ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESS THE EFFECTIVENESS of KAIZEN PRACTICE ON ORGANAIZATIONAL PERFORMANCE IN THE CASE OF TRACON TRADING PLC (COFFEE TRADING BUSSINESS LINE)

A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR DEGREE OF MASTER IN BUSINESS ADMINISTRATION

By

SIHAM AHMED

ID No: SGS/0086/2013B

Advisor: Yibeltal Nigussie (Assistant Professor)

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DECLARATION

I the undersigned, hereby declare that the thesis work entitled **"ASSESS THE EFFECTIVENESS** OF **KAIZEN PRACTICE ON ORGANAIZATIONAL PERFORMANCE IN THE CASE OF TRACON TRADING PLC (COFFEE TRADING BUSSINESS LINE" ,** submitted by me for the award of the Degree of Master of Business Administration at ST. Mary's University, is original work and it hasn't been presented for the award of any other higher learning institution for the purpose of earning any degree.

Name: Siham Ahmed

Signature: _____

Date: _____

Advisor's Name Dr. Yibeltal Nigusie

Signature: _____

Date: 19/12/2022

Approval Sheet

By

Siham Ahmed

APPROVED BY BOARD OF EXAMINERS

_____	_____
Dean, Graduate Studies	Signature
_____	_____
Advisor	Signature
_____	_____
External Examiner	Signature
_____	_____
Internal Examiner	Signature

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LIST OF ACRONYMS

EKI	Ethiopia Kaizen Institute
JICA	Japanese International and Cooperation Agency
JIT	Just in time KAB Know about Business
CI	Continuous Improvement
PDCA	Plan-Do-Check-Act
QCC	Quality Control Cycle
R&R	Reward and Recognitions
SPSS	Statistical Package for the Social Sciences
TPM	Total Production Management
TQC	Total Quality Control
5S	Five(Sort, Set in Order, Shine, Standardize, and Sustain)
BPR	Business process Reengineering

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ABSTRACT

This research project was conducted under the title to assess the Effectiveness of Kaizen implementation practice in Tracon trading PLC (Coffee Trading Business Line). The main objective of the study was to assess the Effectiveness of Kaizen implementation practice in Tracon trading PLC. For this study purpose both primary and secondary data sources were used. In the primary data both open and close ended questions were prepared in the form of self-administered questionnaires, whereas the secondary data types were taken from written books regarding Kaizen implementation. The study would use convenience sampling technique; furthermore, data was analyzed and interpreted by using SPSS software and some statics tools like percentage and tables. The study was revealed that Tracon trading PLC has been implementing Kaizen tools in its work place to improve its organizational performance and to be competitive in its dynamic and very competitive industry. Furthermore, it was concluded that the implementation of the kaizen tools in Tracon Trading Plc has contributed toward increases in Productivity and cost reduction, which increases the profitability of the company. After implementing 5s framework, Total productive maintenance, 7 waste elimination practices, Just-in-Time principle, and the principles of total quality management system in the company, there is improvement in Organizational performance because of increasing Productivity and Profitability by helping Cost Reduction in the company. Finally, since the current status of the Kaizen implementation in Tracon Trading Plc is very successful and it brought a significant achievement in various activities, Maintaining this success is a very important issue to ensure continuous improvement. Moreover, it was recommended for the management of the Tracon trading plc to make the implementation process inclusive and create the feeling of the ownership among the employees, because this is the only way to increases the effectiveness of the Kaizen implementation in the company. Moreover, it would be advisable to provide periodic training for all employees of the company to strengthen Kaizen in the work place.

Key words: Kaizen, organizational performance, 5s framework, Total productive maintenance, 7 waste elimination practices, Just-in-Time principle, total quality management system

CHAPTER ONE

1. INTRODUCTION

The purpose of this research is to assess the effectiveness of kaizen implementation and organizational performance. This chapter deals with background of the study, background of the company, definition of key terms, statement of the problem , research questions, objectives of the study, scope, significant and organization of the study are included.

1.1 Background of the study

For manufacturers to ensure that they remain competitive in the market they need to improve their competitiveness by apply the continuous improvement or Kaizen concept in their organization. The ultimate objective of manufacturing industries today is to increase productivity through system simplification, organizational potential and incremental improvements by using modern techniques like Kaizen (Mohd Ghazali Maarof and Fatimah Mahmud, 2016). Different elements of kaizen are being utilized by manufacturing industry to improve the performance of current manufacturing system processes. This study attempts to evaluate the performance of different elements of kaizen on the organaization performance in Tracon trading plc. The kaizen Method of continuous improvements is an originally Japanese management concept for incremental (gradual, continuous) change (improvement). Kaizen is a way of life philosophy, assuming that every aspect our life deserves to be constantly improved Value Based Management. (Net,2016). The Kaizen Philosophy lies behind many Japanese management concept such as Total Quality Control, Quality Control Circle, small group activities, and labor relations. Key elements of Kaizen are quality, effort, involvement of all employees, willingness to change and communication. (Mohd Ghazali Maarof and Fatimah Mahmud, 2016)

The manufacturing sector comprises established enterprises and employed more people in the country. The products from the sector comprises of both industrial and consumer goods from diverse industries such as agro- processing, vegetable oil refining, iron and steel manufacturing, cement, plastics manufacturing, apparel industry and medicinal and pharmaceutical products. The

sector operates in a largely unfavorable business operating environment characterized by high operations cost, poor infrastructure, inadequate and expensive financing and inadequate managerial and technical skills of ministry of trade and Industries (MOI, 2010). To overcome these challenges it is prudent that manufacturing firms adopt non-costly continuous improvement methodologies to improve their competitiveness.

The Japanese concept of Kaizen simply translated means 'continuous improvement'. It is a firm-level process, whose implementation in manufacturing firms is widely espoused as a successful productivity enhancement strategy. Kaizen is a system that allows organizations to improve their business activities and processes and is aiming at establishing a cycle of continuous improvements and innovation. The process is company-wide, involving all levels of the firm from top-level management to front-line workers, but it is at the front line that most emphasis is placed. Innovation is a key part of the process, through a stepped approach where the innovation boundary, over time, is buoyed by the implementation of Kaizen, rather than degrading without it. The implementation of Kaizen, therefore, helps keep innovation at the forefront of a firm's operations, essentially turning it into a regular part of their processes.

Currently, the most prominent case of JICA-implemented Kaizen in Africa is Ethiopia. The process began in 2009 through a partnership with Ethiopia's Ministry of Industry at the request of the country's prime minister and is part of JICA's 'National Movement for Mind-set Change' approach to private sector development enhancement in the country (Kitaw, 2011) and JICA's Industrial Policy Dialogue with Ethiopia (Homma, 2014). In Ethiopia, Kaizen implementation was carried out in two phases: Phase 1 (2009–2011) included the undertaking a study on quality and productivity improvement and formulation of a national plan, including the identification of 30 pilot companies and Kaizen capacity building in Ethiopia's Ministry of Industry and Trade. Phase 1 also included the setting up of the Ethiopian Kaizen Institute in 2011. Phase 2 (2011–2014) included the implementation of the Project for Capacity-Building for Dissemination of Quality and Productivity Improvement. The scale-up of participating firms included 65 medium and large enterprises and 190 micro and small enterprises. The second phase also included capacity building for the Ethiopian Kaizen Institute staff.

Evaluations of the effect of the use of Kaizen in Ethiopia have shown that firms that implement the approach see a reduction in the amount of costs, non-value adding activities and wasteful practices, with associated increases in value addition, profitability and productivity. The results of in-company training, carried out by the Ethiopia Kaizen Institute on participating firms in Ethiopia (Abebe and Zerfu, 2014), show some significant improvements in performance. Specifically, there were improvements in labor productivity (86% increase) and capital productivity (135%), and an increase of 59% in sales revenues. Similar results are reported across enterprises participating in the Kaizen pilot program in Ethiopia (Shimada et al., 2013) where participating enterprises could attain an average 'quantitative benefit' of approximately $30,500 per company by reducing overproduction, reducing the amount of materials used, the efficient use of capital and reductions in operating times.

Organizations, which have implemented kaizen informally, say, it is one of the tools that have enabled their organizations to attain considerable positive changes in different attributes (working practice, workforce attitude, productivity, etc.). Furthermore, several people have been heard to give explanations on different media about what benefits organizations have obtained using kaizen. In the case of Ethiopia, though private companies as well as public enterprise have started to implement kaizen, information on the impact of kaizen on implementation on employees working condition, performance, effect on organizational culture and leadership practice in private organization do not have enough information (Asayehgn Desta, 2014)). Hence, it is necessary to consider detailed understanding on the influence of kaizen on the performance of the workers in increasing the productivity of the company. Addressing this research could help to know the challenges that it has encountered, the lessons learned for other organization which help to sustain the productivity of the workers and improve the productive capacity of the company. It is also important to collect information for further decisions by the company. Therefore, for this study Tracon trading plc, which is implementing Kaizen, is selected.

1.2 Background of the Organization

Tracon Trading P.L.C was established a decade ago and has achieved an accelerated growth since its establishment. The Company has a well-organized structure, which clearly depicts the responsibilities and accountability of each business lines. According to the current organizational

Structure, there are six Business Lines, namely, Aluminum Assembly and Fitting, Coffee Trading, Freight Transport and Heavy Machinery Rental, Construction, Real Estate and Import and Merchandising Business Lines. Moreover, it has two departments and three service units, which are being directed by respective managers.

Vision

To be one of the best renowned, environmentally and socially responsible global company as valued by key stakeholders

Mission

To serve customers via the provision of top quality products and services and there by contribute to the economic and development endeavors of the country

Organization Values:

Customers' satisfaction, employees' empowerments, integrity and ethics, social responsibility and corporate citizenship, profit and growth and respect and trust

1.3 Statement of the Problem

Different countries in the world, which have applied Kaizen Management techniques, have various types of practice and encountered multi-dimensional challenges. According to Asayehgn Desta (2014), a number of manufacturing industries in Ethiopia currently are not using methods that will achieve high productivity and excellent quality standards to make them more competitive in the globalized, international markets. Most of the initiatives taken for quality and productivity improvement are through top-down approaches without the best management skills. Many manufacturing companies are plagued by such problems as high quality rejects, high inventories, long lead-time of production, high costs of production, and inability to cope with customer orders. Given these problems and appreciating that kaizen, the manufacturing process used in Japan, has revolutionized the way enterprises deliver products to their customers, retain market share, and satisfy their domestic market and expand into the international market. A number of enterprises in Ethiopia are attempting to develop the habits of kaizen to focus on a customer-driven strategy to improve productivity and the quality of products and services by continuously amassing marginal improvements over time.

The implementation of the kaizen practice could enable enterprises in Ethiopia to identify and solve their current manufacturing problems without employing high-tech approaches, only involving people on the shop floor in kaizen activities. However, the specific challenging factors that faced manufacturing company of Ethiopia to implement kaizen and magnitudes of various factors on the implementation phase of Kaizen not addressed on prior studies. Therefore, this study attempted to identify the following factors include management commitment, skilled human resource, technology, enterprise capacity capability and financial resources that affect kaizen implementation and their magnitude in case of Tracon trading plc. In this study, the researcher tried to explore kaizen practice of Tracon trading plc Coffee Trading Business Line, which are implementing the kaizen management system to revitalize their management system.

This research was find out the level of implementation and effectiveness of Kaizen practice on Tracon trading plc Coffee Trading Business Line in Ethiopia. Therefore, this study will be strived to respond to this research question.

1.4 Research Questions

Based on the statement of the problem the following basic questions were raised and attempted to answer:

1. How effective the current kaizen implementation practice of Tracon trading plc (Coffee Trading Business Line)
2. How does kaizen implementation support organizational performance?
3. To what extent are kaizen tools (5S,Just-in-time, Total productive maintenance, 7 waste elimination practices, total quality management) actually implemented in Tracon trading plc?
4. What are the challenges encountered and lesson learned for other organization in implementing kaizen?

1.5 Objectives of the Study

1.5.1 General Objective

The general objective of this study is to assess the Effectiveness of Kaizen implementation practice in Tracon trading PLC (Coffee Trading Business Line).

1.5.2 Specific Objectives

The specific objectives of this study were:

- To examine the relationship between kaizen practice and organizational performance in Tracon Trading PLC (Coffee Trading Business Line).
- To determine the extent of kaizen tools implementation (5Ss, just in time, TQM, Total productive maintenance, Elimination of seven wests) in Tracon Trading PLC (Coffee Trading Business Line).
- To figure out the degree of contribution of each kaizen tool in improving the performance of Tracon Trading PLC (Coffee Trading Business Line).
- To identify the challenges encountered and lesson learned for other organization in implementing kaizen in Tracon trading PLC (Coffee Trading Business Line).

1.6 Significance of the Study

This study mainly benefits manufacturing companies in that they can learn from the findings of the research. The study also benefits other researchers as a stepping-stone to conduct similar studies that fill the gap of this study. It will also be very important to management and staff at Tracon trading plc (Coffee Trading Business Line), as it will provide the first comprehensive evaluation on what has been achieved in the implementation of Kaizen on the improvement of the performance of the organization. The findings of this study may also assist to make concrete recommendations to other organization about the effect of kaizen practice on organizational performance, which may help the organization to achieve its goal at large.

1.7 Scope of the study

The scope of this study was limited on the effect of kaizen practice on organizational performance to Tracon trading plc (Coffee Trading Business Line) and did not include other organization's business line because it was difficult to conduct research across all business lines, as it requires time and money. It is also delimited to the area of kaizen tool that includes 5s, seven-wastage /Muda/, just in time, total quality management, and total productive maintenance.

The study used data that was gathered from Tracon trading plc (Coffee Trading Business Line) 2022. The study was used primary data in relation to kaizen implementation at Tracon trading plc (Coffee Trading Business Line) and secondary data from articles, research and journals related to kaizen and employees performance.

1.8 Organizations of the Study

The paper was organized into five main chapters. The first chapter is an introductory part, which contains background of the study, statement of the problem, objectives of the study, significance of the study, research questions, scope of the study, and organization of the study. The second chapter provides an overview of the related literature. The third chapter contains research design, source of data, method of data collection, sample size and sampling technique, data processing and analysis, data presentation. The fourth chapter presents analysis and presentations of data and the fifth chapter provides summary, conclusion and recommendation.

CHAPTER TWO

2. LITRATURE REVIEW

2.1 Conceptual Overview of Kaizen

Kaizen is a Japanese word that has become common in many Western companies. Kaizen culture an organizational culture based on the three super ordinate principles namely process and results, systemic thinking, non-judgmental and non-blaming (Mullins, 2010). The word indicates a process of continuous improvement of the standard way of work. It is a compound word involving two concepts: Kai (mean change) and Zen (mean for the better). The term also comes from 'Gemba Kaizen'meaning continuous improvement (CI). Continuous Improvement is one of the core strategies for excellence in production, and is considered vital in today's competitive environment (Robinson, 1991). It calls for endless effort for improvement involving everyone in the organization.

The ideas of kaizen philosophy implement as continuous improvement of organizational attitude the approach on the purpose of doing business. It is the key thrust to maintaining or achieving competitive advantage through a well-managed, dynamic change process. It is customer focused, ever changing, and maximized when all associates use Kaizen to achieve the primary quality, cost, delivery, safety, and morale goals. Its assumption lies in the Buddhist understanding of life to be inherently the experience of suffering. (According to this school of thought, humans undergo suffering because everything is the result of ever- changing and interrelated conditions and causes. Our confusion and suffering will end, when the causes of our suffering are identified and extinguished. (Gembutsu Consulting, 2008). The Kaizen philosophy assumes that our way of life be it our working life, our social life, or our home life should focus on constant improvement efforts. In my opinion, Kaizen has contributed greatly to Japan's competitive success (Imai, 1997, p.1).Kaizen is the main pillar of TQM (Total Quality Management) or TPM (Total Productive Maintenance), and its emphasis lies with continuous process improvement. The most effective way to achieve Kaizen is for worker themselves to be highly motivated to implement to improvement production methods and products. Suggestion systems, QC circle and self- management are typical methods to motivate workers to achieve Kaizen according to (Ethiopian Kaizen Institute, 2013). Kaizen means continuous improvement involving the entire workforce from the top management

to middle managers and workers. Imai (1986) argued that, it is not just a management technique but a philosophy which instructs how a person should conduct his or her life. Kaizen shows how management and workers can change their mindsets together to improve their productivity. Imai farther argues that kaizen is an umbrella concept for a large number of Japanese business practices, such as 5S, including suggestion system, Quality Control Circle (QCC), Total Quality Management (TQM), the Toyota Production System, the Just-in-Time System, and the Kamban System.

2.2 The Objectives of Kaizen

The benefits of kaizen include increasing number of private enterprises and implement quality and productivity improvement. The success of the kaizen implementation also established to disseminate kaizen to private enterprise in sustainable manner (EKI and JICA, 2013). Kaizen aims for improvements in productivity, effectiveness, safety, and waste reduction. Those who follow the approach often find a whole lot more in return, less waste inventory is used more efficiently as are employee skill. People are more satisfied they have a direct impact on the way things are done. Improved commitment team members have more of a stake (a share or interest in business) in their job and are more inclined to commit to doing a good job. Improved retention satisfied and engaged people are more likely to stay. Improved competitiveness increases in efficiency tend to contribute to lower costs and higher quality products; Improved consumer satisfaction coming from higher quality products with fewer faults. Improved problem solving looking at processes from a solutions perspective allows employees to solve problems continuously. Improved teams working together to solve problems helps build and strengthen existing teams.

2.3 Historical Overview of Kaizen

Henry Ford first developed a manufacturing concept of continuously moving assembly line – the first approach for mass production. The Ford Model of a worker performance in simpler and repetitive tasks has been replaced by job rotation and teamwork, which mainly improve employee morality but also yield substantial benefits in terms of higher quality and employee suggestions for improvements in the process (Kovacheva, 2010). The philosophy of kaizen has kindled considerable interest among researchers because it increases productivity of the company and helps produce high-quality products with minimum efforts. Several authors have discussed the

concept of Kaizen including Doolen, T. L. (2005) that were made experience of kaizen in Ethiopia. According to Imai (1986), kaizen is a continuous improvement process involving everyone, managers and workers alike. Broadly defined, kaizen is a strategy to include concepts, systems and tools within the bigger picture of leadership involving and people culture, all driven by the customer. William, H. (1992) stated that the origin of Plan-Do-Check-Act (PDCA) cycle or Deming cycle could be traced back to the eminent statistics expert Shewart in the 1920s.

2.4 The Kaizen Philosophy

Kaizen is a philosophy that suggests a human life and lifecycle can be consistently bettered, translating according to Colenso (2000), to "change and good". The Japanese word is often linked to the term 'continuous improvement' which it is frequently referred to in western organisations and literature as a replacement for the Japanese terminology. Agmoni (2016) finds that, as a philosophy, Kaizen not only prompts positive developments but places a focus on identifying and rectifying issues before they develop and take effect.

The origins of Kaizen in supply chain management can be traced back to the Japanese automotive industry, with Shingo's (1981) paper on the 'Toyota Production system' - developed and implemented in the early 1950s by Taiichi Ohno, former Executive Vice President of Toyota Motor Company (as can be seen from Sako, 2004).

Forming the building block for Kaizen, the concept of lean manufacturing focused on ways to remove 'muda' waste from production processes. Hines and Taylor (2000) defines such waste as non-value adding activities that, in the eyes of the final customer, do not make a product or service more valuable. Keeping with Inman's (1993) description of high inventories as the "flower of all evil", Lean looked to minimise inventory to 'zero' in addition to defects, breakdown, handling, set up and lead time (Shingo, 1981). Over time, Lean production has become increasingly popularised with western organisations, stimulated by Womack, Jones, and Roos' (1990) study of the Toyota Production System. Comparing the Japanese strategy to other manufacturing organisations around the world, this acted as quantification for earlier manufacturing studies (Shingo, 1981; Schonenberg, 1982; Monden, 1983).

2.5 Implementation of kaizen

Kaizen implementation is not once in a month or once in a year activity. It is continuous. (Imai, 1997) expressed that the rate of the worker participation in terms of providing important suggestion for their organization and Japanese companies. In most cases, these are not ideas for major changes. Kaizen is however, based on making little changes on a regular basis namely, always improving productivity, safety and effectiveness while reducing waste. The tools that are used to implement Kaizen, also known as Kaizen umbrella, are Total Quality Control (TQC), Total Productive Maintenance (TPM), Quality Improvement, Automation, Zero Defect (ZD), Kanban, Just-in-time (JIT),the 5-s steps Quality Control Circle (QCC) and the suggestion system (Imai, 1986).

2.5.1 Techniques for Implementation of Kaizen

Indeed an integral part of Total Quality Management (TQM) is Kaizen therefore the term is reciprocally related. When an organization/company want to maintain a level of quality that satisfy their customers at the appropriate time and price then that organization must follow some quality management techniques to fulfil those principles and planning. According to Imai (1986) the techniques associated with Kaizen included are, total quality control (TQC)/TQM, just in time (JIT), total productivity maintenance (TPM), fives(5s), Benchmarking, skill gap analysis, six sigma the information about it found under TQM, Policy Deployment, a Suggestion System, Small-group activity, etc. For this research only, use some of them than all organizational performance and effectiveness.

I. Total Productivities maintenance

TPM or being known as Total Productive Maintenance has been originated in Japan in 1971. It is being design as a method to improve the availability of machines through the utilization of maintenance. Some people might think that TPM is deterioration prevention, which means is what happens naturally to anything that is not taken care of. For this reason, many people refer to TPM as "total productive manufacturing" or "total process management" (Joel Levitt, 2010). TPM is a proactive approach that essentially aims to identify issues as soon as possible and plan to prevent any issues before occurrence. One motto is "zero error, zero work-related accident, and zero loss" (Wireman, T., 2004). In the other hand, TPM also need to make sure that the setting and

maintenance of the machine are being frequently done by the machine operator that has be well-trained to handle that machines (Peter Wilmott et. al., 2001). In this setting, the operators are enabled to understand the machinery and identify potential problems, righting them before they can affect production, by so doing, decrease downtime, and reduce costs of production. TPM is a critical adjunct to lean manufacturing. If machine uptime is not predictable and if process capability is not sustained (Ralph Bernstein, 2005), the process must keep extra stocks to buffer against this uncertainty and flow through the process will be interrupted. Unreliable uptime is caused by breakdowns or badly performed maintenance. Correct maintenance will allow uptime to improve and speed production through a given area allowing a machine to run at its designed capacity of production.

II. Total Quality Management (TQM)

One particular approach to improved organizational performance and effectiveness is the concept of the Japanese inspired total quality management (TQM). There are numerous definitions about TQM. These are generally expressed in terms of a way of life for an organization as a whole, committed to total customer satisfaction through a continuous process of improvement and the contribution and involvement of people according to (Mullines, 2010). A major influence on the establishment and development of TQM was the work of Deming, who emphasized the importance of visionary leadership and the responsibility of top management for initiating change. A mathematician by training, he was interested in statistical measurement of industrial processes and attempted to persuade the American manufacturing industry to improve quality, and to create constancy of purpose for improvement of products and service. Deming cited in, (Ibid), drew attention to the importance of pride in work and process control, and made constant reference to the importance of good management including the human side of quality improvement and how employees should be treated. If TQM is to be implemented successfully, it must be seen as a total process involving all operations of the organization and the active participation including top management. It demands a supportive organizational culture and a programme of management change. TQM places emphasis on the involvement of people as the key to improved quality. It involves changes to the traditional structure with greater emphasis on natural Work groups, multi-discipline working and team-based management. Attention must be given to effective education

and training, empowerment and the motivation to take ownership of quality, and systems of communications at all levels of the organization. (Mullins, 2010)

III. The Just- In-Time

Production System Originating at Toyota Motor Company under the leadership of (Taiichi Ohno, 1988) the just- in- time (JIT) production system aims at eliminating non value-adding activities of all kinds and achieves a lean production system that is flexible enough to accommodate fluctuations in customer orders. Just–in–time principles are to produce only the units in the right quantities, at the right time, and with the right resources, Applicable. This production system is supported by such concepts as take time (the time it takes to produce one unit) versus cycle time, one -piece flow, pull production, jidoka(automation), U-shaped cells, and setup reduction according to(Imai, 1986:9). To realize the ideal JIT production system, a series of kaizen activities must be carried out continuously to eliminate non-value- adding work in Gemba. JIT dramatically reduces cost, delivers the product in time, and greatly enhances company profits.

IV. The 5s Formwork Place Organization

5s is not only the basic technologies to promote Kaizen, but also a prerequisite for KAIZEN implementation. The word 5s brought from five Japanese equivalent meaning with English terms is presented as follows: 5s originally stands for Sort=Seiri, Set-In-Order=Seiton, Shine=Seisou, Standardize=Seiketsu, Sustain=Shitsuke. It is well known but difficult to practice. However, if you can install it successfully, you realize the cost effectiveness of 5s. (Imai, 1997) Once the root causes of problems in the process or value stream are identified during the pre kaizen process, the team uses the following four pillars of kaizen activities to implement greater operational efficiency (the cost) and effectiveness (the extent to which customers‘ requirements are met). These are: a) housekeeping activities, b) waste elimination or elimination of non-value added materials, c) standardization of workplace environment, and d) mapping out Socio-economic and environmental effects of the company, and e) conducting follow-up action plans to evaluate the end results of the kaizen activities (Ministry of Industry, 2011). a) Housekeeping Activities: The beginning of the kaizen housekeeping journey of management starts by displaying a level of orderliness and clarity of the work area using the following Five Steps (5S). As stated by Imai, 5S

is a set of techniques that provide a standard approach to good housekeeping and fosters an increase in quality and productivity (Imai, 1997 as quoted in Juhari et al (2011).

Therefore, to effectively apply the 5S System, Juhari, Abidin, and Omar (2011) suggest that communication for 5S, training for 5S, reward and recognition for 5S and top management support for 5S are vital factors that influence employees'motivation in the implementation of the 5S System. Given this, they suggest that management needs to pay attention and invent effective strategies to motivate their employees on a consistent basis. In their study they have ascertained that the four independent variables that influence employees'motivation for environmental improvement and the implementation of the 5S systems include, knowing the goals of the firm, management support, employee involvement and experiential training, and employees' reward and recognition.

A. Waste Elimination:

Muda or elimination of non-value adding activities includes removing unnecessary wastes caused by people and machine. Muda or waste can accumulate because a company may have more than necessary equipment, materials or people for quantity production. The way to eliminate waste in any company is therefore to make employees aware in advance, which steps add value to the product, and which steps do not. Generally, the seven types of deadly wastes (muda) as identified by the Toyota Production System (TPS) that accumulate in a company's production system are caused by overproduction, waiting, transportation, inventory, over processing, motion, and production of defective parts. In addition, in the sugar plantation and production process, extra wastage is accumulated because of the infiltration of excessive nutrients into ground water or surface waters that naturally contribute to greenhouse-gas emissions (Lean in Government Series, November 2007).

It occurs when a company produces too soon or too much product in order to be on the safe side in case of a machine's failure and/or employee absenteeism. As a result, trying to produce more than needed products creates misuse of raw materials, wasteful inputs of manpower, utilities, an increased burden on interest payments, added transportation, additional space needed to store excess inventory and administrative costs (See, Thawani, 2003 and Thessaloniki, 2006). As stated

by Mezgebe, Asgedom, and Desta (2013) any company can minimize overproduction by trying to be consistent in understanding the heartbeat of the consumer, making demand assessments for the particular product even if the product has been commercialized for a long period of time. Demand is dynamic and tuning the production scheme accordingly is important, so continuous communication with customers is one way of reducing overproduction.

B. Waiting Waste:

This occurs when the hands of the operator are idle, or when an operator‘s work is put on hold because of a lack of parts, waiting for the next piece to arrive. It can also happen when another worker slows the line, anything that lengthens the lead-time of the product from start to finish. As narrated by Thessaloniki, (2006) Lead-time begins when the company pays for its raw materials and supplies, and ends when the company receives payment from customers for products sold. Since lead-time represents the turnover of money, a shorter lead-time means better use of resources, more flexibility in meeting customer needs, and of course contributes to the lowering of operation costs.

C. Transportation:

This is a non-essential part of operations. A company might use trucks, forklifts, or conveyors as a means of transportation. Unnecessary transport of damaged materials (muda) contributes to waste because transportation does not add value to the finished product. As stated by Thawani (2003) one way of minimizing waste is by incorporating the act of any process into the main line.

D. Inventory:

An excess of final product, semi-finished product, raw materials and spare parts kept in inventory contributes to Muda of inventory. They do not add value. Instead, they add to the cost of operations by occupying space, requiring additional equipment and facilities such as warehouses and forklifts. As the products stored deteriorate over time they could eventually become obsolete. Excess items staying in inventor gather dust and their quality deteriorates over time. They are even at risk of damage through fire or production systems help to solve the Muda of inventory.

E. Over-processing:

This type of Muda uses more resources, utilities, and materials, or uses the wrong set of tools, procedures or systems. Producing more quantity ahead of schedule creates waste because in manufacturing a longer line requires more workers, more working-process and a longer lead-time to produce outputs. As suggested by Thessaloniki (2006), many unneeded workers are likely to make a greater number of mistakes, which leads to quality problems. More workers also mean that a longer lead-time will increase cost of operations As Suggested by Thawani, (2003) elimination of Muda in processing can frequently be avoided by combining operations/steps.

F. Motion:

Excessive movements by workers like walking, lifting, or carrying heavy objects, searching for lost items create waste. In short, Muda of motion is unproductive because it involves movements by workers not directly related to the job. Such as poor workplace organization, resulting in poor ergonomics for example excessive bending or stretching (Mezgebe, Asgedom, and Desta, 2013). Thus, Workers should avoid walking, lifting, or carrying heavy objects that require great physical exertion because it is difficult, risky, and represents non-value added activities‖ (Thessaloniki 2006). Rearranging the workplace would eliminate unnecessary human movement and eliminate the requirement of having another operator to do his/her work more efficiently.

G. Production of Defective Parts:

Muda of repairs/rejects interrupts production. It contributes to a great waste of resources and effort. In addition, rejects increase inspection work, require expensive rework or additional time to repair (Thessaloniki, 2006). The production of defective parts can cause dissatisfied consumers to complain about their defective product but also might create a skeptical attitude about other products the company may be producing in the future. In order to eliminate non-value added defective products, companies could retrain and redirect staff-time to higher priority activities related to their core mission.

In general, it was suggested by Thawani (2003) that unlike many western approaches such as Business Process Re-engineering, Six Sigma which calls for massive investments, the golden rules of Workplace Management (Gemba kaizen) is group effort for continuous incremental improvement that can be standardized by requiring each worker to: go to work place first (like a

detective) when problems arise. Investigate or check the object carefully (e.g. a customer complaint or defective item produced/pile loads of inventory); Take temporary counter-measures promptly; Find the root cause of the problem (e.g. if excess inventory check the purchasing system or the production management) and Develop or amend an existing procedure or system to prevent its recurrence. Thus, the adoption of a zero defect mindset in the employees of an organization is vital for spontaneously and automatically improving the operations of the firm. Management and engineers set standards. Companies with employee suggestions can bring about improvement as they are called to review the set standards periodically, collecting information and analyzing defects, and encouraging teams to conduct problem-solving activities to optimize performance, comfort, and safety to meet the company‘s goals (Thessaloniki, 2006).

H. Policy Deployment

Although kaizen strategy aims at making improvements, its impact may be, limited if everybody is engaged in kaizen for sake without any aim. Management should establish clear targets to guide everyone and make certain to provide leadership for all kaizen activities directed toward achieving the targets. Real kaizen strategy at work requires closely supervised implementation. This process is called Policy Deployment, or in Japanese, Hoshin Kanri cited in (Imai, 1986). First, top management must devise a long- term strategy, broken down into medium- term and annual strategies. Top management must have a plan-to- deploy strategy, passing it down through subsequent levels of management until it reaches the organization. As the strategy cascades down to the lower echelons, the plan should include increasingly specific action plans and activities. Major Kaizen Systems Kaizen without a target would resemble a trip without a destination. Kaizen is most effective when everybody works to achieve a target, and management should set that target (Imai, 1986).

I. The Suggestion System

Functions as an integral part of individual-oriented kaizen and emphasizes the morale- boosting benefits of positive employee participation. Japanese managers see its primary role as that of sparking employee interest in kaizen by encouraging them to provide many suggestions, no matter how small. Japanese employees are often encouraged to discuss their suggestions verbally with supervisors and put them into action right away, even before submitting suggestion forms. They

do not expect to reap great economic benefits from each suggestion. Developing kaizen minded and self-disciplined employees is the primary goal. This outlook contrasts sharply with that of Western management‘s emphasis on the economic benefits and financial incentives of suggestion systems (Ibid).

A kaizen strategy includes small group activities informal, voluntary, intra company groups organized to carry out specific tasks in a workshop environment. The most popular type of small group activity is quality circles. Designed to address not only quality issues but also such issues as cost, safety, and productivity, quality circles may be regarded as group oriented kaizen activities. Quality circles have played an important part in improving product quality and productivity in Japan. However, their role often has been blown out of proportion by overseas observers, who believe that these groups are the mainstay of quality activities in Japan. Management plays a leading role in realizing quality—in ways that include building quality Assurance systems, providing employee training, establishing and deploying policies, and building cross- functional systems for QCD. Successful quality-circle activities indicate that management plays an invisible but vital role in supporting such activities (Ibid).

2.5.2 Level of Kaizen implementation

As Ethiopian kaizen institute of 2009e.c stated that kaizen implementation levels are three those are management-oriented kaizen, group oriented kaizen and individual oriented kaizen

1. Management Oriented Kaizen

Management oriented Kaizen concentrates on operational standard that content top-level management, medial level management and the supervisor that provides 50 present of improvement. And in kaizen the managements are expected to have four capacities those are capacity leadership, capacity of improvement, capacity of working together with employees that keep the organization up on progress and moral.

2. Group Oriented Kaizen

Kaizen in group work, as a permanent approach is represented by Quality Control (QC) circles and other small group activities to solve problems. The approach also calls for the full Plan-Do-Check–Act (PDCA) cycle and demands team members not only identifying problems areas but

also identify the causes , analyze them, implement and test new countermeasures , and establish new standards and procedures. The group oriented Kaizen enhances group moral and allows everybody to master the art of solving immediate problem from their own workshop.

3. Individual Oriented Kaizen

Individual oriented kaizen is manifested in the form of suggestions. The suggestion system is vehicle for caring out individual oriented Kaizen. It is often regarded as a morale booster and it does not always ask for immediate payback on each suggestion. Management attention and responsiveness are crucial if workers are to become "thinking workers" looking for improved ways to do their job continually.

1.1.1. Condition for Successful Implementation of kaizen

Kaizen strategy is one that works to constantly improve the performance of employees and managers, the interaction between staff and management, and the pursuit of better productivity. According to (George N. Root III, 2012) there are conditions need to practice Kaizen strategy effect in organization.

Job Satisfaction

For a Kaizen strategy to work, your employees must be satisfied with their jobs and be interested in working to continuously improve their performance. Your human resources group should survey employees to determine the staff attitudes toward job satisfaction and work to improve the workplace conditions until job satisfaction is achieved.

Company Involvement

The company must be dedicated to a Kaizen strategy for it to work. Managers need to be encouraged to set time aside for employee evaluations, and employees need to be allowed time to monitor the managerial staff as well. A Kaizen needs to be a priority in business planning for it to be successful.

Dedication

You must present a Kaizen strategy to your managers and employees as a way to improve company productivity and add to the corporate bottom line. A Kaizen strategy can look like a common-sense approach to job development, but its effectiveness is in the ability of your staff and managers to

stay dedicated to it. Developing the proper attitude toward a Kaizen strategy and getting your company to understand its benefits will make it easier to implement.

Open-Minded

You and your staff need to have an open mind for a Kaizen strategy to work. It can be a significant departure from the way you are used to doing things. The constant analysis of job duties and employee interaction can seem unnecessary at times. Encourage your organization to give Kaizen a chance and enter into it willing to make it work.

Questioning

A Kaizen strategy requires many questions about individual and group performance. Your staff needs to be prepared to field many questions about why they did something a particular way, what results they were hoping for and how they judge the results they achieved. Let your staff know that these questions are not an indictment of their performance but rather a way to improve productivity.

Teamwork

When a person working within a Kaizen strategy has a question about a work process, you should encourage that person to ask several people for input. Your staff needs to learn to work as a team and respect each other's opinions and input for Kaizen to be effective. No Finger Pointing When something goes wrong, a common defense for employees is to begin pointing fingers at others. You need to create a culture where mistakes are looked at as opportunities to learn and improve as opposed to being reasons for accusations.

2.6 Principles of kaizen

As (Ethiopia Kaizen institution Manual volume 7, 2017) listed Kaizen guiding principles are:

1) Integrated total company approach: Genuine participation of top management, middle managers and front-line employees in a collaborative working system throughout company organizations

2) Proactive and spontaneous participation of employees of front-line workplaces with their own initiatives

3) Focus on the workplace that encourages improvements of efficiency in existing resources allowing low cost improvements to accumulate for significant contribution to the company goals

4) Continuous and endless activities in revolving cycles of PDCA resulting in significant improvements

5) Endogenous undertaking conducive to change in organizational culture: Practicing KAIZEN in itself leading to a corporate culture of continually self-innovative organization and self-motivated workforce.

2.7 Organizational Performance

Organizational performance principally focused on the capability and ability of an organization to efficiently exploit the available resources to achieve accomplishments consistent with the set objectives of the company, as well as considering their relevance to its users (Peterson, Gijsbers, & Wilks, 2003). Verboncu and Zalman (2005) appreciated that performance is a particular result obtained in management, economics, and marketing that gives characteristics of competitiveness, efficiency, and effectiveness to the organization and its structural and procedural components. According to Protopappa-Sieke and Seifert, (2010), the success of an organization is assessed through the performance of the organization's financial performance and non-financial performance. Operating performance is part of the non-financial performance and a production aspect of the measurement is defined as the organization because of organizational processes (de Leeuw & van den Berg, 2011).

Organizational performance can be defined as a measure of how efficiently and effectively managers use available resources to satisfy customers and achieve organizational goals (Jones & George, 2009). This is because organizations are commonly viewed as instruments of purpose, where it often can be seen as coordinated by intentions and goals (Khairur, Hayati & Mohd Shahriman, 2010) as they need to compete with one another and consciously seeking advantage in order to maintain good ranking performance. As organizational performance can be measured in terms of effectiveness and efficiency as mentioned before, therefore the word “efficiency” can be defined as access to the amount of resources that the organization use to achieve stated goals (Salaheldin, 2009). In contrast, for organizational performance that is a measure based on its effectiveness, this actually refers to the degree to which the organization has achieved or accomplishes its desired goals (Daft, 2008). On the other hand, according to Richard et al. (2009), organizational performance encompasses three specific areas of firm outcomes, which are

financial performance, Product market performance. Operational performance, However, in relation to the subject of the study in this paper, the researcher is only interested to measure the effectiveness of kaizen practices towards the organizational performance based on two specific areas from the financial performance that used profitability and, from the operational performance that used productivity and cost reduction.

2.8 Empirical Review

(Nesra Seid, 2012) conducted a quantitative study on the role of the Ethiopian Government in implementing kaizen as a modern management tool for quality and productivity at Kadisco Chemical Industry in Addis Ababa. The findings of this study indicated that the implementation of the Kaizen policy was found to increase labor productivity by reducing, on average of 50%, time wastage for searching tools; improved a defect ratio which ranged from 50% to 70%; and improved lead time in the range of 16% to 90%. The study thus concludes that the implementation of Kaizen at Kadisco Industry has brought those benefits.

As noted in (Asayehgn Desta et al., 2014), based on the three pilot companies (Mesfin Industrial Engineering PLC, Almeda Textile Factory PLC., and Sheba Leather and Tanning Industry PLC), the study found that the employees didn‟t have the full capacity to accept the kaizen management system. If they had for example, by forming a kaizen cross-functional teamwork approach, workers could have been empowered to challenge the status quo, gathering the most conspicuous internal and external factors that could be become part of the work ethics necessary for continuous improvement of productivity. Instead, it was found that some of the executive managers were themselves not committed to the kaizen teamwork because they didn't usually participate nor did they allow the shop floor workers or operators to participate in team group work. According to (Alhabi Mohammad & Alyahya Mohammed, 2013) the organization culture helps in internalizing joint relationship that leads to manage effective organization processes. The productivity and culture of organization helps in improving performance. In more than 60 research studies, 7600 small business units and companies‟ performance from 1999 to 2007 have been evaluated. There is positive association between organizational culture and employee's performance that helps to improving results of organization performance.

A study by Muthengi and Soni (2005) on effectiveness of KAZIEN System in enhancing financial performances of Baba Dogo Metal fabricators found that Kaizen is not a procedure effectively aced. Despite the fact that the standards can be just characterized, taking in their viable application through cross-useful kaizen groups requires study, duty and determination. Direction by experienced professionals, frequently on a drawn out premise, is referred to on numerous occasions as a basic central of progress, and as with most business change forms, the prizes are proportionate with the venture.

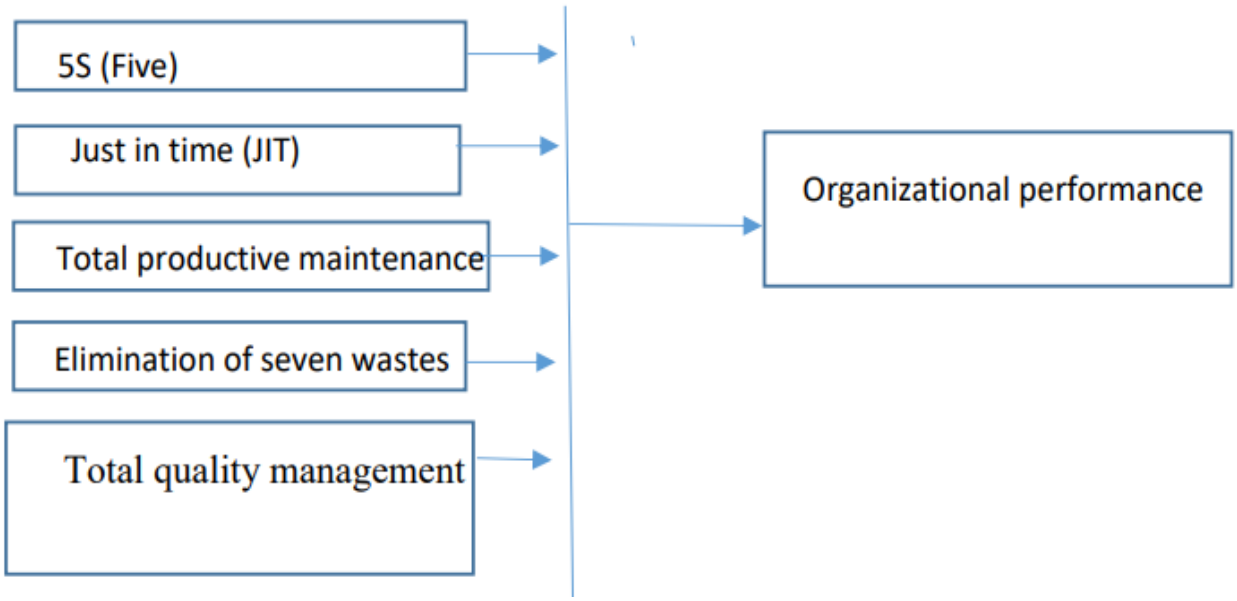
To this point, empirical studies on kaizen implementation with respect to manufacturing company reviewed. Although Kaizen is a recent phenomenon used to organizations of Ethiopia, some researchers have been engaged to study kaizen practice in a context of Ethiopian organizations. For instance, using mixed method research design, Eden (2017), Asayehgn Desta (2014), and Berhanu (2014) studied kaizen implementation on selected organizations of Ethiopia. However, based on the researcher knowledge, there was no empirical study conducted on Ethiopia on assessment of effectiveness (success/failure factors) of kaizen. Hereunder, the aforementioned empirical studies conducted in Ethiopian case reviewed.

Research conducted by Eden (2017) evaluated Practices and Challenges of Kaizen Implementation at Tikur Abbay Shoe Share Company. In doing so, the researchers used a mixed method research design and gathered data using structured questionnaire and interview from respondents. Eden (2017) based on their finding claimed that in each organization very high levels of user satisfaction and spectacular improvements in kaizen implementation. In Tikur Abbay Shoe Share Company were brought some changes in minimizing work flows and in reducing time conception but there had been challenges which emanated from various sources, like gaps in knowledge of executives, trainers and employees; their negative attitude towards the kaizen implementation. Their lack of knowledge and skills; gaps in available infrastructures and material resources; and gaps in the capacity and capabilities of the management body. The study disclosed that there were inadequate training on the concept and application of kaizen. As per the researchers' recommendation, thus, to reduce the knowledge and skill gap of the implementers on pillars of kaizen, training on kaizen is suggested as an important force of smooth kaizen implementation.

The authors claimed that the findings of the research showed that there was moderately implemented kaizen strategy. The kaizen implementation indicated that there were success stories, but there had been challenges which emanated from various sources, like gaps in knowledge of executives, trainers and employees; their negative attitude towards the kaizen implementation; their lack of knowledge and skills; gaps in available infrastructures and material resources; and gaps in the capacity and capabilities of the management body. However, due to its recent introduction in Ethiopia, limited number of study conducted the concept of Kaizen in manufacturing firms as evident in the foregoing review however some study has focused on the manufacturing firms especially in the Ethiopia context and in this era of globalization and technological advancements where quality improvement is key for operational performance. As per the researcher knowledge, there is no enough comprehensive study on assessment of effectiveness of kaizen implementation in Ethiopian context, specifically, manufacturing company's kaizen implementation stands. Thus, this gap leads to originate the following general research question and a need to study Assessment of effectiveness of kaizen practice in Tracon trading plc (Coffee Trading Business Line).

2.9 Conceptual framework

There are several systems and practices that fall under the umbrella of Kaizen philosophy. These include 5S, Kaizen events, 5 Why's, Total Preventive Maintenance (TPM), Just-In-Time (JIT) System, others are Suggestion System, Kaizen costing, Quality Circle (QC), Total Quality Management (TQM), Toyota Production System (TPS), Kanban system, elimination of the seven wastes and poka-yoke (error proofing). These systems if well-coordinated and implemented can lead to improvement in the efficiency and productivity of an organization while ensuring a conducive organizational climate for continuous improvement and innovations (Titu et al., 2010). This Study will therefore look at the effect of the independent variables on the dependent variables. This study was measured organizational performance in terms of, profitability, productivity, and cost reduction.


5S (Five)
Just in time (JIT)
Total productive maintenance
Elimination of seven wastes
Total quality management
Organizational performance

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Research Design and Approach

This chapter outlines the methodology on how data and information relevant to the research was gathered and analyzed in order to achieve the objectives of the study. It was discussed the description of study procedures and the methods that was employed in the study. It was covered the research design, sources of data, instruments of data collection, population and sampling procedures, methods of data analysis, and ethical consideration.

3.1.1Research Design

This study used a descriptive research approach to assess Effectiveness of Kaizen implementation practice in Tracon trading PLC by focusing on employees of Coffee Trading Business Line in Addis Ababa. Descriptive research enable the researcher to describe the average member, or the average performance of a member, of the particular group being studied.

3.1.2 Research Approach

The research approaches include both quantitative and qualitative type to triangulate the instruments from different directions. Measuring the objective and analysis of effect of independent variable on dependent variable was done through quantitative research approach, whereas qualitative research, which was framed in terms of using words, open-ended questions or interview questions.

3.1.2 Source of Data

The main sources of data for this research were both primary and secondary data. Primary data was collected either through questionnaires or through interview from the sampled respondents (Kothari, 2006). On the other hand, a secondary source of data was collected from different books, newspapers, magazines, academic papers, annual reports, literatures etc.

3.2 Population, Sample Size and Sampling Techniques

Population means totally of individual from which some sample is drawn .Target populations of this study were comprised of 200 of the employees of Tracon trading plc (Coffee Trading Business Line) those who are working on the main factory around Jemo sub city. The sample size will be determined using Yamane's, (1967) simplified formula, the study focus of which those are permanent worker of the company and those how have one years and above working experience in the company. As the result shows below by using, the formula sample size of the research is 133.

$$n = \frac{N}{1+N(e)^{\wedge}2}$$

Where: n = sample size

N = Total population

e = Sampling error (at 5% margin of error and 95% confidence level)

Therefore, n= 200

$$1+ 200 (0.05)^{\wedge}2$$

$$n= 200$$

$$=133$$

n= the sample size of the research is 133

3.3 Data Collection Techniques

Primary data was gathered and measured information on variables of interest was done in an established systematic fashion that enables to answer research questions and evaluate outcomes mainly by using questionnaires. Secondary data was collected from reports, publication and other relevant studies. Based on this the convenience sampling of probability sampling technique was used in this study (Diamantopoulos and Schlegelmilch, 2000).

3.4 Methods of Data Analysis and Presentation

The data has been collected by using questionnaires and interview; the questionnaires prepared in the scale format that ask for agree/ disagree rating response of employees. The data collected were analyzed using SPSS and presented by using chart and tables. Presentation, analysis, and interpretation of data and conclusions and recommendations have been drawn using analysis and data outcomes into a text format.

Chapter Four

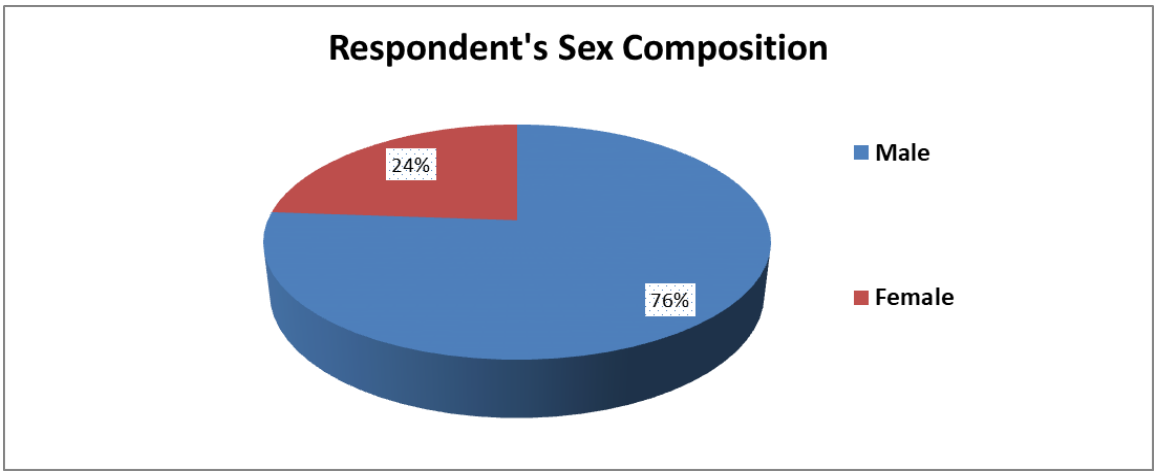
4.Presentation, Analysis, and Interpretation of Data

4.1 Introduction

This chapter deals with the presentation, analysis, and interpretation of the study in relation to the Assessment of the Effectiveness of Kaizen implementation practice in Tracon trading PLC (Coffee Trading Business Line). The data has been collected through questionnaire from employees and interviews conducted with the higher official's discussion to arrive at meaningful results. The data collected were analyzed using SPSS and presented by using chart and tables. The chapter presents an analysis of the information designed to respond to the research objectives as outlined in the study. To collect relevant Data, the questionnaire was distributed for 133 sample employees if the Tracon trading PLC and 130 of them have filled and returned successfully. Thus, questionnaire return rate is happened to be 98%. The data on Kaizen implementation practice in Tracon trading PLC, which was collected from 130 employees who are working in Coffee Trading Business Line of the Tracon trading PLC, will be presented as follows.

4.2 Analysis on the personal profile of respondents

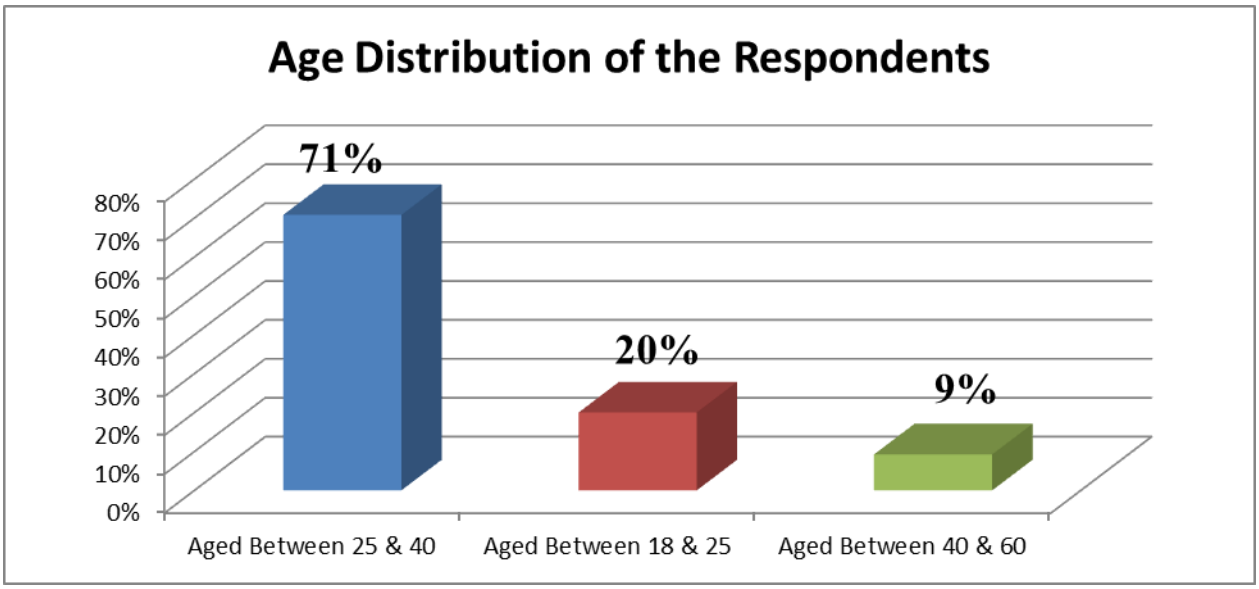
*Figure 1-**Data Presentation of Respondents' sex***



Source: computed from primary data.

As the above pie chart indicated from the respondents 76%, (99) and 24% (31) were male and female, respectively. This showed that more male than female employees are participated in the study and the sample population is dominated by the male employees.

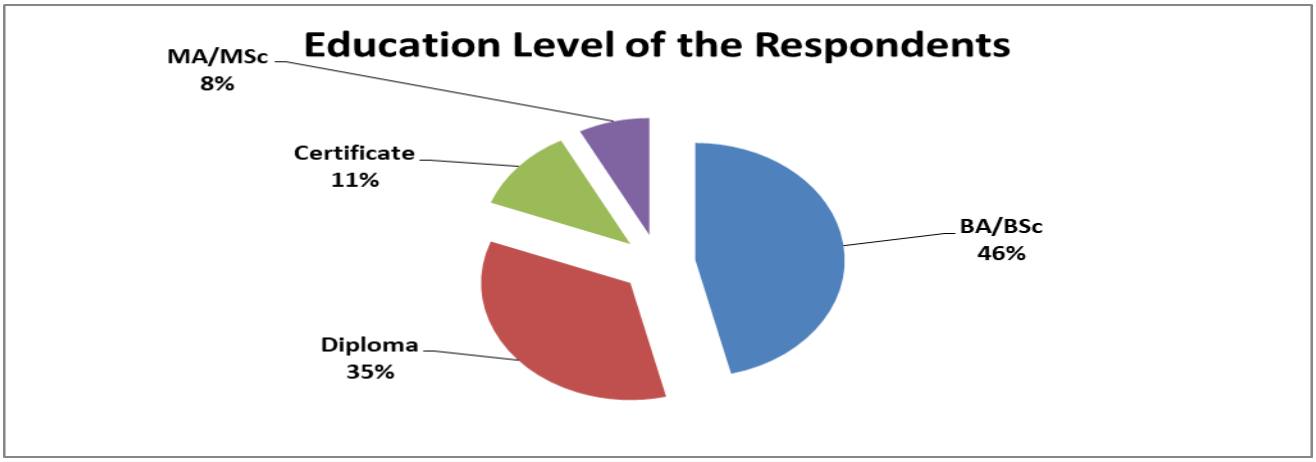
Figure 2-***Age Distribution of the Respondents***



Source: computed from primary data

The above table shows that 92 (71%) of the respondents are found the age interval between 26-40, and 26 (20%) of the respondents are between 18 - 25 and the remaining 12(9%) of the respondents are found between 40 and 60 years. This showed that majority of the employees that participated under study from Tracon Trading Plc were between the ages of 18-40 years. This group constituted 91% of the respondents sampled for this study. This age category indicates the presence of an active working force that have a progressive effect on the development of the company production and using this group provides better labor input and is important for the company.

Figure 3 ***Respondents Educational Background***



Source: Computed from primary data

According to the above figure, majority 60 (69%) of respondents were first-degree holders, followed by diploma holders 45 (35%) of respondents, the other group 15 (11%) of respondents were at certificate level and the remaining 10 (8%) of the respondents' were Master's Degree Diploma holders. Therefore, majority of the respondents are First degree (BA/BSc) holders and Diploma holders. These two groups constitute about 81% of the employees selected for the sample. Thus, from this we can conclude that most of the respondents are well educated indicating that the application of kaizen service could be easy for the company workers

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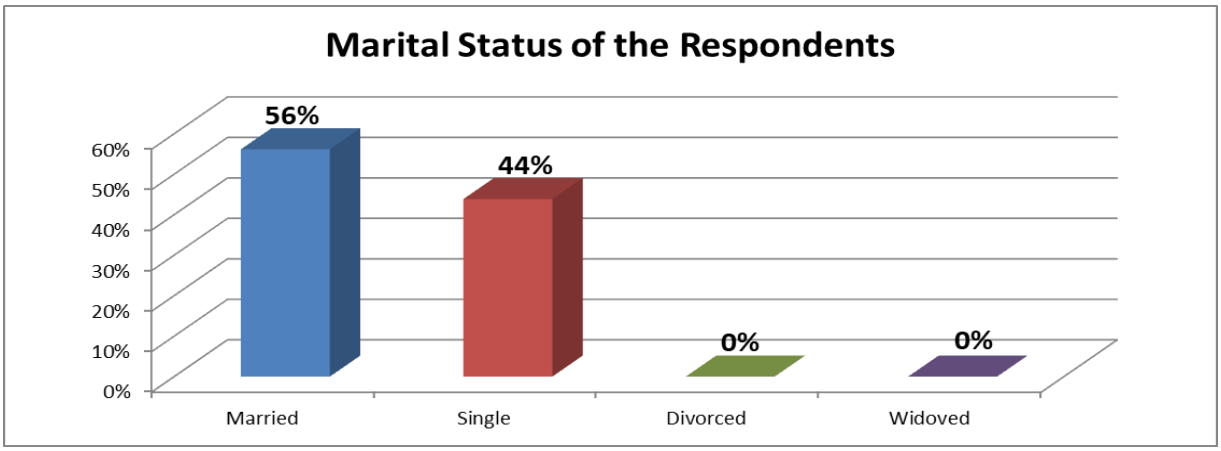
Figure 4; ***Respondents Marital Status***

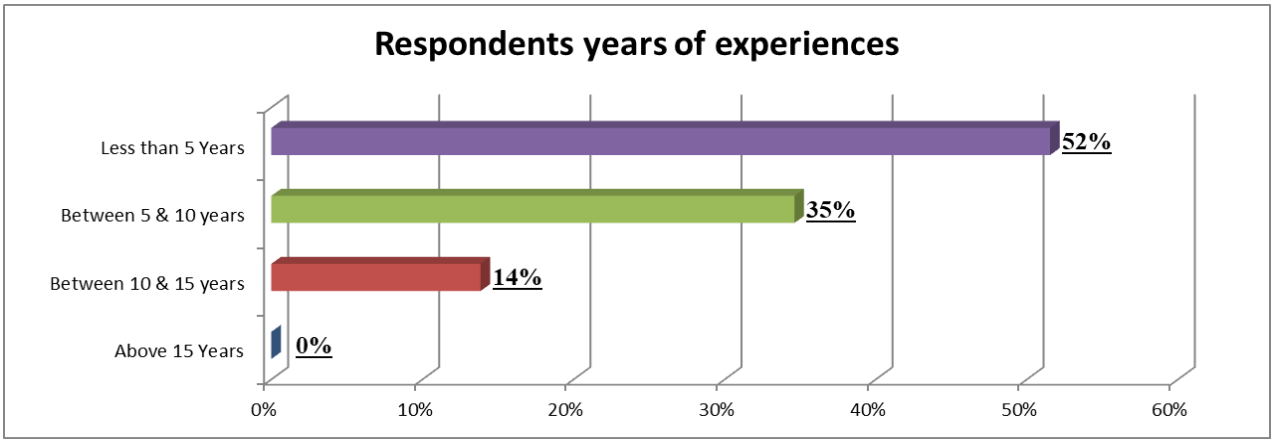


Source: Computed from primary data

Figure 4.4 above showed that the entire sample respondents included in this study was single & married. These two groups constitute 56% and 44% as married and single, respectively. Therefore,

this analysis shows that single and married employees are more in the selected samples; this may be attributed to the age distribution of the respondents included in this study.

Figure 5 ***Respondents years of experiences***



Source: Computed from primary data

As we can realize from the above Figure 4.5, the largest groups of respondents have work experiences less than 5 years with tracon Trading Plc, which accounts 52%, whereas 35% are in the range of 5 to 10 years of, work Experiences. The other group of employees, which is 15% of the respondents, has work experiences between 10 and 15 years. There are no employees who claimed to be worked more than 15 Years in the company. Generally, the majority-selected sample of employees from Tracon Trading plc has no long work experiences in the company. This revealed that majorities of the respondents are not too experienced in which the company is believed to provide training to its employees to escalate their working performance and to develop attractive working environment.

4.3 Analysis on the Kaizen Tool Implementation in Tracon Trading Plc

4.3.1 Analysis on the 5s Framework

5s is not only the basic technologies to promote Kaizen, but also a prerequisite for KAIZEN implementation. The word 5s brought from five Japanese equivalent meaning with English terms is presented as follows: 5s originally stands for Sort=Seiri, Set-In-Order=Seiton, Shine=Seisou, Standardize=Seiketsu, Sustain=Shitsuke. It is well known but difficult to practice. Based on this, the data collected regarding to the 5s Frame work implementation practices in Tracon Trading plc will be provided as follows:

According to (Hutchins, 2006) Implementing the 5s (sort, set in order, shine, standardization and sustain) in the company can develop well-organized workplace that will come out a safer, more efficient, and increased in service, employee attitudes and as well as social responsibility. This research survey find the same result that After implementation of the kaizen principle in the company help to improve the processes and standard of work place that increase employees performance and also implementation of 5S has helped the employee to reduce the amount of time in searching for tools and equipment's.

A. Analysis on Employees responses on Sorting Practice of the Tracon Tarding Plc.

Based on this, the respondents were asked about whether the company properly differentiates between necessary and unnecessary item or not, 70% (91)of them were admitted that Tracon trading plc has been properly differentiating between necessary and unnecessary item in the work place. However, 16% revealed that Tracon trading plc has not properly differentiates between necessary and unnecessary item in work place. Finally, the remaining 14% of the respondents were being neutral about this idea.This helps the company to use necessary materials effectively and avoid unnecessary materials on time.

In addition, 70% of them admitted that in Tracon trading Plc Unwanted items are minimized from work place. 16% revealed that the organization's unwanted items are not minimized from work place. The remaining 13% of the respondents were neutral about this idea. In general, 70% of the respondents were admitted that in Tracon trading Plc Unwanted items are minimized from work place..

57% of the respondents were agreed that the Rules of red tag for disposal items were placed in Tracon trading Plc. The other group or the respondents, 13% of them, were Neutral about this idea

47% of the respondents admitted that here is practice of defining areas to store broken, unusable or occasionally used items in Tracon trading plc and 44% of the respondents revealed that there is no practice of defining areas to store broken, unusable or occasionally used items in Tracon trading plc. The remaining 9% of the respondents were remained neutral on this idea. From this it can

concluded that, (44%) of the respondents were no practice of admitted that Storage area is not defined to store broken, unusable or occasionally used items in Tracon trading plc. This lead a gap between employee's performance expected and actual level of production. (For details see Table 4.3.1 below)

Table 4.3.1A: Employees Responses on the Implementation Practices of Sorting

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
Sorting	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	**% Share**
The factory properly differentiates between necessary and unnecessary item	7	5%	14	11%	18	14%	52	40%	39	30%	**130**	**100%**
Un wanted items are minimized from work place	9	7%	12	9%	17	13%	68	52%	24	18%	**130**	**100%**
The Rules of red tag for disposal items	13	10%	26	20%	17	13%	51	39%	23	18%	**130**	**100%**
Storage area is defined to store broken, unusable or occasionally	19	15%	41	32%	12	9%	37	28%	21	16%	**130**	**100%**

Source: Computed from primary data

From the above table, it can concluded that 70% of the respondents were admitted that in Tracon trading Plc Unwanted items are minimized from work place. In addition, most of respondents (70%) were admitted that Tracon trading plc has been properly differentiating between necessary and unnecessary item in the work place, and 57% of the respondents were agreed that the Rules of red tag for disposal items were placed in Tracon trading Plc. This helps the company to utilize its property efficiently. However, majority (47%) of the respondents were no practice of admitted that Storage area is not defined to store broken, unusable or occasionally used items in Tracon trading plc. Therefore, the company should aware the employees the defined storage areas. In general, it can concluded that Tracon Trading properly implementing Sorting aspect of the 5s framework by practicing minimizing Unwanted items from work place, properly differentiating between necessary and unnecessary item in the work place and implementing Rules of red tag for disposal items in work place.

B. Analysis on Employees responses on Set in Order Practice of the Tracon Trading Plc.

81% of the respondents were admitted that there is a practice of making ready all products, equipment, and tools properly for production in Tracon Trading Plc.

Moreover, 79% of the respondents were admitted that location of all the objects necessary have been defined and marked in Tracon Trading Plc. However, 13% location of all the objects necessary have not been defined and marked in Tracon Trading Plc.and 8% is neutral about the idea that location of all the objects necessary have been defined and marked in Tracon Trading Plc. Thus, majority of the respondents were admitted that the objects necessary have been defined and marked in Tracon Trading Plc.

In addition to that, 82% of the respondents revealed that there is practices of putting items in such a way that they are easy to find, pick up, use and return in Tracon Trading Plc. However, only 12% did not revealed that there is practices of putting items in such a way that they are easy to find, pick up, use and return in Tracon Trading Plc and 6% of them is neutral about this idea. Therefore, majority of the respondents were admitted that there is practices of putting items in such a way that they are easy to find, pick up, use and return in Tracon Trading Plc.

Finally, 87% of the respondents were revealed that Color coding is effectively used for easy identification wherever necessary in Tracon Trading PLC. Therefore, Tracon Trading Plc is implementing set in order, which is one of the Kaizen tool, by making ready all products, equipment, and tools properly for production, defining and marking location of all the objects. Thus, putting items in such a way that they are easy to find, pick up, use and return is applied, Color coding is effectively used for easy identification wherever necessary, and keeping all necessary items in the shelf according to frequency of use. This helps the company to remain competitive. ***(For Details see Table 4.3.1B below)***

Table 4.3.1B: Employees Responses on the Implementation Practices on Set in Order

Set in Order	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
All products, equipment, tools properly set and ready for production	3	2%	7	5%	15	12%	74	57%	31	24%	130	100%
location of all the objects necessary have been defined and marked	5	4%	12	9%	10	8%	76	58%	27	21%	130	100%
putting items in such a way that they are easy to find, pick up, use and return is applied	7	5%	9	7%	8	6%	84	65%	22	17%	130	100%
Color coding is effectively used for easy identification wherever necessary.	3	2%	5	4%	8	6%	72	55%	42	32%	130	100%
The necessary items are kept in the shelf according to frequency of use	9	7%	12	9%	17	13%	56	43%	36	28%	130	100%

Source: Computed from primary data

C. Analysis on Employees responses on Shining Work Environment Practice of the Tracon Trading Plc.

Majority (53%) of them was admitted that clean and comfortable work place was not created in Tracon Trading plc. In addition, 16% of them remain neutral about this idea. In general, Tracon trading plc is implementing “shine” aspect of 5s framework by Cleaning schedules were exists and visibly for everyone, using of Adequate cleaning tools and making All products, equipment, tools and work environment cleaned as much as possible to be competitive and for its sustainability.

The respondents responded that Weekly cleaning exercise is conducted regularly for continuous periods, everyone is actively involved in cleaning and the store and production areas are free from unnecessary materials. In general, result showed after implementing kaizen Results from the test, observation, and feedback from participants showed that there was a perceived improvement in the working environment. (For Details see table 4.3.1C)

Table 4.3.1C: Employees Responses on the Implementation Practices on Shine

Five S (Ss)	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
Shine	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
Cleaning schedules are existing and visibly shown	15	12%	25	19%	13	10%	50	38%	27	21%	130	100%
Use of adequate cleaning tools is evident	17	13%	13	10%	57	44%	26	20%	17	13%	130	100%
All products, equipment, tools and work environment are properly cleaned	13	10%	27	21%	17	13%	50	38%	23	18%	130	100%
clean and confortable work place was created	27	21%	41	32%	21	16%	24	18%	17	13%	130	100%

Source: Computed from primary data

Finally, the respondents were asked about whether there is a standardized and sustained practice of the 5S framework in Tracon trading plc. Accordingly, 56% of the respondents revealed that there is no continuous use of the Sorting, set in order & Shine in the company. However, 33% of them agreed that there is continuous use of the Sorting, set in order & Shine in Tracon trading plc While, 8% of the respondents remain neutral in this idea. Further, 49% of the respondents were disagreed that Standardized checklist used to regularly scrutinize 5s activity in Tracon Trading Plc, while 22% were agreed and 28% of them remain neutral in this aspect. Further, 56% of the respondents admitted that Standardized procedures, visual management, warning signs, labeling for correct identification, color-coding were followed in Tracon Trading plc. However, 31% disagreed and 13% of the remained neutral about this idea.

From this result, we can concluded that Tracon practicing of 5s framework is not standardized because there is no continuous use of the Sorting, set in order & Shine in the company and Standardized checklist is not used to regularly scrutinize 5s activity in Tracon Trading Plc. Moreover, because of there is no standardized practices, 56% of the respondents revealed that the result of the 5s framework are not sustained in the company. Furthermore, 54% of the respondents revealed that there is no practicing of displaying the success stories of the 5s framework in Tracon

Trading plc, and also 52% of them confirmed that Evidence of sustaining 5s kaizen- board, slogan & poster competitions among employees was not practiced in Tracon Trading Plc.

Therefore, the company should improve those practices to be more productive and to remain competitive. For Details see table 4.3.1D)

Table 4.3.1D: Employees Responses on the Standardizing and sustaining of 5s Framework in Tracon Trading plc.

Five 5s	**Strongly Disagree**		**Disagree**		**Neutral**		**Agree**		**Strongly Agree**		**Total**	
Standardize & Sustaining	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The above three 3s (Sorting, set in order & Shine) are continuously practiced	32	25%	45	35%	10	8%	31	24%	12	9%	130	100%
Standardized checklist used to regularly scrutinize 5s activity	37	28%	27	21%	37	28%	12	9%	17	13%	130	100%
Standardly procedures, visual management, warning signs, labeling for correct identification, color coding were followed.	13	10%	27	21%	17	13%	50	38%	23	18%	130	100%
Factory made efforts for sustaining SS Within the factory	27	21%	41	32%	21	16%	24	18%	17	13%	130	100%
5s audit tool has been properly implemented	24	18%	44	34%	39	30%	12	9%	11	8%	130	100%
Result of 5s have been sustained	21	16%	49	38%	27	21%	17	13%	16	12%	130	100%
Success stories are being displayed (i.e., Before and after pictures)	29	22%	41	32%	27	21%	17	13%	16	12%	130	100%
Evidence of sustaining 5s kaizen- board, slogan & poster competitions among employees was practiced	39	30%	42	32%	19	15%	17	13%	13	10%	130	100%

Source: Computed from primary data

4.3.2 Analysis on the Kaizen Waste Elimination/Minimization Practice

The employees were asked about whether the company is practicing waste management in Tracon Trading Plc. Accordingly, 70% of the respondents revealed that the Company's kaizen activity minimizes unnecessary movement of workers/people in work place. In addition, 53% of them revealed that the installation of machine based on operating procedure to minimize motion has not been implemented in Tracon Trading plc. So most of the respondents were not satisfied by installation of machine. It is critical factor for generating and sustaining kaizen without systematic installation of machine implementing and sustaining the practice might be a challenging issue.

In general, there is clearly established waste management system in Tracon Trading plc by implementing Kaizen tools in the company through minimizes unnecessary movement, minimizing waiting due to products/service delivery and installing of machine based on operating procedure to minimize motion in work place. Still the company should improve in this regard, as some of them are remain neutral and disagreed. Therefore, from the above explanation the company should improve its weak practice in waste management system. So in order to solve this type of problem the management should have planned schedule for training about waste management system . (For Details see table 4.3.2A)

Table 4.3.2A: Employees responses on Waste Elimination/Minimization practice of the Tracon Trading plc.

Waste Elimination/Minimization	**Strongly Disagree**		**Disagree**		**Neutral**		**Agree**		**Strongly Agree**		**Total**	
Motion & Waiting	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The company's kaizen activity minimizes unnecessary movement of workers/people	12	9%	10	8%	17	13%	57	44%	34	26%	130	100%
The installation of machine based on operating procedure to minimize motion has been implemented	27	21%	41	32%	21	16%	24	18%	17	13%	130	100%
The factory kaizen activity minimizes waiting due to products/service delivery	17	13%	13	10%	57	44%	26	20%	17	13%	130	100%
The factory kaizen activity minimizes waiting due to machine	13	10%	27	21%	17	13%	50	38%	23	18%	130	100%

Source: Computed from primary data

The implementation of the Kaizen has expected to contribute toward defect minimization and improving inventory management in work place of every company. In the same manner, the respondents were asked about the contribution of kaizen implementation on defect minimization and improving inventory management in the Tracon trading plc. Accordingly 86% of them admitted that kaizen implementation has contributed toward defect minimization in Tracon Trading Plc, 74% of the revealed that it contributed toward handling excess raw materials inventory and 69% of the respondents admitted that kaizen implementation has contributed toward handling of office supplies inventory in Tracon Trading plc. Therefore, the implementation of the Kaizen has contributed toward defect minimization and improving inventory management in Tracon Trading plc . (For Details see table 4.3.2B)

Table 4.3.2B: Employees responses on the contribution of Kaizen Implementation toward defect minimization and improving inventory management in Tracon Trading plc.

Waste Elimination/Minimization	**Strongly Disagree**		**Disagree**		**Neutral**		**Agree**		**Strongly Agree**		**Total**	
Defects & Inventory	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The factory kaizen act ivi minimizes defect	12	9%	10	8%	7	5%	67	52%	34	26%	130	100%
Factory kaizen activity handle excess raw material inventory	9	7%	12	9%	13	10%	65	50%	31	24%	130	100%
Factory kaizen activity handle office supply inventory	13	10%	19	15%	21	16%	56	43%	21	16%	130	100%

Source: Computed from primary data

The implementation of the Kaizen has expected to contribute toward improvement in raw materials, equipment and tools used for production process as well as Products of every company. Accordingly, 76% of the agreed that the implementation of the Kaizen in Tracon Trading plc has contributed toward Minimization of unnecessary movement of products from production to sale, while 53% of them disagreed that the implementation of the kaizen has contributed toward Minimization unnecessary movement of Raw Materials, equipment's, and other Tools of the company. In addition to that, 23% disagreed and 33% agreed that the implementation of the kaizen did not contribute toward minimization producing more than needed in the Tracon Trading plc.

While, 56% of the agreed that the implementation of the kaizen contributed toward minimizing producing at faster than it needed in Tracon Trading plc.

Generally, it was concluded that the implementation of the Kaizen has contributed toward Minimization of producing at faster than it needed and unnecessary movement of products from production to sale in Tracon Trading plc. Through this employee and management communication with the idea of Kaizen, implementation has impact to implementation of kaizen for sustainability development. (For Details see table 4.3.2C)

Table 4.3.2C: Employees responses on the contribution of Kaizen Implementation toward improvement of Transportation and Overproduction

	Strongly Disagree		**Disagree**		**Neutral**		**Agree**		**Strongly Agree**		**Total**	
Transportation/Over Production	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
Factory kaizen activity Minimizes unnecessary movement of products from production to sale	12	9%	10	8%	17	13%	57	44%	34	26%	130	100%
Factory kaizen activity Minimizes unnecessary movement of Raw Materials, equipment's, and other Tools	27	21%	41	32%	21	16%	24	18%	17	13%	130	100%
Factory kaizen activity minimizes producing More than needed	17	13%	13	10%	57	44%	26	20%	17	13%	130	100%
Factory kaizen activity minimizes producing at faster than it needed	13	10%	27	21%	17	13%	50	38%	23	18%	130	100%

Source: Computed from primary data

The implementation of the Kaizen expected to contribute toward reducing over-processing, increases the provision of the raw materials, and deliver product orders in time. In this regard, the respondents were asked about the contribution of the Kaizen Implementation in tracon trading plc and 79% of the agreed that it contributed toward minimizing non-value adding processing by labor and Machine in the work place and, 84% of them revealed that it minimizes unnecessary documentation in the company. Further, 82% of the revealed that the Implementation Kaizen in

tracon trading plc has contributed towards in providing all required materials and goods in just in time (No more No less). In addition, 78% of them revealed that its implementation helped the company to schedules production according to market demand priorities. Furthermore, 73% of them confirmed that the Implementation Kaizen in tracon trading plc has helped the company to delivers the right quality, and quantity product on the time for its customer and this increases it efficiency and its competitiveness in the industry (Imai, 1986, 1997). (For Details see table 4.3.2D)

Table 4.3.2D: Employees responses on the contribution of Kaizen Implementation toward improvement of Timing and minimizing unnecessary processing in the work place

Over Processing/Just-in-Time	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
Factory kaizen activity minimizes non-value adding processing by labor & Machine	9	7%	14	11%	17	13%	57	44%	33	25%	130	100%
Factory kaizen activity minimizes unnecessary documentation	9	7%	12	9%	12	9%	63	48%	34	26%	130	100%
All the required materials and goods needed are placed in just in time. (No more No less)	9	7%	11	8%	17	13%	61	47%	32	25%	130	100%
The company schedules production according to market demand priorities	12	9%	19	15%	10	8%	64	49%	25	19%	130	100%
The factory delivers the right quality, and quantity product on the time	9	7%	15	12%	12	9%	62	48%	32	25%	130	100%

Source: Computed from primary data

Finally, the implementation of the Kaizen will be expected to contribute toward the improvement of the organizations productivity and quality management system. In this regard, 71% of the respondents were confirmed that the management of the Tracon Trading plc is committed to successful implementation of the Kaizen in the company and 69% agreed that the implementation of the kaizen has helped to increases Productivity of the Tracon Trading plc. Moreover, 56% of them agreed that the implementation of the Kaizen has helped Tracon Trading plc to meet customer need and expectations. In addition to that, 70% of the respondents were confirmed that Quality

policies and procedures are documented and communicated to all employees in Tracon Trading plc, and 49% of them disagreed that there is continuous monitoring and implementation of quality system and procedures to enhance performance, while only 37% of them agreed with this idea. Therefore, it is possible to say that, where these elements are not adequate or lacking, it is very difficult to assess practical implementation and standardization. Finally, majority (56%) of the respondents were admitted that the employees are not continuously trained to enhance internal quality performance in Tracon Trading plc.

Therefore, it can concluded that there is commitment among the management of the Tracon Trading plc to successful implement the Kaizen tools in the company and also the implementation of the kaizen has helped to increases Productivity and it helped Tracon Trading plc to always meet customer need and expectations. Further, Quality policies and procedures are documented and communicated to all employees in Tracon Trading plc, however, there is continuous monitoring and implementation of quality system and procedures to enhance performance in the company. There is no practice of giving continuously training employees to enhance internal quality performance in Tracon Trading plc.

This implies that majority of the sample are negative impression about the current employee training system and most of them are not comfortable about the training. So most of the respondents are not satisfied by current training system, continuous employee training and skill development has critical factor for generating and sustaining kaizen *(Imai 1986; Farris 2006).* Without systematic continuous or planned training on the subject matter and skill development program implementing and sustaining the practice might be a challenging issue. (For Details see table 4.3.2E)

Table 4.3.2E: Employees responses on the contribution of Kaizen Implementation toward Productivity increases and Quality improvement

TQM/TPM	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The Management body is committed for success Kaizen implementation	9	7%	12	9%	17	13%	67	52%	25	19%	130	100%
Quality policies and procedures are documented and communicated to all employees	12	9%	10	8%	17	13%	57	44%	34	26%	130	100%
The employees are continuously trained to enhance internal quality performance	27	21%	44	34%	13	10%	26	20%	20	15%	130	100%
The organization always meets customer need and expectations	13	10%	27	21%	17	13%	50	38%	23	18%	130	100%
There is continuous monitoring and implementation of quality system and procedures to enhance performance	29	22%	35	27%	17	13%	29	22%	20	15%	130	
The implementation of the kaizen Help to Increases Productivity of the company	10	8%	17	13%	13	10%	61	47%	29	22%	130	100%

Source: Computed from primary data

4.4 Analysis on the offectiveness of Kaizen Tool Implementation on Organizational Performance

A. Profitability

According to (Stegmeier, 2008) the necessity for organizations to manage and create creative capability, transform new concepts into value in Organization culture that lead to Competitive markets and increase a profits for the firm by introducing innovation, has been a driving force for business leaders to better understand the dynamics of creativity and innovation, and to develop and execute strategies to leverage the workforce, intellectual capital and the physical workplace in order to increase innovative output for the organization. The implementation of the Kaizen will be expected to contribute toward the improvement of the organizations Profitability. Accordingly,

80% of the respondents were agreed that The implementation of 5s framework increased the profitability Tracon trading Plc, 82% admitted that The implementation of waste elimination increased the company's profitability, 72% of them admitted that The implementation of Just-in-Time increased the company profitability, 78% of them confirmed that the implementation of total productive maintenance increased the company profitability. Finally 79% of the respondents were confirmed that the company's practice of continuous improvement of quality system leading to increased profitability in the Tracon Trading plc. (For Details see table 4.4A)

Table 4.4A: Employees responses on the contribution of Kaizen Implementation toward Profitability in Tracon Trading Plc

Profitability	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The 5s implementation increased the company's profitability	12	9%	10	8%	3	2%	68	52%	37	28%	130	100%
The implementation of waste elimination increased the company	3	2%	9	7%	12	9%	74	57%	32	25%	130	100%
The implementation of Just-in-Time increased the company profitability	17	13%	13	10%	7	5%	57	44%	36	28%	130	100%
The implementation of total productive maintenance increased the company profitability	3	2%	14	11%	12	9%	67	52%	34	26%	130	100%
The company has continuous improvement of quality system leading to increased profitability	7	5%	11	8%	9	7%	72	55%	31	24%	130	100%

Source: Computed from primary data

B. Productivity

The implementation of the Kaizen expected to contribute toward the improvement of the organizations Productivity. Accordingly, 77% of the respondents were agreed, that the implementation of 5s framework increased the Productivity of the Tracon trading Plc. In addition,

69% agreed that the implementation of waste elimination increased the company's productivity. Moreover, 68% of them agreed that the implementation of Just-in-Time increased the company Productivity. Furthermore, 69% of them confirmed that the implementation of total productive maintenance increased the company profitability, and 70% of them admitted that the practice of continuous improvement of quality system leading to increased profitability in the Tracon Trading plc. According to Mullins, 2010 Total Quality maintenance to be implemented successfully it must be seen as a total process involving all operations of the organization and the active participation including top management. Thus, Results suggested that respondents perceived there was an improvement in productivity after kaizen implementation. (For Details see table 4.4B)

Table 4.4B: Employees responses on the contribution of Kaizen Implementation toward Productivity in Tracon Trading Plc

Productivity	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The 5s implementation increased the company's productivity	9	7%	5	4%	16	12%	53	41%	47	36%	130	100%
The implementation of waste elimination increased the company productivity	4	3%	17	13%	20	8%	54	42%	35	27%	130	100%
The implementation of Just-in-Time increased the company productivity	7	5%	14	11%	21	12%	62	48%	26	20%	130	100%
The implementation of total productive maintenance increased the company productivity	9	7%	13	10%	19	15%	57	44%	32	25%	130	100%
The company has continuous improvement of quality system leading to increased productivity	4	3%	15	12%	21	16%	62	48%	28	22%	130	100%

Source: Computed from primary data

C. Cost Reduction

The implementation of the Kaizen will be expected to contribute toward the cost reduction in the companies. According to Mullins, 2010 Total Quality maintenance to be implemented successfully it must be seen as a total process involving all operations of the organization and the active participation to reduce the cost. Accordingly, 65% of the respondents were admitted that the implementation of 5s framework helped Tracon Trading plc to reduce its cost. In addition, 77%

admitted that the implementation of waste elimination has helped organization to reduce its cost, 66% of them admitted that the implementation of Just-in-Time has helped organization to reduce its cost. Furthermore, 67% of them confirmed that The implementation of total productive has helped organization to reduce its cost, and 68% of them admitted that the practice of continuous improvement of quality system leading to Cost Reduction in the Tracon Trading plc. (For Details see table 4.4C)

Table 4.4C: Employees responses on the contribution of Kaizen Implementation toward Cost Reduction in Tracon Trading Plc

Cost Reduction	**Strongly Disagree**		**Disagree**		**Neutral**		**Agree**		**Strongly Agree**		**Total**	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
The 5s implementation helped the company to reduce cost	11	8%	15	12%	19	15%	47	36%	38	29%	130	100%
The implementation of waste elimination was helped the company reduce cost	10	8%	12	9%	9	7%	58	45%	41	32%	130	100%
The implementation of Just-in-Time was helped the company to reduce cost	11	8%	21	16%	12	9%	55	42%	31	24%	130	100%
The implementation of total productive maintenance was helped the company to reduce cost	5	4%	17	13%	21	16%	52	40%	35	27%	130	100%
The company has continuous improvement of quality system was helped the company to reduce cost	11	8%	21	16%	10	8%	52	40%	36	28%	130	100%

Source: Computed from primary data

4.5 Kaizen implementation challenges

Kaizen is continuous improvement it need continuous implementation process no start and end process. In kaizen practice to sustain and improve the process continuous process help to show as the changes and the implementation process should be checked. For kaizen implementation, process management commitment is needed and full of motivation, coordination is necessary without systematic continuous training on the subject matter implementing, and sustaining the practice might be a challenging issue.

The majority of the respondent (82.3%) are positive impression on lack of motivation are challenges for kaizen implementation process, whereas 68.2% positively responded on in the organization there is lack of management commitment and also 79.1% respondent responded positively with in kaizen implementation process there is lack of coordination, communication and corporation with in the department. This implies that lack of management commitment, communication, coordination, and corporation is the most challenges for kaizen implementation process in the study company.

4.6 The effectiveness of Kaizen Implementation on Tracon Trading PLC

Kaizen helps organization to eliminate key issues that affect productivity – reduce waiting time between work processes, material movement between processes, non-value adding activities by employees, manual workflows and imbalanced cycle times. When productivity goes up, cost goes down. It is all about decreasing waste by eliminating overproduction, improving quality, being more efficient, having less idle time, and reducing unnecessary activities. All these translate to cost savings, and can turn potential losses into profits. In this regard, the respondents were asked to compare the standing point (organizational performance on its industry) of the Tracon Trading plc. before implementing Kaizen tools in the work place with its position after implementing the Kaizen tool and asked to rate the contribution of the kaizen implementation on its improvement in organizational Performance.

Accordingly, 84% of them revealed that after implementing 5s framework has contributed toward the improvement in company performance by increasing productivity and profitability by helping cost reduction in the company. In addition to that, 85% of the respondents were confirmed that Total productive maintenance has contributed toward the improvement in Organizational performance by helping the company to keeps all equipment in best conditions to prevent breakdowns and delays in manufacturing process and making inventory Available when needed.

Furthermore, 89% of the respondents were confirmed that waste elimination practices of the Tracon trading plc has increased the company performance by reducing unnecessary movement in work place, using machine and other technology to reduce waiting times, reducing defects in

products. All this reduce cost, helping to keep only necessary stock of the inventory in the office, reducing over production and over processing in the work place. Furthermore, 89% of the respondents were revealed that implementing "Just-in-Time principle" in work place has helped the company to improve its organizational performance by creating work environment where all the required materials and goods needed are placed in just in time, No more No less. Finally, 87% of the respondents were agreed that the implementation of the total quality management system in the company has contributed towards the improvement in organizational performance in Tracon Trading Plc. Thus, Results suggested that respondents perceived that there was an improvement in the time spent finding items during practicums and in workplace practices after 5S implementation. (For Details See Table 4.5 Below)

Table 4.5: The effectiveness of kaizen Implementation on Tracon Trading PLC

Effective Implementation of the following Kaizen tools positively contributed to the Improvement of the Organizational Performance in Tracon Trading Plc.	rongly Disagr		Disagree		Neutral		Agree		Strongly Agree		Total	
	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share	No	% Share
5S Framework	0	0%	12	9%	8	6%	59	45%	51	39%	130	100%
Total productive maintenance	2	2%	7	5%	11	8%	87	67%	23	18%	130	100%
Elimination of seven wastes	0	0%	11	8%	9	7%	43	33%	67	52%	130	100%
Just in time (JIT)	4	3%	9	7%	14	11%	73	56%	30	23%	130	100%
Total quality management	3	2%	8	6%	19	15%	67	52%	33	25%	130	100%

CHAPTER FIVE

5.SUMMARY CONCLUSION & RECOMMENDATIONS

5.1 Summary of the major finding

A survey was conducted using a questionnaire with structured questions divided into two parts: respondents' demographic information and respondents' opinions regarding the effectiveness of implementation of kaizen cost and benefits in Tracon trading company. A total number of 133 staff were selected to provide answers to the structured questions. In addition, data were collected through personal interviews with 5 staff members of the company.

Based on the data collected from employees of Tracon coffee trading Company the analysis made so far, the following important summary points were found.

- The respondents were admitted that Tracon trading plc has been properly differentiating between necessary and unnecessary item in the work place, items are minimized from work place and the Rules of red tag for disposal items were placed in Tracon trading Plc.
- In addition, the respondents revealed that there is practices of putting items in such a way that they are easy to find, pick up, use and return, the use of Adequate cleaning tools and contributed toward defect minimization in Tracon Trading Plc.
- The majority of the respondents were confirmed that the management of the Tracon Trading plc is committed to successful implementation of the Kaizen in the company and 69% agreed that the implementation of the kaizen has helped to increases Productivity, and Quality policies and procedures.
- The majority (56%) of the respondents were admitted that the employees are not continuously trained to enhance internal quality performance in Tracon Trading plc.
- Accordingly, 77% of the respondents were agreed that The implementation of 5s framework increased the Productivity of the Tracon trading Plc

Generally, According to the data collected, presented and analyzed in this research work, implementation of kaizen in Tracon coffee trading has highly contributed to meeting its strategic objectives. Thus, implementation of Kaizen has increased the practice of improving most of the

factory‘s systems from time to time and it contributed a lot in improvement through reducing production cost, applying wise resource utilization.

5.2 CONCLUSION

The general aim of the thesis was to assess the Effectiveness of Kaizen implementation practice in Tracon trading PLC (Coffee Trading Business Line). To complete this aim the researcher reviewed literature on the area of Kaizen implementation practice and related areas comprehensively and then conducted a survey with employees of Tracon trading PLC.

The study was revealed that, Tracon trading PLC has been implementing Kaizen tools in its work place to improve its company performance and to be competitive in its dynamic and very competitive industry. In addition to that, it was found out that there is clearly established waste management system in Tracon Trading plc by implementing Kaizen tools in the company through minimizes unnecessary movement, minimizing waiting due to products/service delivery and installing of machine based on operating procedure to minimize motion in work place. Moreover, the implementation of the Kaizen has contributed toward defect minimization and improving inventory management in Tracon Trading plc. It was also concluded that the implementation of the Kaizen has contributed toward Minimization of producing at faster than it needed and unnecessary movement of products from production to sale in Tracon Trading plc.

It was concluded that there is commitment among the management of the Tracon Trading plc to successful implement the Kaizen tools in the company and also the implementation of the kaizen has helped to increases productivity and it helped Tracon Trading plc to always meet customer need and expectations. In addition to that, it was find out that there is continuous monitoring and implementation of quality system and procedures to enhance performance of the organization in Tracon trading plc. Further, Quality policies and procedures are documented and communicated to all employees in Tracon Trading plc. There is also a continuous monitoring and implementation of quality system and procedures to enhance performance in the company. However, there is no practice of giving continuously training employees to enhance internal quality performance in Tracon Trading plc.

Further, it was concluded that the implementation of the kaizen tools in Tracon Trading Plc has contributed toward increases in productivity and cost reduction, which increases the profitability of the company. After implementing 5s framework, Total productive maintenance, 7 waste elimination practices, Just-in-Time principle, and the principles of total quality management system in the company, there is improvement in Organizational performance because of increasing Productivity and Profitability by helping Cost Reduction in the company.

5.3 RECOMMENDATIONS

Based on the problems identified from the sample respondents of employees of the Tracon Trading Plc the following recommendations were suggested to improve the Effectiveness of Kaizen implementation system and practices, and to increase its effectiveness to contribute toward the improvement in organizational performance.

The status of the Kaizen implementation in Tracon Trading Plc is very successful and it brought a significant achievement in various activities. Maintaining this success is a very important issue to ensure continuous improvement. Thus, the company should apply different techniques like motivation scheme in the factory and strategic plan with reasonable budget to sustain Kaizen improvements. However, for the most of the questions asked many of the employees were remained Neutral, i.e they were not well informed about the Kaizen implementation practices of the Company. Therefore, it is advisable for the management of the Tracon trading plc to make the implementation process inclusive and create the feeling of the ownership among the employees, because this is the only way to increases the effectiveness of the Kaizen implementation in the company. Moreover, it would be advisable to provide periodic training for all employees of the company to make sure about the company's effort to implement Kaizen in the work place. Finally, it was known that the attitude of employees play significant role on successful implementation of kaizen. Thus, the management of the Tracon Trading plc should work towards strongly creating awareness on need for change as well as understanding the need for kaizen for each employees. Furthermore, the company should participate all employees in kaizen activities and consciousness to the employees about the benefit of successful implementation of kaizen, such as create conducive work environment, simplifies work burden, motivate to perform better and increased interest in work.

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APPENDIXES I: QUESTIONNAIRES

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF MASTERS OF BUSINESS ADMINISTRATION (MBA)

Dear Respondent,

This questionnaire is designed to collect data for the master thesis on the topic "The effect of kaizen practice on organizational performance in Tracon Trading PLC (coffee Trading business line) for partial fulfilment of the requirements for Masters of Arts Degree in Business Administration (MBA). The study is used only for academic purpose and the information you provide will be kept confidential and anonymous. Besides, the outputs of the study will use as input for the companies‟ decision makers. I, therefore, kindly request you to fill the questionnaire honestly and accurately, so that quality of information you provide determines the ultimate reliability of the study.

Section 1: Respondent's Demographic (Background) Information

1. Age A.18-25 □ B. 26-40 □

C. 41-60 □

2. Sex A. Male □ B. Female □

3. Level of Education

A. certificate □ C. BA/BSc □

B. Diploma □ D. MA/MSc □

4. Work Experiences

A. < 5 years □ C. 10-15 years □

B.5-8 year's □ D. above 15 years

Section 2: Kaizen Tool Implementation

The following questions are pertaining to the extent your company currently practices kaizen tools. Please read the following statements carefully and indicate your perception about the application of each kaizen tool in your organization.

The rating scales are; 1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = neither Agree nor Disagree (N) 4 = Agree (A) 5 = Strongly Agree (SA)

S. No.	Attributes of Kaizen	Rate				
1.	Five S (5s)					
1.1.	Sorting	1 = SD	2 = D	3 = N	4 =A	5 = SA
1.1.1.	The factory properly differentiates between necessary and unnecessary item					
1.1.2.	Un wanted items are minimized from work place					
1.1.3.	The Rules of red tag for disposal items					
1.1.4.	Storage area is defined to store broken, unusable or occasionally used items					
1.2.	Set in Order	1 = SD	2 = D	3 = N	4 =A	5 = SA
1.2.1.	All products, equipment, tools properly set and ready for production					
1.2.2.	location of all the objects necessary have been defined and marked					
1.2.3.	putting items in such a way that they are easy to find, pick up, use and return is applied					
1.2.4	Color coding is effectively used for easy identification wherever necessary.					
1.2.5	The necessary items are kept in the shelf according to frequency of use					

1.3.	**Shine**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
1.3.1.	Cleaning schedules are existing and visibly shown					
1.3.2.	Use of adequate cleaning tools is evident					
1.3.3.	All products, equipment, tools and work environment are properly cleaned					
1.3.4.	clean and confortable work place was created					
1.4.	**Standardize**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
1.4.1.	The above three S"S (Sorting, set in order & Shine) are continuously practiced					
1.4.2.	Standardized checklist used to regularly scrutinize 5s activity					
1.4.3.	Standardly procedures, visual management, warning signs, labeling for correct identification, color coding were followed.					
1.5.	**Sustain**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
1.5.1.	Factory made efforts for sustaining 5S within the factory					
1.5.2.	5s audit tool has been properly implemented					
1.5.3.	Result of 5s have been sustained					
1.5.4.	Success stories are being displayed (i.e., Before and after pictures)					
1.5.5.	Evidence of sustaining 5-S kaizen- board, slogan & poster competitions among employees was practiced					

2.	**Kaizen Waste Elimination/Minimization Practice**	**Rate**				
2.1.	**Motion**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.1.1.	The factory kaizen activity minimizes un necessary movement of workers/people					
2.1.2.	The factory kaizen activity minimizes un necessary movement of machine and equipment					
2.1.3.	The factory kaizen activity minimizes un necessary movement of raw materials					
2.1.4.	The installation of machine based on operating procedure to minimize motion has been implemented					

2.2.	**Waiting**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.2.1.	The factory kaizen activity minimizes waiting due to delivery products/service					
2.2.2.	The factory kaizen activity minimizes waiting due to machine down time					
2.2.3.	The factory kaizen activity minimizes workers waiting without work					
2.3.	**Defects**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.3.1.	The factory kaizen activity minimizes defects west caused by rework, correction/errors					
2.3.2.	The factory kaizen activity minimizes defects west caused by quality problem					
2.3.3.	The factory kaizen activity minimizes Reduce scrap defect					
2.4.	**Inventory**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.4.1.	Factory kaizen activity handle excess raw material inventory					
2.4.2.	Factory kaizen activity minimizes over production inventory					
2.4.3.	Factory kaizen activity handle maintains and repairer inventory					
2.4.4.	Factory kaizen activity handle office supply inventory					
2.5.	**Transportation**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.5.1.	Factory kaizen activity minimizes un necessary movement of products from production to sale					
2.5.2.	Factory kaizen activity minimizes un necessary movement of material or products in the production process					
2.5.3.	Factory kaizen activity minimizes un necessary movement of tools or equipment's in the production process					
2.6.	**Over Production**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.6.1.	Factory kaizen activity minimizes producing more than needed					
2.6.2.	Factory kaizen activity minimizes producing at faster rather than it needed					
2.6.3.	Factory kaizen activity minimizes line imbalance or poor					

2.7.	**Over Processing**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.7.1.	Factory kaizen activity minimizes non-value adding processing by labor					
2.7.2.	Factory kaizen activity minimizes non–value adding processing by machine					
2.7.3.	Factory kaizen activity minimizes un necessary documentation					
3.	**Just – in – Time (JIT)**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
3.1.	All the required materials and goods needed are placed in just in time. (No more No less)					
3.2.	The company schedules production according to market demand priorities					
3.3.	The factory delivers the right quantity product on the time					
3.4.	The factory deliver the right quality product on the time					
3.5.	The factory receives the right quality materials at the right time					
3.6.	The factory receive right quantity materials at the right time					

4.	**Total Productive Maintenance (TPM)**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
4.1.	The company properly keeps all equipment's in best conditions to prevent breakdowns and delays in manufacturing process.					
4.2.	Machine breakdown has been greatly reduced and they are maintained on a regular basis					
4.3.	Availability of maintenance inventory when needed					
4.4.	Availability of effective planning maintenance program covering plant equipment in the factory					
4.5.	Autonomous maintenance will increase our urge to maintain the equipment					
4.6.	Cleaning, oiling, tightening and inspection of equipment is carried out routinely					

5	**Total quality management(TQM)**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
5.1	The management body is committed for success in TQM implementation					

5.2	Our manufacturing firm undergoes a comprehensive program to apply for ISO certified					
5.3	Quality policies and procedures are documented and communicated to all employees					
5.4	The employees are continuously trained to enhance internal quality performance					
5.5	The organization always meets customer need and expectations					
5.6	There is continuous monitoring and implementation of quality system and procedures to enhance performance					

Section 3: Organizational Performance

Show the extent of how the following organizational performance dimensions have been improved by Kaizen tool practice in your organization. To what extent have the following organizational performance dimensions been improved by kaizen?

S. No.	**Organizational Performance**	**Rate**				
1.	**Profitability**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
1.1.	The 5s implementation increased the company profitability					
1.2.	The implementation of waste elimination increased the company profitability					
1.3.	The implementation of just in time increased the company profitability					
1.4.	The implementation of total productive maintenance increased the company profitability					
1.5.	The company has continuous improvement of quality system leading to increased profitability					
2.	**Productivity**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
2.1.	The 5s implementation increased the company productivity					
2.2.	The implementation of waste elimination increased the company					

	productivity					
2.3.	The implementation of just in time increased the company productivity					
2.4.	The implementation of total productive maintenance increased the company productivity					
2.5.	There is high productivity after TQM practice					
3.	**Cost Reduction**	**1 = SD**	**2 = D**	**3 = N**	**4 =A**	**5 = SA**
3.1.	The 5s implementation helped the company to reduce cost					
3.2.	The implementation of waste elimination helped the company to reduce cost					
3.3.	The implementation of just in time helped the company to reduce cost					
3.4.	The implementation of total productive maintenance helped the company to reduce cost					
3.5.	There is high cost reduction after quality management practice					