement the Kaizen principle, management must take employee suggestions seriously and provide regular updates on the status of implemented changes.

#### **4.5.4 Improved Morale**

It is difficult to achieve the Kaizen standard without a high level of employee morale. It is vital for business executives to create a welcoming environment for their employees and to give them a meaningful stake in the company's success. A valued workforce frequently exhibits high levels of productivity when compared to a low-morale workforce, which may face decreased production and greater friction between employees and management.

#### **4.5.5 Quality Circles**

Quality circles are critical for reducing waste and barriers to a business's optimal efficiency. Quality circles are made up of small groups of people – usually five to nine people – that gather on a regular basis to discuss conflict resolution solutions in the workplace. The Kaizen standard defines quality circles as "quality circles." Establishing a quality circle's goal is to provide solutions that are immediately implementable, timely, and cost-effective. The Kaizen standard demands management to act quickly on quality circle recommendations.

#### **4.6 Aspects of Gemba Kaizen Principle**

##### **4.6.1 The Five S's**

This methodical approach yields flawless processes, consistent policies, norms, and laws, all of which contribute to a good work culture in a firm. The "Five S" approach of Kaizen can be used to create systems, policies, rules, and regulations. It is difficult to discover a Japanese employee who is unhappy with his or her workplace. Employees in Japan are not permitted to criticize their company or coworkers. Kaizen, a technique of continuous improvement that combines gradual adjustments and the elimination of defects, enhances employee and customer pleasure. As a result of the employment of Kaizen tools, a well-organized workplace results in enhanced productivity and superior long-term results (Akoth, 2016). Furthermore, it cultivates employees who are committed to the firm. Housekeeping techniques, known as the "five Ss" in the Kaizen philosophy, are an essential component in the pursuit of operational excellence. The "five Ss," according to the Kaizen Institute, are an excellent place to start when presenting an idea because they engage all employees. Bamburi Cement Limited uses this strategy to assure customer and staff happiness, as well as the company's overall performance.

The first of the "S"s, Seiri, also known as sorting, is in charge of getting rid of anything that is no longer needed, resulting in a more efficient working environment. Seiton, which literally translates as "placing everything in its correct position," is the next phase because each object has a designated placement (Imai, 2018). Simply defined, this means that the equipment needed for work are easily accessible, reducing the amount of time spent searching for them throughout the office. This is the third "S" stage, which stands for

"scrub," and it requires not just keeping a clean workplace, but also enjoying it. Seiketsu (standardized procedures) comes next, which refers to the standardization of company processes (Marshall, 2019). The Kaizen Institute believes that visible management is essential for making these standards understandable to all parties involved. After completing the first four phases effectively, the corporation must now concentrate on shitsuki, or the process of retaining the organization's improvements. Bamburi Cement Limited and the Kaizen Institute collaborated to assure the strategy's success. This resulted in greater employee and customer satisfaction as well as waste reduction.

#### **4.6.2 Continuous Improvement**

The Kaizen philosophy emphasizes the importance of positive transformation, which cannot occur without continuous improvement. People are therefore able to recognize and realize their full potential, as well as develop themselves through a paradigm shift in perspective. Toyota pioneered the Kaizen principle, which is now widely applied throughout the world. This strategy has frequently been utilized to improve the quality of things and delivery times, which is crucial in the manufacturing industry. Businesses are increasingly incorporating Kaizen into their daily operations as part of a Lean thinking strategy. It protects individuals against risks in a dynamic, ever-changing, and risky organizational environment. Adopting a Kaizen culture benefits both businesses and individuals. Team members are encouraged to offer their skills and expertise to benefit the entire organization, which is a basic premise of Kaizen. It is recommended that Kaizen-following teams and corporate executives help their employees in reaching their full potential.

According to the Kaizen concept, increasing customer value can be achieved by eliminating waste and continuously improving over time. Kenya's cement makers have recently come under fire for allegedly employing harmful technological breakthroughs and system reengineering in an effort to stay up with the industry's growing level of competition. An investigation into the deployment of Gemba Kaizen chain management strategies in a Kenyan cement manufacturing firm was conducted as part of this project (Akoth, 2016). Since incorporating lean supply chain management principles, Bamburi

Cement Limited's performance has continued to improve in a variety of areas, including customer satisfaction. Four Bamburi Cement Limited executives were interviewed for their viewpoints on the company's operations, which helped to validate the findings. Researchers gathered quantitative and qualitative primary data by asking open-ended and closed-ended questions, which supplied them with more detailed and clear information than they would have received otherwise.

Lean manufacturing was the most involved sector of the firm, followed by lean transportation, lean suppliers and procurement, and finally lean consumers, all of which have showed steady development since the implementation of the Gemba Kaizen method (David, 2015). Bamburi Cement Limited's average mean was 1.9418, showing that the practices had a bigger impact on organizational performance than previously projected. Internal lean strategies often outperform external ones because incorporating a strategy into an internal context is easier than integrating it into an external environment. This is due to skilled employees implementing Gemba Kaizen tactics throughout the company's supply chain. As a result of these practices being executed on a regular basis, a healthy balance of internal and external practices has resulted in ongoing advancement in all of the company's divisions.

#### **4.6.3 Total Productive Maintenance (TPM)**

One component of Kaizen that every organization strives to achieve is the delivery of high-quality products and services on time and within budget. When equipment fails or malfunction suddenly, quality, delivery, and cost all suffer. This two-day program covers Kaizen (continuous process improvement) as well as IATF 16949:2016 Section 8.5.1.2 (TPM). This manual is a great place to start for new TPM programs as well as those wishing to join an established TPM system (Robson, 2015). An in-house TPM-style shop floor improvement program can be built with the help of this training course. TPM can reduce product costs by improving overall equipment performance through the elimination of non-value-added jobs in machine and equipment operations and preventative maintenance. The strategy is built on the concept of Total System Focus, which includes all stakeholders involved in the mud removal process, from manufacturing through maintenance.

TPM is necessary if you run a business that relies heavily on machinery and other equipment. When TPM is employed, a proactive approach to machine maintenance is combined with an emphasis on employee ownership and preventative maintenance (Robson, 2015). Preventive maintenance, quick changeovers, and simple operation are all important considerations when designing machinery, equipment, and fixtures. All employees should be well-versed in all aspects of equipment setup, changeover, and operation, including safety and cleanup procedures (Imai, 2018). Short-term cost savings may be offset by downtime, poor quality, and missed delivery dates, and the equipment may threaten worker safety.

TPM should be broken down into three layers. To begin, the machine operator's TPM must be met. These responsibilities include cleaning and verifying working conditions such as fluid levels, heat, and electricity. This level of TPM is simple and should be performed on a daily basis. The second level of TPM is the work done by a maintenance department once a week or once a month, depending on the machine's utilization. Second-level TPMs may necessitate a complete or partial disassembly of the equipment in order to perform repairs or replace broken parts (Marshall, 2019). The builder's work is the third step of TPM. If necessary, this could be done once or twice a year. Investing in all levels of our TPM program ensures that your equipment runs efficiently and reliably for the life of the machine.

#### **4.6.4 Work Standardization: Employee Performance and Satisfaction**

Many organizations fail to grasp the relevance of the human resource variable (the organization's most valuable asset) to its total performance, despite the fact that human resources are the key to organizational success. A lack of respect for the relevance of human resources has resulted in the collapse of many organizations and management (Imai, 2018). Line managers tend to be more concerned with material and financial resources rather than human resources when it comes to managing human resources on the line since they are operating managers. They have done every effort to make sure that they put a major emphasis on human resources in order to increase employee pleasure, which would eventually improve the company's performance. This shift in the function of human resource management (often referred to as personnel management) is in part owing to the

rising recognition that quality assurance and employee performance are interlaced (David, 2015). Kaizen notion emphasizes high-quality equipment and procedures. It also emphasizes the requirement of teamwork among all members of a corporation in order to consistently supply consumers with high-quality goods and services. If Bamburi Cement's workers are to stay up with the demands of their clients and the high quality standards that are expected, they must continually increase their delivery skills (Robson, 2015). The Kaizen concepts have been applied by many different organizations throughout the world in order to achieve their quality assurance targets.

#### **4.6.5 Kaizen Events**

Kaizen events, also known as kaizen blitzes, are short-term efforts that aim to improve the overall performance of a system. Five or ten-person "kaizen teams" are created to focus on various aspects of the company's procedures. Using the five-S framework, one can make a change in their personal behavior. This holds true in their work life as well. For example, one can improve the efficiency of his or her computer by uninstalling all inactive software from their hard drive. The remaining programs should be organized on the desktop in the order that they are needed. Cleaning of temporary files and downloads on a daily basis is required to keep a computer running smoothly. Employees should standardize their work processes and then modify them on a regular basis. System-wide improvements can be executed in a short amount of time by utilizing kaizen events, often known as kaizen blitzes. Anybody who wants to use the five-S framework to enhance their own behavior can employ the same concept.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter contains the summary of the findings based on the study objective. Further the study contains the recommendations of the study and conclusion. Finally the chapter has suggestions for further research to allow academicians to pursue the study concepts further.

### **5.2 Summary of the findings**

Gemba Kaizen is a Japanese philosophy of continuous improvement that focuses on process efficiency and waste reduction. While Kaizen refers to ongoing improvement, Gemba refers to the spot in a lean framework where value is created. Employees at all levels collaborate to regularly produce incremental improvements to the manufacturing process, resulting in constant performance improvement (Cherrafi et al.,2019). Kaizen is an anticipatory strategy of great significance to a company's performance. In this case study, the Bamburi Cement Limited company was studied through interviews with four of its managers to determine Gemba Kaizen's influence on its performance. The strategy has been of significant impact as it combines its disparate talents into a highly effective growth engine. The Gemba walk, a concept in this strategy, refers to a crucial component of lean management (Simmons, 2018). For a successful strategy, managers and leaders might begin by monitoring the actual work process, communicating with people, learning about it, and discovering possibilities to enhance it. The Gemba walk is a vital component of the Lean management approach in all organizations, including Bamburi Cement Limited.

Gemba Kaizen is intended to enable managers and leaders to observe actual work processes, communicate with people, gain knowledge about work processes, and find prospects for continuous improvement in an organization's overall performance. Employees at the study company, Bamburi Cement Limited, are encouraged to take a break from their daily responsibilities and stroll the floor of their workplace to find unproductive operations (Suárez-Barraza et al.,2012). According to the Kaizen Institute, firms that have implemented Kaizen are constantly working to improve their processes, promote discipline

and uniformity, and think that the methods for addressing problems are more valuable than the solutions themselves. According to Masaaki Imai, the institute's founder, Kaizen, drives a company's workforce. Individuals who attempt to live by Kaizen principles every day, not just those who utilize Kaizen as a tool, make a difference in people's lives (Prayuda, 2020). Gemba Kaizen has supported Bamburi Cement Limited in recognizing and rewarding its employees' accomplishments, resulting in an increase in value over time due to this strategy. The cement company has been able to focus its efforts on ongoing development as a result of this mindset.

Gemba Kaizen strives to optimize organizational processes and eliminate waste. While the term Kaizen refers to the process of continual improvement, the time, Gemba relates to the site of value creation. Gemba Kaizen has a far more significant impact on a business's performance than its English translation implies (Singh & Singh, 2009). According to the Kaizen Institute, subscribing to this mentality means always attempting to improve procedures, emphasizing discipline and consistency, and believing that the mechanisms for resolving problems are more valuable than their answers. Thus, Gemba Kaizen is founded on five concepts: problem identification, nembutsu checking, temporary countermeasures, determining the root cause of an issue, and standardization of operations and change procedures to influence improvements in every area that needs change (Cherrafi et al., 2019). Bamburi Cement company has been able to boost its performance over the last few years while adhering to the Kaizen Institute's guidelines.

Implementation of Gemba Kaizen principles within the workplace holds numerous benefits for organizations across a range of sectors. One of them is the manufacturing industry, which faces a growing number of pressures and high competition among organizations (Maryani et al., 2020). First and foremost, the organization promotes teamwork since it works and communicates consistently and in the same language. It is a technique that emphasizes minor, incremental gains and operational consistency. According to research findings, employees from all departments of Bamburi Cement were involved from the beginning, which aided in creating their work culture, mentality, and methods (Rizkbadr, 2018). The Kaizen concept has been established in the organization of a growth mindset.

One of the most important things any company can do to assure success is to unite its whole workforce under the same vision and set of goals.

Every employee at Bamburi Cement has been inspired by the company's commitment to continuous development and the confidence that consistent results would be achieved. As a result, individuals feel bound to continue their efforts since they believe they are contributing to the business's success (Simmons, 2018). Kaizen adoption has simplified the acceptance of all new suggestions for improving current workflows and processes at Bamburi Cement Limited. Change must be viewed positively to promote an environment where new ideas and possibilities are accepted and valued by the entire workforce. By developing a continuous improvement plan across all of the company's activities, waste was reduced to an acceptable level. As a result, the company saved both time and money, which was spent on enhancing and speeding up procedures; hence the company achieved colossal performance improvement.

The study results on the influence of the Kaizen principle on the performance of Bamburi Cement Limited revealed that the Kaizen approach had a substantial impact on the organization's employees' integrity and understanding of the value of pleased customers. Kaizen is a management tool that has had a significant effect on the organization's overall performance, which is consistent with the views of other scholars (Suárez-Barraza et al.,2012). Businesses can benefit from implementing Kaizen concepts because they will operate more effectively, resulting in higher output. As a result, using this strategy could assist firms such as Bamburi Cement Limited in improving their performance, particularly in terms of customer satisfaction and retention.

### **5.3 Recommendations of the Study**

Based on the study's findings, the following recommendations are made: Gemba Kaizen principles must be taught to Bamburi Cement Limited personnel before they can be interpreted for customers. Customers must be reassured about their destination rather than their current location by these employees. Second, in order for Bamburi Cement employees to learn and grow more effectively, they must understand the concept of continuous and steady development, as outlined by the Kaizen principles resulting in better outcome over

time (Proi, 2011). All stakeholders at Bamburi Cement Limited should be aware of a well-defined path for continuous growth, development, and achievement. While it may be tempting to believe that a massive transformation is the most effective way to achieve competitive change within a company, Kaizen must be at the forefront of any change effort. Continuous improvement is required to fine-tune these improvements and address any new issues resulting from the abrupt shift (Prayuda, 2020). The organization's next opportunity to achieve a performance paradigm shift and gain a competitive advantage result from the daily execution of the Gemba Kaizen idea.

There are numerous benefits to applying kaizen principles. All of these solutions are viable and desirable: common sense, low-cost methods, and ongoing adaptation and development (Cherrafi et al., 2019). It is not always necessary to obtain approval from top management before implementing changes, which promotes self-discipline and responsibility. Everyone contributes to the effort to improve things through the use of Kaizen. It does not rely on large capital investments and does not strive for rapid progress. A strong team of well-trained specialists must be assembled using some of the most popular Quality Management Certification Training programs to implement new and creative methods (Rizkbadr, 2018). When using the Gemba Kaizen principle, the application of the Lean Six Sigma methodology promotes long-term success.

#### **5.4 Conclusion**

The application of Gemba Kaizen concepts has a significant impact on staff performance and the overall performance at Bamburi Cement Limited. Because this strategy affects employee and customer satisfaction, it is critical to an organization's long-term success. Customers want both immediate and long-term results, which is why the strategy effectively increases customer satisfaction and acquires new customers (Singh & Singh, 2009). As a result, the strategy has improved employee performance's integrity component, implying a value system in the workforce. In theory, the study's findings show how using the Gemba Kaizen technique can help offset the impact of one of the primary performance constraints, namely employee performance, resulting in increased customer satisfaction and thus higher returns.

### **5.5 Suggestions for Further Research**

According to the study's recommendations, more research should be conducted in other manufacturing industries, particularly those dealing with cement, to determine how well Gemba Kaizen's strategic ideas have been implemented and their impact on overall performance. Furthermore, it is critical to consider how far these firms have taken the Kaizen principle, the difficulties they encountered in implementing it, and the impact it has had on their overall performance (Proi, 2011). Future researchers should also concentrate their research on the impact of Gemba Kaizen on all aspects and departments of a company. They should also ensure that the percentage of growth in a given period is recorded in order to determine the level of Kaizen's influence on a company's performance.

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## **APPENDICES**

### **Appendix 1: Letter of Introduction**

#### **TO WHOM IT MAY CONCERN**

Dear Sir/Madam

#### **RE: DATA COLLECTION**

I humbly request for permission to conduct research at your organization. I am a Master of Business Administration student at the University of Nairobi. I intend to conduct a study on the influence of Gemba-Kaizen Strategy on performance of Bamburi Cement Plc in Kenya. The study research process will include use of interview guides. The information obtained will be treated as strictly confidential. The interview guides will be collected after 2 weeks.

There are no medical risks or other discomforts associated with the research. The results of the study may help future researchers to gain a better understanding of the research problem. I would avail a copy of the research to your company upon request.

Thank you in advance.

Yours Faithfully,

**Sarah Endusa**

[sarahchima82@gmail.com](mailto:sarahchima82@gmail.com)

## **Appendix 2: Interview guide**

This study is aimed at examining Influence of Gemba-Kaizen Strategy on the Performance of Bamburi cement PLC. The study was conducted for academic purposes only and with all the respect and the value attached to it.

### **SECTION A: Background information**

1. What is your designation in the company?
2. What duration have you worked in your position?
3. What is your uppermost educational and professional level?

### **Section B: Gemba Kaizen strategy**

1. Are there any set standards for organization processes? What are some of the standards that have been set on the processes in the organization? Are they keenly adhered to?
2. Is the 5S-Kaizen used in your day to day activities?
3. How do you see the contribution of Kaizen strategy implementation from the traditional management system and how do you measure the communication level and customer focus?
4. Were there any challenges that were faced when implementing Kaizen strategy in your operation either departmental or organization wise?
5. Has there been a reduction on wastage in areas like production, excess quality and inventory after introducing the Kaizen strategy?
6. How is the level of coordination, monitoring and evaluation of Kaizen intervention measured? Are there any gaps identified in the firm?
7. How often does the company review Kaizen strategy in instances where you do not meet the set goals?
8. Has there been any positive change in performance that has been noticed from the workforce in your department as a result of the introduction and implementation of Kaizen strategy? Give reasons for your answer
9. What are some of the major achievements and failure as a result of Kaizen adoption in the firms operations?
10. Are there any performance indicators in the firm since the implementation of Gemba Kaizen strategy?

**Thank you for your time**