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**THE PRACTISES AND CHALLENGES OF
KAIZEN IMPLEMENTATION
AT HORIZON ADDIS TYRE SHARE COMPANY**

By

Demelash Hailu Habtegebreal (Ato)

**DECEMBER 2021
ADDIS ABABA, ETHIOPIA**

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KAIZEN IMPLEMENTATION
AT HORIZON ADDIS TYRE SHARE COMPANY**

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF
GRADUATE STUDIES IN PARTIAL FULLFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION**

**DECEMBER 2021
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(SGS0036/2012B)

APPROVED BY BOARD OF EXAMINERS

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Asst. Professor Shoa Jamal. All sources of material used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institutions for the purpose of earning any degree.

Name

Signature

St. Mary's University, Addis Ababa

December, 2021

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate studies for examination with my approval as a university advisor.

Shoa Jemal (Ast. Professor) _____

Advisor

Signature

St. Mary's University, Addis Ababa

December, 2021

DEDICATION

This work is dedicated to the entire family: my mum W/o Menbere Nigate, my late Dad Ato Hailu Habtegebreal, respectively, for their being the reason of my coming to this world and getting this level; my wife, W/o Ejigayehu Mekonnen, and my children Leul, Dagim and Kidus Demelash, for their immense contribution towards my studies.

ABSTRACT

The purpose of this study was to examine the practices & challenges of kaizen implementation at Horizon AddisTyre Share Company. Descriptive research design was employed in this study. Questionnaire and interview data collection instrument were used for this study. Stratified random sampling has been used for selection of respondents. The collected data were analyzed through descriptive statistics using frequency, percentage and mean. SPSS(version 20) Software has been employed to organize the data. Based on the finding of the study, training was the most important issues that challenge kaizen implementation and it is followed by employee's participation and motivation, top management commitment, and quality control circle. The finding also showed that the company is not well implemented kaizen due to lack of continuous kaizen training and education program for building employees capacity, giving poor attention about kaizen education and training like other fields of work , unable to build and developing kaizen implementation system and procedures and structure, lack of kaizen trainers building capacity and absence of experience sharing from domestic and foreign companies were identified as a major challenges in the company. The researcher recommended that the company's top management should be committed to support kaizen implementation by providing continuous and consistent well organized, kaizen training program for employees in order to improve their kaizen skill capacity. Furthermore top managers should be inspiring employees by making employees motivation through financial and non-financial reward.

ACKNOWLEDGEMENTS

Firstly, thank you my God helps me for successful completion of this study. God has given me the strength to pass all my challenges throughout my thesis.

Secondly my heartfelt appreciation goes to my advisor Ast. Professor Shoa Jemal for his constructive comments throughout the end of my research paper work and very friendly support towards the improvement of my research thesis. Without his great support my research paper could not have been accomplished successfully.

Thirdly I would like to thank my wife Ejigayehu Mekonnen for her encouragement, inspiration and she continuously support me during the entire masters study period and also I would like to express my deeper thanks to all my colleagues who constantly support me until the completion of my research thesis.

Fourthly I would like to thank all Horizon Addis Tyre share company workers and managers for their cooperation to me. Finally I want to thank Saint Marry University school of Graduates Study, who have designed and provided this opportunity to prepare this paper and study for an MBA program.

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LIST OF ACRONYMS

CIP: Continuous Improvement Process

EKE: Ethiopia has established Ethiopian Kaizen Institute

EKI: Ethiopian Kaizen Institute

GDP: Gross Domestic Product

GRIPS: National Graduate Institute for Policy Studies

ISO: international standard organization

JICA: Japan International Cooperation Agency

JIT: just in time delivery

KPT: Kaizen Promotion Team

HATSC: Horizon AddisTyre share Company

MOE: ministry of industry

PDCA: Plan-Do-Check-Action

PLC: private limited company

QCC: Quality Control Circle

QCD: cost, quality and delivery

QCD: Quality, Cost, and Delivery (QCD)

R and R: Reward and recognition

SPSS: Statistical Package for Social Science

TOPS: Toyota production system

TQC: Total Quality Control

TQC: total quality control

TQM: total quality management

TVET: technical vocational, educational and training

Key words: *Top Management Commitment, Employees' participation and Motivation, Kaizen Training and Quality Control Circle.*

CHAPTER ONE

INTRODUCTION

The purpose of this chapter is to provide readers with an overview of the thesis topic and its approach. The chapter therefore, deals with background of the study, definition of the terms and concepts, statement of the problem, basic questions, objectives, significance, scope, limitation and organization of the study report.

Now a day industry sectors has been the main engine of economic development for both developed and developing countries. Therefore, it has been essential to improve its productivity through different mechanism. Ethiopian industry sectors have a lot of problems in relation to improve customer's service, improve products quality, managing waste, improve working environment, making profitable and productive.

According to Imai, (2012:1-4) There are two approaches to solve these problems. The first might be using modern technologies by investing large amount of money. The second uses low cost approach techniques that do not need large sum of money. This approach is called kaizen. Whenever money is the main factor, innovation or technology could be costly while the new philosophy of kaizen on the other hand, low cost approaches can be implemented using existing resource through coordination of human effort.

Everything what creates wastage of resources such as time, movement, financial resources, raw materials, unnecessary steps, defect during production process might be improved. The real life advantages of this approach were seen in the case of Toyota Motor Corporation. (Prosic, 2011: 173-174).

(Mfowabo, 2006); (Bisht, 2013) as cited Haftu, Abdelkadir, Getachew and Kassu, (2017:585) now day's manufacturing industries are faced a lot of challenges or problems due to the dynamic changes of technology and customer demands. Therefore, continuous improvement of product must be necessary in a business environment to compete both domestic and global market. In 1970 Japan's export was better than its import; the main reason for this achievement was successful implementation of kaizen.

The word Kaizen is a combination of two words KAI + ZEN = KAI means change ZEN means betters which means change to better or continuous and gradual improvement. In fact, the Japan philosophy of kaizen may not be have suddenly changes of the company, but

continuous small improvement will bring productivity enhancement if they are continuous and constant (Rahmanian and Rahmatinejad, 2013: 1096)

Recent economic crises indicate that companies must utilize of its resources efficiently and effectively, in order to survive in this competitive global market. In other hand, if a company wants to be the competent or winner of the global market, they should have continuously improved its product and service. This can be achieved through the applicability of kaizen on the daily activities. (Stefanic, Tosanovic and Heredic (2012:1)

Even though, there is different management strategy to compete in this business world, the philosophy of kaizen is different from others strategy. According to GRIPS Development Forum 2009 shows that kaizen is a low-cost approach to enhance productivity improvement; it does not require large amount of money or sophisticated technology and it does not required high allocation of research and development (R&D). Thus management philosophy is particularly important for financially weak countries.

According to Maaroff and Mahmud, (2016: 525) Globalization period has affected the manufacturing industry worldwide. Many manufacturing industries might be faced stiff competition from global market force. As a result, manufacturers need to do improvement to ensure their competitiveness in this dynamic global market. One of the strategies to ensure the company competitiveness is through exercise and implementation of kaizen. In order to reduce costs and improve productivity, Industry sectors might have given a lot of attention for continuous improvement or kaizen .According to jalu .G (2015) Shows that results that obtain from kaizen implementation such as Cost reduction, space utilization, reduce lead time, defects reduction, reuse machines by repairing, increasing labor productivity by reducing time loss for searching tools, clean working environments, health and occupational safety workers.

Despite the positive achievements obtained from kaizen implementation number of challenges were faced. Some of these challenges include employee resistance towards continuous improvement, lack of motivation among employees, lack of recognition of hardworking employees, inadequate communication, rigid bureaucratic organizational structures, Attitude and misconception. Some managers, supervisors and employees perceived kaizen is consuming time and just the matter of housekeeping. (Bwemelo, and Gordian, 2014:86).

Ethiopia has established Ethiopian Kaizen Institute (EKI) in November 2011 and started to create awareness about Kaizen benefits for domestic industries by opening Ethiopian Kaizen Institution (EKI) and promote kaizen implementation for both service and manufacturing sectors.

Haftu et al, (2017:586) states that to ensure sustainable economic development and poverty reduction in Ethiopia, it is essential to develop both government and private sectors through continuous improvement of its production and service system. Slow development, poor quality of product or service, increasing wastage, low productivity, might be the characteristics of Ethiopian manufacturing industries. The overall effect of this low quality, low productivity could be an obstacle for promoting domestic and foreign market.

Horizon Addis Tire Share Company is the only Tyre manufacturing in Ethiopia which has implemented Kaizen philosophy to enhance its competitiveness. However, Kaizen implementations improve productivity through better use of people, space, equipment, time and materials; still the implementation has been challenged. The purpose of this study was to assess the factors which affect kaizen implementation on Horizon Addis Tyre Share Company. There are several issues that affect kaizen implementation. The major issues include top management commitment, employee involvement and motivation, quality control circle or team work, education and training on kaizen. Based on literature and researcher experience kaizen is good management and problem solving mechanism using existing resource. But its applicability and sustainability in many Ethiopian industry sector is very low.

Ethiopia kaizen institute pilot test of kaizen implementation in 30 companies. Only three companies were best implementers and achieved better results. This shows that kaizen implementation is a big challenge for Ethiopian manufacturing industries. Those best model private industries got award from EKI in implementing kaizen. However; lack of awareness for continuous improvement is the main obstacle for those companies due to weak commitment of top management, inconsistent kaizen training, inappropriate team formulation, low commitment, weak participation and weak concern of employees towards kaizen (Desalegn and Zerihun, 2016). Therefore, this study was conducted to solve existing problems by assessing factors which affect kaizen implementation on Horizon Addis Tyre Share Company.

1.1. Statement of the Problem

Kaizen is a recent concept in the modern industry to increase productivity. In developing Countries like Ethiopia there is no sophisticated technology to increase the quality and productivity of the industry. Therefore, the possible available alternative is increasing quality and productivity without spending large amount of money by implementing new management philosophy which is known as kaizen.

The main objective of industries now a day is enhancing productivity through using simple method system and incremental improvements by using modern available techniques. Improving customer service, making operation faster, more operation and reduction in costs are challenges faced by many industries today. To minimize these challenges many companies in the world search different business strategies. One of the most recognized techniques is kaizen. Adimasu, (2015:1)

Many companies try to start implementing kaizen in the work place, but not sustain and fully implemented. Not only standardization and sustainability, starting of Kaizen remain challenging task for many companies. As a result, companies might face a challenge to improve quality, managing waste, create save and conducive environment, minimize cost, increase productivity, and managing routine task. According to Haftu et al, (2017:586) argue that despite, introducing and promoting the philosophy of kaizen on manufacturing industries in Ethiopia, they were not successfully implemented and even if success full implemented industries could not be maintain sustainability. As a result, Ethiopian manufacturing sectors has been characterized by slow development.

If the companies implement kaizen properly, they can eliminate waste, reduce unnecessary inventories, increase the level customer satisfaction, minimize unnecessary expense, production capacity utilization improvement, and increase profitability and lead time improvement. However, there were challenges during implementation process. Power is given in the hands of few top managers, workers or employees involvement or motivation towards continuous improvement in the company were limited on the other hand, Awareness creation among the management and employees took much time. (Daniel, 2011)

Desalegn and Zerihun, (2016); Admasu, (2015); and Rahmanian and Rahmatinejad, (2013) shows that kaizen implementation depends on top management commitment, long and short term training of employees, employee's participation and motivation, team work or quality

control circle. These requirements are the most important issues of implementation and sustain kaizen implementation .But most of the company could not be consider these basic requirements. Generally, the researcher on the topic at hand was motivated to conduct research on issues affecting kaizen implementation on Horizon Addis Tyre Share Company for the following reason: - The first point despite different literatures shows issues affecting kaizen implementation on both manufacturing and service sectors still the implementation is challenged in Ethiopian manufacturing industry. Therefore; the researcher would determine problems and make possible solution by further investigation. The second point however, several researchers' studies on kaizen implementation on manufacturing industries but it is limited studies that is why kaizen implementation is not successfully implemented and sustains. The Third point based on literature and researcher experience Kaizen implementation has various benefits. It could be implementing using existing resource without investing large sum money. Financial bottle neck is common agenda in developing country like Ethiopia while unnecessary waste during production seen everywhere. But its implementation and sustainability has been difficult task .The last point is to magnify kaizen implementation obstacles from various authors and make possible remedies of kaizen implementation problems. These are why here comes the need of the researcher paper at hand.

1.2. Research Questions

The following are the basic research questions of this study. The researcher therefore, tried to address these research questions:

1.3.1 What are the issues that contribute in kaizen implementation at Horizon AddisTyre Share Company?

1.3.2 What are the major challenges the company face in implementing kaizen?

1.3.3 What are the remedies for improving the implementation of kaizen in Horizon AddisTyre Share Company?

1.3. Objective of the Research

1.3.1. General Objective

The main objective of the study is to examine the practices and challenges of kaizen implementation in Horizon Addis Tyre Share Company.

1.3.2. Specific Objectives

- To identify major practices in kaizen implementation
- To identify challenges of kaizen implementation on Horizon Addis Tyre Share Company
- To determine the contribution of each issues in kaizen implementation at Horizon Addis Tyre Share Company
- To recommend possible remedies of challenges of kaizen implementation in Horizon Addis Tyre Share Company

1.4. Significance of the Research

Today there are various gaps to implement and sustain kaizen in both Ethiopia private and government sectors. Therefore, this research paper minimizes existing problems as well as it contributes to further understanding of continuous improvement/ kaizen.

This study more specifically contribute the case company managements, employees, kaizen facilitators, trainers and team leaders:-

- 1.4.1. It helps the case company to better understand which issue contributes more to Kaizen implementation
- 1.4.2. It helps to be used as reference for future researchers to have a desire to conduct research in the area enables the Ethiopian Kaizen Institute as a reference while giving training and consultant service for companies
- 1.4.3. It helps policy makers and other stakeholders how sustainably maintain kaizen implementation

1.5. Scope of the Study

This study has been carried out in 2013 E.C budget year. Conceptually, Kaizen implementation practices are many in number however the study focuses on top management commitment, education and training, employee's participation and motivation and quality control circle(QCC) as the major requirement in the implementation process.

Descriptive research design with quantitative and qualitative approach has been used. The study area is Addis Ababa Horizon Addis Tyre Share Company Head Quarter.

1.6. Limitation of the study

Covid-19 was a limitation for questionnaire collection and hindrance for interviewing respondents for face to face communication periodically and retard free discussion by the respondents.

1.7. Operational Definitions of Terms

Kaizen: it is japans word Kai (change), Zen (good), which means change to better or continuous improvement.

Gemba: a Japanese word meaning real work place

Muda: a Japanese word meaning waste or non-value adding activities like

Training: planned process to modify attitude, knowledge, skills or behavior through learning experience to achieve effective performance.

Top management commitment: is the support that employees get from managers in the implementation of Kaizen.

Employee's involvement: Collaboration of workers commitment, genuine participation and motivation in the company for successful kaizen implementation.

Quality Control Circle (QCC): a small group of formed based on genuine participation of front-line employees, who continually control and improve the quality of their work, products and services.

Productivity:Productivity is a state of mind... an attitude that seeks the continuous improvement of what exists.

Challenges:Problems the company faces in the process of Kaizen implementation.

1.8. Organization of the Research

This research report consisted of five chapters. The first chapter deals with background of the company, introduction to the study, statement of the problem, research questions, research objectives, significance of the research, rationale of the study, delimitation of the study, limitations the research, organization of the research and operational definition of the research . the second chapter points out the literature review; Chapter three states the methodology of the study, including research design, source of data, instrument of data collection, sample strategy and sampling techniques, procedure of data collection and method of data analysis and ethical consideration. The fourth chapter presented about data presentation, and analysis and interpretation which is gathered from the case study. Finally, the fifth chapter consisted of finding summary, conclusions, and recommendations and future research suggestion.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter discusses literature related to the research problem and objectives.

2.1. Theoretical Literature

Horizon Addis Tyre Share Company was set up 40 years ago with the support of the Ethiopian government.

“It moved on during the closed economy and later on as a part of the technology revolution, it joined hands with Solvakian MATADOR to become MATADOR-Addis Tyre. Then Matador was sold globally to Continental. Continental subsequently decided to leave this country. After that the Horizon Plantations, which is part of MIDROC group, took over the shares of MATADOR and the company become Horizon Addis Tyre,” recalls UmeshDavera, General Manager of Horizon Addis Tyre Company.

“We are investing significantly in terms of upgrading existing technology and building of new skills of the people. We are focusing more on launching the new products that market needs by way of technical cooperation with the major partners globally. We want to make this local factory, which is the only tyre factory in Ethiopia, to have self-reliance in meeting the tyre needs of this country, ‘Addis Davera.

Natural rubber is the main raw material used in manufacturing tires, although synthetic rubber is also used. In order to develop the proper characteristics of strength, resiliency, and wear resistance, however the rubber must be treated with a variety of chemicals and then heated. Automation guides many of the steps in the manufacturing process; skilled workers are still required to assemble the components of a tire.

2.1.1. Definition and basic concept of kaizen

The concept of Kaizen in Japanese was taken as culture from lower level to top level. They take as a strategy for improvement process. The term Kaizen is a Japanese word ‘Kai’ and ‘Zen’, which means change for better. The term Kaizen means continuous improvement that needs involving everyone in the organization from top managers to lower level workers. (Thessaloniki, 2006: 2)

The Ethiopia kaizen Institute developed its own working definition as follows:

"Kaizen is a philosophy of continual, participatory and self-disciplined innovation management having its own integrated systems and problem solving tools, implemented with the highest level of commitments at all levels of owners, leaders and employees through enhancing their absorptive capability step by step aiming at creating new and advanced corporate culture to catch-up and attain world class competitiveness"

"Kaizen" means ongoing quality and productivity improvement concept and tools; Federal Negaritgazeta October (2011). According to Dysko (n.d.) the philosophy of kaizen goes out from thought that tomorrow must be better than today. Synonymous of Kaizen are used more equivalents like: OIP (Ongoing Improvement Process), CIP (Continuous Improvement Process)

According to Rahmanian, and Rahmatinejad (2013:1096) Kaizen is defined as a combination of two words from one Japanese concept change toward betters or continuous and gradual improvement. In fact, Kaizen stands on this philosophy that is not necessary to look for immediate changes for improvement of the organizations, but any improvement or reform will bring productivity enhancement if they are continuous and constant.

The concept of kaizen is human oriented. People are solution or remedies rather than as a problems. Kaizen is process oriented and employees can provide improvements by understanding how their jobs fit into the process and changing it. It deals with the management change and it is a methodology that leading the right direction to improve manufacturing operations on a continual and incremental basis following the right steps which means (Thessaloniki, 2006:4-8)

2.1.2. The distinctive feature of Japan's competitive success

Kaizen has become well known as management strategies in the last two decades of the last century. Despite Kaizen management well developed Japan between 1950-1980 the name was legally recognized and registered as a trademark in the U.S. in 1985 the name of kaizen was just a common noun in Japanese, with the meaning of "always better". Professor Imai has given the meaning of managerial principle Kaizen, has an entire structure concepts, techniques and management systems used by Japanese enterprises which proved an outstanding competitiveness on the Western markets. (Ghicajanu, 2009:275)

Prosic, (2011:175-176) the business strategy of kaizen no need of large sum of money rather it needs the involvement or the participation. The objectives of Kaizen implementing kaizen in the work place includes eliminating waste, fast delivery of product or service, standardized work environment. Kaizen is the main tools of quality improvement and control it has positive opportunities. Does not view problems as negative but rather sees them as positive opportunities. The outcome of kaizen implementation includes improve productivity, quality, better safety, faster delivery, lower costs and greater customer satisfaction, employee's moral, low turnover, reducing waste

2.1.3. Kaizen in Ethiopia

The introduction of kaizen as a management tool in Ethiopia has been started with the assistance of JICA in response to the request of the government of Ethiopia to the government of Japan for kaizen technology transfer to Ethiopia. After the project design phase was completed, the former Ministry of Trade and Industry established kaizen unit with professionals drawn from the ministry and relevant sectorial institutes, and JICA deployed a consultant team to work with the Unit. The kaizen project was officially launched with the first National Kaizen Seminar in the presence of high level officials from both sides with the project pilot companies. Kaizen is selected as one of management tools to improve and enhance managerial capability to implement Growth and Transformation Plan. (Admasu, 2015)

The Kaizen project in Ethiopia consisted of three phases. The first phase which started in August, 2009, reviewed the quality and productivity of 63 companies. After preliminary diagnosis of these factories, 30 companies were selected based the following criteria: 1) proximity to Addis Ababa, within 100km distance, 2) contributions to exports and /or imports, 3) scale of capital, and 4) number of employees. Then, the employees of the pilot companies were sent to Japan to undertake work-site observation and learn from the experience of the Japanese kaizen practitioner. In October 2009-2010, by the end of the first phase of the project, from the thirty pilot companies, only 6, 4, and 8 companies were finally chosen by Ethiopia's Kaizen Institute for having high possibility, good possibility, and some possibility respectively to become kaizen model companies (Ethiopian Ministry of Trade, 2011) (Asayehgn, 2011).

Table 2. 1: Ethiopia KAIZEN Project Phase II (2009-11)Major activities

Stage1	<p>Situation analysis on quality/productivity improvement activities / Visit to factories for preliminary diagnosis</p> <ul style="list-style-type: none"> ▪ Preparation for the pilot project (Kaizen methodology selection, selection of 30 pilot companies with criteria)
Stage2	<p>Implementation of the pilot project</p> <ol style="list-style-type: none"> a. to visit the pilot companies to diagnose the situation, and to give guidance on the quality and productivity improvement activity (KAIZEN) with the staff members of the Kaizen Unit b. to repeat factory visit periodically and give KAIZEN advice and to monitor the KAIZEN process c. to evaluate the pilot project and compile recommendations to the factories
Stage3	<p>Formulation of a National Plan including an Action Plan of KAIZEN , Formulation of a Manual</p>

Source: Japan international cooperation agency (2010)

2.1.4. Importance of kaizen

If kaizen implemented appropriately, it will eliminate waste, Cut inventories, Improve customer satisfaction and, Enhance profitability or Productivity. Kaizen implementation project constitutes: Organizing of Quality Control Circle (QCC), 5S implementation, Operation Standard and Elimination of wastes (MUDAs). Companies can be gain benefit from kaizen implementation like Capacity utilization, Profits improvement, Waste minimization, Costs reduction, lead time minimization. Clean working environment created, Teamwork and motivation of workers developed, Health and occupational safety of workers improved, Knowledge obtained on how to meet delivery & reduce costs.

According to Homma, (2012), success full implementation of kaizen could Increasing labor productivity, by reducing time loss for searching tools on average 50%; Reduction of floor space around 50%; Defect ratio improvement in the range of 50-70%; Lead time improved in the range of 16 to 90%; Labor saved from 15 to 90%.

JICA Study Team (2010) Samples of Improvement Results at 30 Pilot Companies, According to the report result obtained from kaizen implementation has both Qualitative and quantitative result: the qualitative result of kaizen implementation includes: Clean working environment created, Team work and motivation of workers developed, Health and occupational safety of workers improved, Knowledge obtained on how to meet quick delivery and to reduce costs. Further Non-Monetary Measures of Improvement include: Increasing labor productivity, by

reducing time loss for searching tools on average 50%; Reduction of floor space around 50%; Defect ratio improvement in the range of 50- 70%; Lead time improved in the range of 16 to 90%; Labor saved from 15 to 90%. Quantitative Results of kaizen implementation also includes Reducing costs \$600/month and (b) \$4,600/year; generating additional income of \$70,000/year; By rectifying raw materials defect used for manufacturing \$ 140,000; identifying, repairing and reusing of usable machines & equipment worth of \$190,000.

2.1.5. Challenges of kaizen implementation

Now a day Globalization is challenged for many industry and service sector. It creates complexities and opportunities. There, can be search anew management strategies and techniques Kaizen approach could help many companies all over world to success full production operation and better operational excellence and improve their productivity.

Ethiopia kaizen institute pilot test kaizen implement in 30 companies. Only three companies were best implement and achieving better results. This shows that kaizen implementation is big challenges Ethiopian manufacturing industries. Those best model private industries got award from EKI in implement kaizen However, lack of awareness for continuous improvement is the main obstacle for those company due to weak commitment of top management, inconsistent kaizen training, inappropriate team formulation, low commitment, weak participation and weak concern of employees towards kaizen. (Desalegn and Zerihun, 2016:2).

Maarof, and Mahmud. 2015 cited from (Mendelbaum, 2006; Schroeder, 2004). The study that was conducted in United States manufacturers industries. The study shows that that only 11% of manufacturing companies implement success fully. Some companies they have failed to implement kaizen because of lack of motivate their employees to participate in the Kaizen activities due to the lack of compensation or reward, lack of training for the employees

As AdmasuAbera cited 2015 From different literatures for instance(Wickens P. D. 1990); (Dean M, Robinson A, 1991); (M. Huson, D. Nanda, 1995); several obstacles in organizations when implementing kaizen. Lack of commitment is only one of several common reasons why kaizen implementation fails (implementing kaizen in a heavily bureaucratic organization). It is impossible to implement kaizen unless unnecessary bureaucratic structure, procedures, rules cut dawn. Beside, people could not participate of kaizen implement if employee's incentives not improve and appropriate training is not provides.

Aurel, Simina and Stefan, (2015 :30-31) states that Despite kaizen have been many benefit, not all the companies succeed and many of them are facing problems. Among the main critical problems in Kaizen implementation are: the absence of a real culture, employees resistance to change, , no sense of responsibility , set short term visions, failure to identify problems, lack of resources . People perceive that kaizen is a burden of their, companies not giving priority, put short vision, and seen as a short-term project.

Bwemelo, and Gordian, (2014:86) Despite the positive achievements obtained during ongoing KAIZEN training project, a number of challenges in adoption of KAIZEN were identified. Some of these challenges include employee resistance towards continuous improvement, lack of motivation among employees, lack of recognition of hardworking employees, inadequate communication, and lack of workplace meetings. Furthermore, the study shows that most of the enterprises had rigid job descriptions and bureaucratic organizational structures that prevented workers from sharing responsibility, having open communication, or developing teamwork. Attitude and misconception towards kaizen is another Challenge. Some managers, supervisors and employees perceived time as time consuming, costly, and just the matter of housekeeping. Lack of top management commitment and support was another challenge reported by employees in various pilot enterprises.

2.1.6. The Development of the Tyre Industry in Ethiopia

Today, there is an intensive and un expected international competition in Tire industry. This will big obstacles news emerging in tire manufacturing industry in Ethiopia There are several sources of competitiveness, like productivity, quality, and delivery time, so on. Quality has become one of the most important drivers of the global competition today. Intensifying global competition and increasing demand for better quality by customers have caused more and more companies to realize that they will have to provide high quality product and/or services in order to successfully compete in the marketplace. The quality awareness is very low. Most of the firms do not even clearly identify their customers. They produce their products without considering customer needs/requirements. The production system is traditional and it is not quality and market oriented .High effort is required to bring this industry to the era of quality. To meet the challenges of global competition it is necessary to exercise and implement the methodologies of continuous improvement and /or radical improvement. Paying attention to customers and understanding what they want is a fundamental and important beginning for competitiveness.

Everything what creates wastes of resources - time, emotions, financial resources, raw materials, unnecessary steps - might be improved. The real life advantages of this approach were observed in the case of Toyota Motor Corporation (Prosic, 2011: 173-174).

Now a day's manufacturing industries are facing challenges due to the fastest changes of technology and market demands. Change is now a permanent feature of the business environment and organizations, which adapt to new environment, are more likely to gain a competitive advantage In1970 Japan's export was better than its import; the main reason for this achievement was successfully implemented of kaizen (Haftu et al, 2017).

2.1.7. Gemba kaizen general thoughts

- ✚ Kaizen discovers talents.
- ✚ Kaizen is about creating company Short summarization of its general thoughts:
- ✚ Right now is the worst status of things.
- ✚ Kaizen ideas are unlimited (it discards conventional fixed ideas)
- ✚ Everything can be improved.
- ✚ Make every day one small improvement.
- ✚ To any improvement, even though there is little signification, attention must be given
- ✚ Kaizen does not need high investments.
- ✚ Do not obscure, but welcome problems, their solutions improve us.
- ✚ Eliminate the root causes, not just the consequences.
- ✚ Listen to others.
- ✚ Collect ideas from everyone and everywhere.
- ✚ Solve problems in team.
- ✚ Always be disciplined and moral culture that does not tolerate waste
- ✚ Kaizen requires strong management support and involvement.

Source: Dysko, (N.D)

2.1.8. Kaizen pillars

- **Kaizen as a philosophy**

KAIZEN is a philosophy of continuous undertaking by an organization to improve its activities and processes with the goal to always improve quality and productivity so that the organization can meet full customer satisfaction.

Ethiopian kaizen institute manual 2011 indicate the following are main characteristics of kaizen

- **Continuity**

The first step in the kaizen process establishes the plan- do- check-act (PDCA) cycle as a vehicle that ensures the continuity of kaizen in pursuing a policy of maintaining and improving standards. It is one of the most important concepts of the process. Plan refers to establishing a target for improvement (since kaizen is a way of life, there always should be a target for improvement in any area and devising action plans to achieve that target. Do refer to implementing the plan. Check refers to determining whether the implementation remains on track and has brought about the planned improvement. Act refers to performing and standardizing the new procedures to prevent recurrence of the original problem or to set goals for the new improvements.

- **Participatory approach**

KAIZEN can be built in and run with an integrated and company-wide approach through the collaboration of all the levels of the organization that are top management, middle managers and frontline employees. Commitment, genuine participation and motivation of all the three actors are critical factors. Kaizen is built in and run with an integrated and company-wide approach through the collaboration of all the levels. For fruitful participation, giving training and education as well as communication is very important. To utilize individual workers ideas suggestion system can be introduced.

- **Accumulation of small improvements**

Japanese people say “accumulation of a small dust builds a mountain”. Significant and greater results can be attained through accumulation of small improvements or by carrying out repeatedly minor or small improvements as opposed to innovation.

- **Needs small investment**

Waste elimination may not require investment or may require little investment through the introduction of basic Kaizen technique such as 5S. To conduct 5S i.e. to sort or separate necessary and unnecessary items , to set or place items in locations suitable for work and to shine or clean: red tags, paint, shelves, racks, display boards and cleaning materials etc. are

needed which can be bought with small investment. A company shouldn't have to make large investment to buy machines and make Kaizen/improvements.

- **Widely Applicable:**

Kaizen refers to a philosophy or practices that focus upon continuous improvement in manufacturing activities, business activities, and even life in general, depending on interpretation and usage. It is widely applicable in manufacturing, service, public or non-profit organizations and others. Kaizen techniques are now universally applicable to all sectors.

2.1.9. Kaizen systems

According to Imai, (2012:9-10) kaizen systems includes the following element

- **Total Productive Maintenance**

Total Productive Maintenance (TPM) focuses on improving equipment quality. TPM seeks to maximize equipment efficiency through a total system of preventive maintenance spanning the lifetime of the equipment. Just as TQM involves everybody in the company, TPM involves everybody at the plant. The five S of housekeeping, another pivotal activity in gemba, may be regarded as a prelude to TPM.

- **Policy Deployment**

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. 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 shop floor. Kaizen is most effective when everybody works to achieve a target, and management should set that target.

- **Total Quality Management Systems**

Total Quality Management (TQM) is a multi-disciplinary and participatory processes with continuity by all categories of staff for realizing high quality services. TQM process, (consisting of 5S and KAIZEN), should be a part of institutional managerial framework for seeking high productivity and quality of services.

TQC/TQM movement as a part of kaizen strategy gives us a clearer understanding of the Japanese approach. Japanese TQC/TQM should not be regarded strictly as a quality-control activity; TQC/TQM has been developed as a strategy to aid management in becoming more competitive and profitable by helping it to improve in all aspects of business. In TQC/TQM, Q, meaning “quality,” has priority, but there are other goals, too namely, cost and delivery. The T in TQC/TQM signifies “total,” meaning that it involves everybody in the organization, from top management through middle managers, supervisors, and shop-floor workers. It further extends to suppliers, dealers, and wholesalers. The T also refers to top management’s leadership and performance—so essential for successful implementation of TQC/TQM.

The C refers to “control” or “process control.” In TQC/TQM, key processes must be identified, controlled, and improved on continuously in order to improve results. Management’s role in TQC/TQM is to set up a plan to check the process against the result in order to improve the process, not to criticize the process on the basis of the result. TQC/TQM in Japan encompasses such activities as policy deployment, building quality-assurance systems, standardization, training and education, cost management, and quality circles.

- **The Suggestion System**

The suggestion system functions as an integral part of 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.

2.1.10. Kaizen as Tools

These are kaizen implementation methods and technical tools. By basing on kaizen philosophy and through following kaizen systems, these tools can bring continuous improvement

- **The Concept of 5S’s**

GRIPS (2009) defined the 5S’s as a system of steps and procedures that can be applied to individuals and teams to arrange work areas in the best manner and condition to optimize performance, comfort, safety and cleanliness.

Thessaloniki, (2006:9-10) the term “Five S” is derived from the first letters of Japanese words referred to five practices leading to a clean and manageable work area. Sort what is not needed. Use the red tag system of tagging items considered not needed, and then give everyone a chance to indicate if the items really are needed. Any red tagged item for which no one identifies need is eliminated (sell to employee, sell to scrap dealer, give away, and put into trash. Set in order what must be kept? Make things visible. Put tools on peg board and outline the tool so its location can be readily identified. Apply the saying "a place for everything and everything a place” Shine everything that remains. Clean and paint to provide a pleasing appearance, standardization and sustain

Table 2.2: Table 1 targets of five 5

Targets of 5S include:
Zero change overs leading to product service diversification
Zero defects leading to higher quality
Zero waste leading to lower cost
Zero delays leading to on time delivery
Zero injuries promoting safety
Zero breakdowns bringing better maintenance

Source: KAIZEN Facilitators’ Guide 2015

Malawi Ministry of Health 5S BASIC MANUAL (2014) 5S implementation procedures categorized into the following four stage

Stage 0: 5S Basic Training: Management team, top management and focal person the facility 5s training designed by health center. In this stage, top management and the focal person should understand 5S principles and implementation procedures.

Phase 1: Preparatory Phase: The top management has decided the installation of 5S officially. It is declared during “kick off meeting”. Pilot areas to install 5S are selected after “Situation Analysis” which is one of components of the kick off meeting. In this stage it is important to convince management team to install 5S based on the deep understanding the concept of 5S and strong commitment.

Phase 2: Introductory Phase: In this phase, Sort, Set and Shine activities are carried out in selected pilot areas supported by the focal person. 5S Basic Training was conducted. In this stage zonal healthy officer conduct supportive supervision and observe the progress as well as support technical advice. Based on the achievement in the pilot areas and results of

supportive supervision, the management shall decide how to expand 5S to all departments. In this stage Work Improvement Teams (WITs) in the pilot areas and a focal person of 5S have to learn 5S deeply from the practice in work places and accumulate their experience.

Moreover, it was necessary to be aware that “5S is not Cleaning Campaign” but that “5S can be management tools for improvement of working place by the staff”. Before the expansion of 5S, top management sends a focal person and another person in-charge for 5S to Training of Trainers (TOT)”

Phase 3: Implementation Phase: Beginning of implementation phase, Quality Improvement Support Team (QIST) and WITs shall be established officially. Internal training of 5S shall be also conducted to all staff. Standardize and Sustain activities are developed by QIST and practiced in all the pilot areas. New departments to install 5S activities were introduce Sort, Set and Shine activities based on the standardized procedures. In implementation phase, activate areas of 5S shall be commenced from small number of areas.

Phase 4: Maintenance Phase: This phase is an on-going phase hence has no time limit. However, it is expected that within three years of entering this phase, all the necessary structures and accountability systems shall be in place. All health workers (staff) were shaped to follow workplace rules and habits. Sort, Set, Shine and Standardize activities could be the culture of all staff of the health facility. In maintenance phase, external supportive supervision conducted several times.

- **The Concept of Waste (muda) Elimination**

Muda in Japanese means waste. Non Value adding activity is classified as muda in Japan. In Kaizen philosophy, the aim is to eliminate the seven types of waste (7 deadly wastes) caused by overproduction, waiting, transportation, unnecessary stock, over processing, motion, and a defective part, and presented on the following table, in summary

Table: 2.3 Table 2 types of waste

Type of waste	Description
1. Overproduction	Production more than production schedule
2. Inventory	Too much material ahead of process hides problems
3. Defects	Material and labor are wasted; capacity is lost at bottleneck
4. Motion	Walking to get parts because of space taken by high WIP
5. Processing	Protecting parts for transport to another process
6. Waiting	Poor balance of work; operator attention time
7. Transportation	Long moves; re-stacking; pick up/put down

Source: Thessaloniki, (2006):

2.1.11. Conditions for Successful Implementation of Kaizen Strategy

Ethiopia Kaizen institute Manual (2011) put successfully implement Kaizen the following Kaizen requisites should be fulfilled. Knowledge of Kaizen concepts and techniques is essential for doing Kaizen activities. Attitude with positive thinking is necessary for understanding and implementing Kaizen and Kaizen concept and techniques can also build positive attitude and can bring corporate culture. Involvement of all from top management to front-line workers: top management with commitment and interest on Kaizen, participation of all workers and establishment and involvement of cross-functional teams are essential for success and continuity of Kaizen. Zealous support for Kaizen: Kaizen needs zealous attention like support for one football team. Education about Kaizen (training): Kaizen is human-oriented i.e. it is implemented by employees therefore education or training about Kaizen is vital. Never-ending activity: Kaizen is continuous and practical, aiming always for best improvement through accumulation of small improvements.

According to George, N. (2012) as cited by TigistHailegiorgis June (2015:22) pre requisite conditions of effective kaizen implementation

Job Satisfaction: - the success of kaizen implementation is the involvement employees Therefore, company employees should be encouraged, willingness and satisfy to improve work area

Company Involvement: - The Company must be out line to a Kaizen implementation strategies, encourage and evaluation and monitor employees.

Dedication: - kaizen implementation started and promoted by managers and workers involve for improvement

Open-Minded: - from top management to lower level worker can open or ready your mind to accept and implement the philosophy of kaizen

Teamwork: - employees they are motivate each other and they are develop team sprit

No Finger Pointing: - do not critics others even if few mistakes might be made. Take the mistake opportunities.

2.1.12. Requirements of kaizen Implementation

- **Top Management Commitment**

According to Oropesaventoe.tal,(2015) states the manager will move from a traditional conception of leadership to a new vision that will generate a wider and more accurate perspective of the environment in which the company works. This new approach to leadership requires that active and effective participation of the human .This is an important variable because of the effect it has on the process of generating and executing strategies. Furthermore, continuous improvement requires that the manager have true leader in the organization, who ensuring the participation of all the employees, and to do this, they must commit deeply to work, since he/she is responsible for implementing the process and the most important driving force of the company. Managers need to implement organizational changes to face new challenges, to ensure that the company adapts to and copes with new circumstances. However, individuals resist such changes in many ways. One of the problems in large and medium industrial enterprises is the lack of leadership who has the responsibility to manage the company. Leadership in senior management is to apply policies and procedures that were useful for the company in the past and assume that they will be useful in the near future. All authors agree that the top common thing of cultural enablers for the implementation of organizational changes is that the change is led by top management. Top management can show how important the change is, make people believe in the change and positively influence the company culture.

Imai, (2012 p: 3) top management must put careful and very clear policy statement. It then must establish an implementation schedule and demonstrate leadership by practicing a kaizen procedure within its own ranks. Today's managers often try to apply sophisticated tools and technologies to deal with problems that can be solved with a commonsense, low- cost approach. They need to unlearn the habit of trying ever more sophisticated technologies to solve everyday problems. Furthermore, leaders must embrace kaizen and business excellence not as a tool or technique but as a never-finished pillar of their strategy.

Thessaloniki,(2006:16-26) explained that top management introduces Kaizen as a corporate strategy, middle management uses Kaizen practices in improving functional capabilities and helps employees develop proper skills for problem solving. Supervisors improve communication with the workers, formulate plans for Kaizen and provide guidance to workers. Workers engage in Kaizen through small group and team activities and practice the

tools for continuous improvement. The Japanese place a high priority on continuous incremental improvements (Kaizen) that, over time, leave behind the competitors who are depending on the 'magic idea' for success. Workers, supported by managers, are a major source of these improvements. Major differences between Japanese and Western management styles are their timeframes. In general, Japanese managers have a long-term perspective, while Western managers tend to look more for short-term results. This difference is also reflected in the way each management style approaches improvement. Western management is usually reluctant to introduce improvement gradually and tends to favor innovation, which is more visible and provides an immediate return. If management makes positive use of the process-oriented way of thinking to support innovation and further reinforces it with a Kaizen approach, it will find that the company's overall competitiveness will be improved in the long run.

- **Quality Control Circle**

A Quality Control Circle (QCC) is a small group of formed based on genuine participation of front-line employees, who continually control and improve the quality of their work, products and services. QCC activities pursue continuous improvements in the workplace with self-disciplined and humanity-focused approaches, utilizing scientific techniques. QCC need to be supported by the top management and the middle managers who treat QCC activities as an important part of employee development and work place utilization, and provide guidance and support for genuine participation while respecting humanity of all employees, Kaizen Manual (2011).

Thessaloniki, (2006), describes quality circle is a group of staff who meet regularly to discuss quality related work problems so that they may examine and generate solutions to these. The circle is empowered to promote and bring the quality improvements through to fruition. Thus the adoption of quality circles (quality improvement team) has a social focus. There must be commitment from senior management, unit management and, other staff and of course the circle members.

In Japanese companies, all factory workers and related employees were dedicated to controlling and improving quality and productivity through the quality and productivity movement, together with the creation of QCCs. Together with QCC, many Japanese methods of quality and productivity improvement have been developed and have been continuously improved. One of the most widely implemented in Japan is known as the "5S. Kaizen has

been one of the most important features of the Japanese QC approach, together with QCC. Kaizen is a Japanese concept which can be translated, literally, as “continuous improvement.” It is not easy to define kaizen in a strict sense since; it corresponds to evolving initiatives and activities in the quality and productivity area and can very flexibly be adapted to each factory floors’ context. Hosonetal, (2009: 24-25)

Quality Circles, in the 1970's, were the first big push to mimic Japan's success with a team based work culture. Although there were success stories, and some organizations still use them, most saw them as a failure. Some of the reasons for failure included Inadequate measurements of results, Management understanding of process, Team members not right for the problem, Management dominated the process, Lack of training with problem solving tools. Thessaloniki, (2006:25)

- **Education and Training Kaizen**

The key to successful kaizen implementation with constantly support, communicate from management implementation. Implementation training is essential to aware or to understand new change management kaizen. Further for this dynamic environment, learning and educations is vital. .Learning organization is an organization that will helps for the organization to grow employees skill capacity .the reason failure of kaizen implementation in the organization is insufficient and non-comprehensive training programs.(Asayehu and Zerihun ,2015)

Schiffer, and Michael (2003) they states that In order to implement kaizen successfully, organizational change should be managed properly by educating employee and communicating about the change and by participation and involvement of staff in the process. Training of all levels is important in order to create a common understanding and language regarding kaizen, and to eliminate the lack of knowledge about modern management techniques. Most of the western managers, shift leaders and line workers have only the normal public education (School, University...) since that time most of the knowledge is either outdated or even forgotten. We can learn from Japanese companies, because they participate which are partially more effective because the things which have been learned can immediately be applied to the running business. Trained people will better support and promote the change. Training is very important for the success of Kaizen implementation. The trainings should be used to create a common language and understanding within a company through the whole organization.

According to (Wiley, 1999) as cited Schiffer, and Michael (2003 : 25) it is critically important that everyone have a common understanding of the overall philosophies, principles, objectives, and techniques involved. In fact, the ability to create this common understanding or common language across the organization should be a key test of the effectiveness of the education and training program. If people at all levels can't get past the jargon, look for another educational resource before you go forward. None of the authors suggests how to progress once the first wave of employees are trained. There is no value added if the training concept stays the same and employees participate several times. The government is working on investing in the human resource development of its population. To ensure that the workforce is adequately prepared to work in Japan's high-tech manufacturing sector, officials believe there needs to be greater collaboration between universities, technical schools, and industry so that a new curriculum can be built that will meet the specific needs of the manufacturing industry.

Real training needs have been correctly identified and requires detailed planning and preparation. This ensures that training is delivered in the right way, at the right time, to the right people. Some organizations employ full-time trainers to carry out training internally. Others employ external training providers as and when they need them. Some organizations employ full-time trainers to carry out training internally. First line managers form a very valuable source of expertise, which can be used to replace or supplement the more traditional trainer. In order ensure training success fully, It is important to aware of the different methods of delivering training and be able to choose the most appropriate one. It is also important that develop and practice your delivery skills. It would need to draw on a number of training methods in order to ensure that the new starters have absorbed all the new knowledge and are able to take on their new roles quickly and efficiently. EKI/MoE – TVET Outcome Based Training Core Process (2015:13)

According to EKI/MoE – TVET Outcome Based Training Core Process (2015) a number of components go towards making a successful Structure of Kaizen training session.

- **Employees' participation and motivation**

Improvements are done by frontline workers that follows the idea of the “hundred headed brain” and the philosophies that those who do the job day by day know where the problems are and how to solve them. In addition that increases the identification with the job itself and the proposed and implemented change. A worker who has played an active part in the

implementation of changes will be more motivated to prove their effectiveness. Schiffer and Michael, (2003).

Maarof and, Mahmud, (2015) Companies strongly emphasize the involvement of the plant floor employees with some level of empowerment given to them to identify and solve problems related to the workplace issues. Kaizen, if implemented correctly, can encourage employees to think differently about their work and boost the morale and the sense of responsibilities among the employees regarding their workplace. This is because through the empowerment given by the top management, employees will start to feel that they are also partly involved in the decision-making and improvement process.

Zafar, Butt and Afzal (n.d) Involvement of employee's increases motivation, ownership and commitment to the organization and ultimately it helps to retain your best employees and to create an environment for managing change. By promoting employee initiative and even employee involvement in decision making, managers can help restore employee trust and commitment and help increase employee motivation. Employee involvement is ongoing process to increase employee's efforts into rewarding decisions which increased organizational performance and employee's wellbeing. Tata Motors and Ford they have increased and intensified the worth of employee's involvement through enriched form of works.

- **Kaizen rewards and recognitions**

Thessaloniki, (2006:26-26 Reward and recognition (R&R) have various functions and can be valuable tool at organizations on their road for TQM. R&R activities provide feedback which is an element of continuous improvement (Kaizen). Recognition is also a form of feedback about the result of individual or team efforts. It shows the individuals or the teams that they are on the right track toward continuous improvement. Recognition as feedback can come from supervisors, other teams, internal customers in the organization, or external customers in the marketplace, .Kaizen philosophy and TQM processes demand empowered employees, team players and cross-functional activities. R&R can motivate these individuals and groups to continue their native participation in the organization. It will also create a positive environment for various teams to compete against each other and these give a 'win-win' situation between the organization and employees. Employees can also be motivated to utilize various TQM tools, solve problems, and to interact with internal and external customers. The R&R system will increase the awareness among 'workers that management is

prepared to reward them if they are serious in applying critical TQM values, such as quality, customer satisfaction, and continuous improvement. Employees will have higher motivation if they work in organizations that are consistent in their R&R process and the workers will perceive management initiative as a fair effort by management. This will extend the feeling of trust, and create a strong sense of belonging in the organization. According to Deming's views, R&R can help transform the organization toward a philosophy of quality. Some forms of recognition, such as awards and plaques, show publicly that the individual or team has achieved some degree of success within TQM frame. They are a visible indicator, both to the team and to outsiders, of a job well done. So recognition highlights employees and teams who make a definite contribution to the continuous improvement or TQM effort. Such recognition stimulates additional effort in employees. Recognition, ceremonies, and symbols are important underpinnings to the successful functioning of system or the TQM process. An expression of appreciation for a job well done can be as formal as a written "thank you." or a plaque, or a certificate. An informal verbal "thank you" can also encourage morale. Thessaloniki, (2006:35-36) on most types of proposal system there is a kind of bonus award, but the concept of an award depends on the system used. According some Japanese managers such an award might has with three meanings: compensation given to communicate a proposal's effect, an incentive for encouragement for further development and awards that expresses appreciation for participation More modern idea processes directly involve the employee(s) with the solution and implementation process. The method of rewarding their efforts may be based more on recognition than actual cash awards.

People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit. This requires: Employees must be treated with dignity and respect., They must be trained to build competence where required, Each employee must know what exactly is required to be done and where possible must be able to assess the quality of his work, Fear 30 must be totally removed from the organization and employees must be encouraged to bring out weakness in the system, Empower employees to take appropriate action in their area of work for improvement. Assess employee satisfaction level and take appropriate measures to improve their morale so that they take pride in belonging to the company. EKI/MoE TVET Outcome Based Training Core Process (2015)

2.2 Conceptual framework of the study

The conceptual framework is developed based on literature review and the research objective

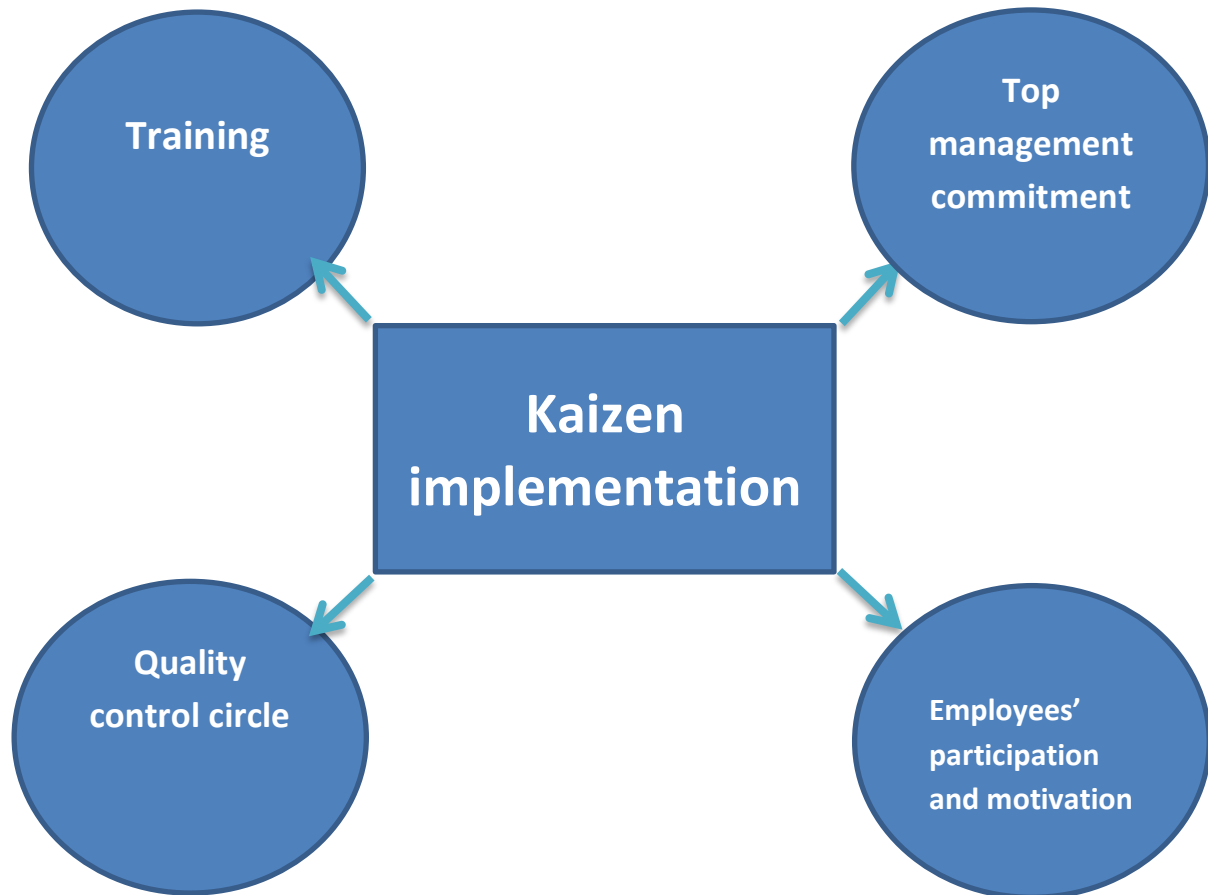


Figure 2.1 Conceptual framework

Source: Developed by the researcher from literature review

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter briefly discusses research design, source and instrument of data collection, sampling technique and procedures, data collection procedures, method of data analysis, Validity and reliability of data measurement. Moreover, this chapter includes Ethical considerations.

3.1. Research Design and Approach

There is no single blueprint for planning research. Research design is governed by the notion of 'fitness for purpose'. The study has employed descriptive case study because its nature is focused on the practice and challenges of Kaizen implementation. The topic at hand was designed to employ both qualitative and quantitative research strategies. The researcher has employed mixed method approach because the researcher prefers to describe theoretical aspects through interview and making a survey by taking large number of samples to put numeric description on the issue.

Mixed methods research was used for collecting, analyzing, and integrating quantitative and qualitative research in a single study. The purpose of this form of research is that both qualitative and quantitative research, in combination, provides a better understanding of a research problem or issue than either research approach alone (Creswell, 2008). The researcher adapted the quantitative research design because it is preferable to analyze large number of respondent questionnaires descriptive statistical data through frequency, mean, percentage. Table, figures and charts were employed for the purpose of data presentation while qualitative research design describe respondent attitude or opinion and their feelings through narration using paragraph, sentence to supplement quantitative data.

3.2. Sources of Data

To gather the necessary data and to keep the credibility of the research, the researcher has used both primary and secondary data collection method.

3.2.1. Primary Sources

The researcher was used semi structure questionnaire as a primary data collection. Semi structured questionnaire helped to gather data from operational employee's because using questionnaire the researcher could be collected a large number data within a short period of

time. Besides, the researcher used face to face interviews to collect information from key informant because Interview method of data collection was preferable to get detail and reliable information to ensure the data collected through questionnaires.

3.2.2. Secondary Sources

Secondary data were collected from Academic Papers, Reports, Ethiopian kaizen institute and Ministry of trade website so as to determine kaizen implementation issues. These secondary data significantly important in order to determine the critical factors that affect kaizen implementation and detail understanding challenges of kaizen implementation and it's benefit.

3.3. Sampling strategy and sampling technique

3.3.1. Study Population

The targets of this study were both managers and employees working in Horizon Addis Tyre Share Company. According to the human resource department currently the total number of employees and managers in operation department was 1078 employees working in the company.

3.3.2. Sample and Sampling Procedure

To select the respondent the researcher employed stratified random sampling. To select fair respondent for this study, researcher followed the following procedures: Firstly determine the target population of the study; secondly determine sample size, thirdly classify the target population by department and fourthly employed proportionate stratified sample.

Stratified random sampling begins with the identification of some variable, which may be related. The sampling frame is arranged by strata, the sample is selected from each stratum using simple random sampling techniques. It is important that the sample selected within each stratum reflects proportionately the population proportions; thus, you can employ proportionate stratified sampling. (Abiy et al 2009). There are no fixed rules for sample size in qualitative research. The size of the sample depends on what you try to find out, and from what different informants or perspectives you try to find that out. (Abiy et al 2009).

Sample selected Respondent

SN	Department(Name of Strata's)	Participate	Proportion($n \cdot Ni/N$)	Sample drawn(selected respondent)
1	Mixing	90	$202 \cdot 90/1067$	17
2	Milling	85	$202 \cdot 85/1067$	16
3	Extruding	94	$202 \cdot 94/1067$	18
4	Calendaring	102	$202 \cdot 102/1067$	19
5	Bead making	78	$202 \cdot 78/1067$	15
6	Cementing and marking	82	$202 \cdot 82/1067$	16
7	Cooling	76	$202 \cdot 76/1067$	14
8	Tyre building	92	$202 \cdot 92/1067$	17
9	Lubricating	98	$202 \cdot 98/1067$	19
10	Curing	88	$202 \cdot 88/1067$	17
11	Tire finishing	93	$202 \cdot 93/1067$	18
12	Quality control	89	$202 \cdot 89/1067$	17
		1067		202

Source: field survey,2021

3.3.3. Sampling Technique

Researchers are typically unable to study the entire population. Therefore, researchers typically study a subset of the population, and that subset is called a sample. Because researchers may not be able to study the entire population of interest, it is important that the sample be representative of the population from which it was selected (Marczyk, De Matteo and Festinger, 2005).

The quality of a piece of research not only stands or falls by the appropriateness of methodology and instrumentation but also by the suitability of the sampling strategy that has been adopted. There is no clear-cut answer, for the correct sample size depends on the purpose of the study and the nature of the population under scrutiny (Bhattacharjee, 2005).

From these departments the researcher used representative data use solving formula cited by Yemane (1967) considering the level of acceptable margins of error 5%. Hence, from the target population size of Horizon Adiss Tire share company managers, supervisors, employees (N=300) a total number of 202 samples are required. Assume 6.23 % margin of error. Based on this the researcher decided to take the upper population size limit to get more valid sample size. Then the total sample size (n) can be calculated by using the following formula

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

n=the sample size N= the size of the population e= the margin of error

Based on this,

$$n = \frac{1067}{1 + 1067(.0623)^2} = 202$$

Totally in the study area consists of 202 respondents' addresses. To compute the sample proportion of each department, the obtained sample divided by population. Therefore, the sample size of this study considered fairly representative of the target population in the study area.

3.4. Data Collection Instruments

The study has employed both quantitative and qualitative data. Both types of data were gathering using appropriate data collection tools in order to obtain sample information from respondents. Questionnaires and Interview data collection tool were employed in the study.

3.4.1. Questionnaire

The researcher has employed questionnaire as major data gathering tool. To gather the data for this study, 202 questionnaires were distributed for selected respondent such as operational employees. The questionnaires were prepared Five point likert rating scale: 1: strongly disagree, 2: disagree, 3: undecided, 4: agree, 5: strongly agree). Likert scale commonly used which constitute five items ranging from strongly disagree to strongly agree .researcher use likert scale to prepare questionnaire because it is easier to develop and it is easier for respondent to understand and to answer the question. Shukla, (2010)

The questionnaire is consisted 4 section the first section was introduction ,the second section back ground information, the third section issues for kaizen implementation in relation to top management , kaizen training , Employee's participation and motivation and Quality control circle (QCC) and The last section is Challenges of kaizen implementation in Horizon Adiss Tire share company. Unclear understanding of questionnaire has direct effect on data analysis and final result. Word of confusion, could create problems of the respondent. Therefore, researcher tried to give attention for questionnaire design.

3.4.2. Interview

Semi structured interview questions were asked to collect data, so as to get relevant information from company managers. Because this type of data collection instrument allowed for the researcher to get specific information that could not be accessed by questionnaire. The interviewer has been got an opportunity to clarify any issues raised by the respondent However; interviews are time-consuming and resource-intensive. Special interviewing skills are needed on part of the interviewer. The most typical form of interview is personal or face-to-face interview, where the interviewer works directly with the respondent to ask questions and record their responses. Anol Bhattacharjee, (2012). Those open ended interview question seeking opinions of the participating company managers in relation to challenges / hindering to implement kaizen at Horizon Addis Tyre Share Company and collect their suggestion in order to minimize kaizen implementation problems.

3.5. Procedure of Data Collection

To collect relevant information from respondents, researcher has followed the following data collection procedures. Firstly, all necessary questionnaires and interview guide were prepared in advance. Secondly, making respondent's arrangement by discussing with company leaders, supervisor, and assign data collect enumerators. Thirdly, short term orientation for enumerators was given how to collect data. Then, questionnaires were distributed for selected department with brief orientation about the purpose of the study. Finally conducted data collection and follow up activities by researcher and data enumerators.

3.6. Validity and Reliability

Reliability is preferred that outcomes (and covariates) be assessed with relatively little measurement error. Other things being equal, unreliability increases unexplained variation within groups and reduces the power of the analysis. (Abiy Zegeye etal, 2009:98)

To ensure the reliability of the data has been assessed with Cronbach's Alpha. According to (Sekaran, 2003) values between 0.50 and 0.80 are acceptable while values below 0.50 are considered less reliable and therefore unacceptable. Based on the result obtained from the pilot study, a few items were modified and some terminologies simplified. Most of the items remained with minor modification in their working in accordance.

Table: 3. 6.1 Reliability of issues affecting kaizen implementation

Variables	Cronbach's Alpha
Top management Commitment	0.714
Kaizen Training	0.711
Employees participation and motivation	0.633
Quality Control Circle	0.69
Challenges of Kaizen Implementation	0.71

From the above table all variables are reliable/acceptable because as the Cronbach's Alpha is between 0.5 and 0.8

3.6.1. Validity

The interview guide and the questionnaire were constructed to obtain a complete coverage of the topic with a strong attention on the general and specific objectives to ensure content validity. Interview and questionnaire are prepared in a very clear and concise manner to enhance the validity. Before distributed questionnaires and ask interview question, each of them examined again and again by the advisor, kaizen trainers from kaizen institute and other research expert. Validity indicates the degree to which instruments measure what they are supposed to measure (Kothari, 2004).

3.7. Data analysis method

Once data was collected it is important to use edit, coding procedures to input the data in appropriate software. And it is also important to check the data before and the final analysis carried out. (Shula, 2010). After the data were collected, organized, arranged, coded and data entered in to statistical software package then the collected data were analyzed by using descriptive statistics like frequency, percentage, mean. In addition to this, interviews would have been used for analysis these qualitative information's that were collected through interview were analyzed and interpreted through description and narratives. The qualitative analysis describe through descriptive narration. Quantitative data was analyzed using software like Statistical Package for Social Science (SPSS) version 20 and analyzed data using tables, figures ,charts The qualitative information's collects through interview a were analyzed and interpreted through description narration .

3.8. Ethical considerations

It is mandatory to follow ethics for any research. The researcher tried to establish rapport with all the interviewees because they were appropriate people to collect reliability and valid qualitative data. The researcher asked permission from Horizon Addis Tire S.C managers and in advance by expressed the objective of the research clearly and give promise to be honest to their company. Permission from concerned body, Legal and authorized letters, confidentiality for all respondents was given a lot of attention.

CHAPTER FOUR

DATA PRESENTATION ANALYSIS AND INTERPRETATION

This chapter presents data presentation, analysis and interpretation of collected data from sampled operational department of Horizon Addis Tyre Share Company. The purpose of this analysis is to simplify, organize, summarize, describe and interpret data and communicate the results in a meaningful way. Statistical data was analyzed by central tendency (frequency, percentage, mean) and presented using table, charts and figures. Moreover, the data collected from company managers through interview could be interpreted by descriptive narration.

4.1. Questionnaire Return rate

All 202 sampled respondents' questionnaires were filled and returned. This means 100 % of responses of respondent collected. This could be Respondents were understood the question properly because the researcher prepare questionnaire both English and Amharic version. On the other hand six selected managers interviewed for this study, all of them were accepted interview question based on appointed schedule. This means researcher also could achieved 100 % of interview question.

4.2. Demographic Variables of the Respondents

Descriptive explanations had been employed to illustrate the demographic variables of the respondents such as gender, age, current position, educational background and department classification of each of 202 Respondents.

Table 4.2.1 Gender of Respondents

Gender	Frequency	Percent
Male	121	59.9
Female	81	40.1
Total	202	100

Source: Source: field survey, 2021

As showed on the table 4.2.1 above 121 (59.90%) of the respondents were males and 81(40.10%) of them were females. However, the number of male respondent greater than female respondent, there were high number of female respondents. This implies that the researcher found appropriate proportionate data from both respondents.

Table 4.2.2 Age group of the Respondents

Age Categories	Frequency	Percent
18-28	58	28.7
29-39	40	19.8
40-50	104	51.5
Total	202	100

Source: field survey, 2021

Table 4.2.2 indicates that 58(28.7%) of the staff Respondents were in the age of 18-28 years. 40(19.8%) of the Respondents were in the age of 29- 39 and 104(51.5%) of the Respondents were the age of 40-50 and above. this shows that more than half of respondents were under the age of 40-50. This implies almost the data collected from experienced respondents. This leads to accurate data collection.

Table: 4.2. 3 Educational Backgrounds of Respondents

Response	Frequency	Percent
Master	8	4
Degree	24	11.9
Diploma	76	37.6
Complete High School	46	22.8
Complete Elementary School	34	16.8
Others	14	6.9
Total	202	100

Source: field survey, 2021

Table 4.2.3: indicate that majority of Respondents 76 (37.6%) were diploma holders, as the nature of the work demanded technical personnel while first degree 24(11.9 %) and master 8(4%) respectively. 46(22.8%) of the Respondents were completed High school while 34(16.8 %) were completed elementary school and the remaining 14 (6.9) of Respondents includes for others.

4.3. Analysis of Collected Data

Respondents were asked to respond on kaizen implementation practices such as top management commitment, education and training about Kaizen, employee’s participation and

motivation and quality control circle(QCC) in Horizon Addis Tyre Share Company and their responses are discussed, analyzed and interpreted in the following manner.

The Likert Scale used is Strongly Disagree, Disagree, undecided, Agree and Strongly Agree

Where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree and 5=Strongly Agree

Mean score is interpreted as used in the table below:

Table 4.3. 1. Top management commitment issues for kaizen implementation

No.	Items	Response					MEAN	
		1	2	3	4	5		
1	Establish a system for employees encouragement, incentives, and rewards	F	24	40	19	58	61	3.46
		%	11.9	19.8	9.4	28.7	30.2	
2	Commitment for Strategy for Kaizen implementation	F	5	4	17	111	65	4.12
		%	2.5	2	8.4	55	32.2	
3	Allocation of kaizen implementation tools or resource	F	18	40	28	76	40	3.4
		%	8.9	19.8	13.9	37.6	19.8	
4	Influence for employees to implement new change management	F	33	39	16	75	38	3.23
		%	16.3	19.3	7.9	37.1	18.8	
5	Build and develop Effective kaizen implementation structure	F		3	9	115	74	4.29
		%	0	1.5	4.5	56.9	36.6	
6	Create kaizen implementation culture in the organization	F	4	14	17	96	71	4.07
		%	2	6.9	8.4	47.5	35.1	
7	Work Evaluation and make direction base on organization mission	F	10	10	13	93	75	4.06
		%	5	5	6.4	46	37.1	
8	Build short and long term training	F	9	16	13	78	85	4.06
		%	4.5	7.9	6.4	38.6	42.1	
							3.85	

Source: field survey, 2021

As shown in the table 4.3.1 above, top management issue is consisted of eight items.

the Data shown under Item 1 65(32.2 %) respondents were agreed and 58(28.8 %) of them strongly agree on Establish a system for employee’s encouragement, incentives, and reward s is contribute on kaizen implementation. However, 24(11.9 %) and 40(19.9 %) and 19(9.4 %) strongly disagree; disagreed and undecided respectively on this issues. The commutative of agree and strongly agree is, 61% however, the mean value for this item is 3.46 which imply average respondents were neutral. (Neither agrees nor disagrees).

Concerning on Commitment to formulate long and short term kaizen implement strategy, system, policies and procedures of kaizen implementation 111(55%) of respondents were agreed,65(32.2%) strongly agreed and 17(8.4%) are undecided .

The mean value of this item is 4.2 which mean average respondents were agreed this item strong influence of kaizen implementation. Regard to allocation of kaizen implementation tools or resource 76(37.6 %) of respondents are agreed, 40(19.8%) of them strongly agreed. However, 40(19.8%) disagree and 18(8.9%) strongly disagree the remaining 28(13.9%) undecided.

The Mean value is 3.4 which imply average of the respondents were in doubt or uncertain whether allocation of resource contribute or not for kaizen implementation. Out of 202 respondent 75((37.1 %) agree, 38(18.8%) strongly agreed that Influence employees towards new change management was affected of kaizen implementation. On the contrary, 33(16.3%) disagree, 39(19.3%) strongly disagree and rest 16(7.9%) were undecided.

The commutative Mean are 3.23 and this implies average of the respondent unable to decide or confuse the influence of employees towards new management change are affecting kaizen implementation or not. The majority of the respondents were agreed 115(56.9%)) and 74(36.6%) strongly agreed for Build and develop Effective kaizen implementation structure the rest are disagreed and neutral.

The mean score is 4.29 which means average of the Respondents were agreed Build and develop Effective kaizen implementation structure greatly influence of kaizen implementation. Out of 202 Respondents 66(47.5 %) agreed, and 71(35.1%) strongly agreed, the rest of them they are disagree and undecided on items Create kaizen implementation culture in the organization. The cumulative mean is 4.07 this implies that average of the respondents they were agreed create kaizen implementation in the company is strong influence on kaizen implementation.⁴⁵ Concerning on Work Evaluation and make direction based on organization mission, majority of the respondent were agreed 93(46%) agreed, 75(37.1%) strongly agreed such variable item strongly affected of kaizen implementation in the company.

From the survey study the researcher findings indicates that top manager commitment was one of the issues of kaizen implementation. Despite many requirements affect kaizen implementation under the categories of top management, Build and develop Effective kaizen

implementation structure, Committed to formulate long and short term kaizen implement strategy, system, policies and procedures, Create kaizen implementation culture in the organization, Work Evaluation and make direction based on organization mission and Build short and long term training were the most mostly affected kaizen implementation.

Based on interview from Horizon Addis Tyre share company managers, successful kaizen implementation determined the commitment of top management. Top managers might be committed Formulate long term and short term continuous improvement strategies ,they were expected to build effective kaizen implementation team , motivate employees through creating both tangible and intangible reward ,provision of kaizen implementation resource, Recognize and celebrate accomplishments, make effective communication channel between managers and employees and build long and short term kaizen training program but few managers they were not believe that organized and programmed kaizen training, is not much essential because kaizen is easily implemented through short term kaizen training and through motivation of employees.

The other interviewee added that communication between managers and staff workers has the most essential for successful implementation of kaizen. Another interviewer also believe establishing formal, continuous and organize kaizen training was essential unless kaizen implementation is not possible. Most of the managers they were believe that effective, communication b/n managers and employees, create employees motivation mechanism, build effective team and training an important contribution factors of kaizen implementation. One of the main factors of kaizen implementation in large and medium industrial enterprises is the lack of leadership skills.

Recent study shows that, manager's commitment determinant factors of kaizen implementation. To implement kaizen the manager must develop leader ship quality by generating continuous implementation strategies. Recent approach of leadership commitment requires making active and effective communication with employees to implement kaizen successfully.

Top management commitment is an important factor of kaizen implementation due to generating new strategies. (Oropesa-Vento et al .2015) Generally, the researcher finding from interview showed top managers commitment was essential factors to support kaizen implementation in Horizon Addis Tyre Share Company. Most of the managers are belief that effective, communication b/n managers and employees, create employees motivation

mechanism, build effective team and training were an important contribution factors of kaizen implementation

Table 4. 3. 2: Training and Education as the requirement of kaizen implementation

No.	Items	Response					MEAN	
		1	2	3	4	5		
1	identify employees skill gap Before start kaizen training	F	5	34	34	88	41	3.62
		%	2.5	16.8	16.8	143.6	20.3	
2	Having Continuous to learn more about 5s	F	0	2	8	101	91	3.38
		%		1	4	50	45	
3	Prepare understandable kaizen training manuals	F		3	10	122	66	4.3
		%		1.5	5	60.4	32.7	
4	Acquiring Knowledge of kaizen techniques, concepts and skills	F	2	12	36	90	62	3.98
		%	1	5.9	17.8	44.6	30.7	
5	Employees awareness creation about kaizen	F	3	13	18	95	73	4.10
		%	1.5	6.4	8.9	47	36.1	
6	Continuous employees training about managing waste	F	3	17	14	109	59	4.1
		%	1.5	8.4	6.9	54	29.2	
7	Kaizen trainer capacity	F	6	16	46	80	52	3.56
		%	3	7.9	39.6	25.7	99	
	Grand Mean						4.02	

Source: Field survey, 2021

The Diverse responses of respondents under the category of kaizen training issues item 1 table 4. 4.2 88(43.6 %) agree, 41(20.3%) strongly agreed, 34(16.8%) disagree, 5(2.5%) strongly disagree, and 34(16.8%) of Respondent undecided.

The mean value of this requirement (item) is 3.62 which approximate 4. It implies an average of the respondents agreed identify skill gap before start kaizen training is an influence of success full kaizen implementation. The response rate concern with Continuous to learn more about 5 s 101(50%) agree, 91(45%) strongly agreed, 34(16.8%) disagree, 5(2.5%) strongly agreed and 8(4%) undecided.

The mean value 3.38 which implies cumulative respondents agreed continuous learn about 5 s is affected kaizen implementation. As shows on the table 4.2 item 3 the majority of the respondent agreed 122 (60.4%) and strongly agreed 66 (32.7%) while 34(16.8%) disagree and 10(5%) undecided the effect of Prepare kaizen training manuals on kaizen implementation.

The mean value is 4.3 which means almost all respondents agreed prepare kaizen training manuals are the highest influence of successful kaizen implementation. As indication table 4.2 item 4 the respondents are agreed 90(44.6%) and strongly agreed 62(30.7%) on Acquiring Knowledge of kaizen concept, and techniques, However 12(5.9%) disagree, 5(2.5%) strongly F 3 17 14 109 59 4.1 7.6 Continuous employees training about managing waste % 1.5 8.4 6.9 54 29.2 7.7 Kaizen trainer capacity F 6 16 46 80 52 3.56 % 3 7.9 39.6 25.7 99 Grand mean 4.02 48 disagree, and 36(17.8%) undecided.

The mean value is 3.98 which can be approximated 4.which means average of the respondents agreed acquire kaizen implementation technic and knowledge is crucial influence of kaizen implementation success fully. On the table 4.2 item 5 shows that respondents 95(47%) agree, 73(36.1%) strongly agreed, 13(6.4%) disagree, 5(2.5%) strongly disagreed and 18(8.9%) undecided on Employee's awareness creation about kaizen to implement kaizen.

The mean value is 4.101 means the average respondents are agreed awareness creation about kaizen is another crucial contribution issuesof kaizen implementation As indication on the table 4.2 item 6 the majority of the respondents 109(54%) have agreed and 59(29.2%) strongly agreed on Continuous employees training about managing waste is important issues of kaizen implementation in the company. However, 17(8.4%) disagree 5(2.5%) strongly disagree and 14(6.9%) undecided.

The mean value is 4.1 this implies that the respondents believe that the existence of continuous employees training about managing waste is essential item of contribute kaizen implementation of kaizen implementation. The last item 7 Respondents have 80(39.6%) agree, 52(25.7%) strongly agreed while, 16(7.9%), 6(3) 46(22.8%) disagree, strongly agreed and undecided respectively effect of Kaizen trainer capacity on kaizen implementation.

The mean of such item is 3.56 it is closer to 4 so the respondents have averagely agreed that kaizen trainers capacity affected kaizen implementation. Based on the response, the grand

mean shows that on table are 4.02 which mean average of respondent were agreed kaizen training is main issue of kaizen implementation. Therefore, the researcher finding showed that majority of the respondent believe that training is essential issues for successful implementation of kaizen on Horizon Addis Tyre Share Company. However, many requirements affected kaizen implementation under the categories of training issues, training on employees awareness creation about kaizen, training about waste management and prepare kaizen training manual were the mostly affected kaizen implementation in the Company.

According to data collected from managers through interview Kaizen training is essential for kaizen implementation. Managers have strongly believed that kaizen implementation and sustainability ensured through giving continuous training for employees. Training Employees about 5s, training about waste, continuous improvement technique and principles, awareness creation about kaizen, Introducing new management change, fill s their skill gap were an important contribution factors of kaizen implementation.

One manager who belief that, 5s and 7waste management training is much enough to sustain and implement kaizen another interviewee believes that employees lacks practical know how to implement kaizen continuously. Hence continues skill development is important for both employees and managers. Most of the employees lack Technical principles to implement kaizen success fully. Most of the managers' belief training on 5s and 7 wastes with well-prepared training modules are the most important or essential to implement kaizen in the work place. Schiffer, and Michael (2003) they states that In order to implement kaizen successfully, companies should be educating and train all levels in order to speak a common language regarding to kaizen . It is essential to eliminate the lack of employee's knowledge about modern management techniques Real training needs have been correctly identified and also requires detailed planning and preparation.

This ensures that training is delivered in the right way, at the right time, to the right people. Some organizations employ full-time trainers to carry out training internally. Others employ external training providers as and when they need them. EKI/MoE – TVET Outcome Based Training Core Process (2015:13 Based on qualitative data analyzed researcher can be concludes training on 5s and 7 waste and well prepared training modules are the most important or essential to implement kaizen in the work place

Table 4. 3. 3: Employees participation and motivation participation that affect kaizen implementation

No.	Items	Response					ME AN	
		1	2	3	4	5		
1	Being enthusiastic about kaizen implementation	F	4	11	37	95	54	3.92
		%	2.0	5.4	18.3	47	26.7	
2	Having Employees decision making involvement to implement kaizen	F	6	23	40	78	53	3.75
		%	3	11.4	19.8	38.6	26.2	
3	Having employees Encouragement , recognize ,empower and reward of good individual performance	F	1		3	90	108	4.5
		%	0.5		1.5	44.6	53.5	
4	Genuine participation of employees towards kaizen implementation	F	5	8	19	111	59	4.02
		%	2.5	4	9.4	55	29.20	
5	Effective communication and feedback from leaders	F	16	12	11	98	63	3.88
		%	7.9	5.9	5.4	48.8	31.2	
Grand Mean							4.01	

Source: Field survey, 2021

As indication the table above 4.4.3 more than 95(47 %) of the respondents were agreed Being enthusiastic about kaizen is affect kaizen implementation, while 54(26.7%), 37(18.3%), 11(5.4%), disagreed, strongly agreed, and undecided respectively.

The cumulative mean is 3.92 it implies average of the respondents agreed an employee being enthusiastic about kaizen is important items that affect kaizen implementation. As shows on the table 4.3 item 2 concerning the Employees decision making involvement 78(38.6%) agreed, 53(26.2%) strongly agreed, 23(11.4%) disagreed and the rest of were not sure about the issues.

The average mean is 3.75 which mean average respondents agreed the Employees decision making involvement is essential variable item that affect implementation of kaizen in the company. On the table 4.3 depicted Majority of the respondent they were agreed 90(44.6%) and strongly agreed 108(53.5) on employees encouragement is essential for kaizen implementation.

The mean score is 4.5 this indicate average respondents strongly agreed having employees Encouragement, recognize, empower and reward of good individual performance was the greatest influence that affect kaizen implementation. Out of 202 respondents 111(55%) agreed, 59(29.2) strongly agreed, 8(4) disagreed and 5(2.5%) strongly agreed and 19(9.4) undecided on the issues of Genuine participation of employees towards kaizen implementation.

Average mean of the issue is 4.04 which show respondents were agreed genuine participation of employees towards kaizen implementation was the second greater influence of kaizen that affect kaizen implementation. However, more respondents 98(48.5) agreed, and 63(31.2%) strongly agreed, s 12(5.9%) disagreed and 16(7.9%) strongly disagreed) and the rest of them undecided on the issues of Effective communication and feedback from leaders.

The mean for these responses were 3.9 which is approximately 4. The cumulative response to this variable shows that Effective communication and feedback from leaders has been crucial item that influence of kaizen implementation. Based on the response of the respondents the total grand mean of employees' participation and motivation is 4.01 so the researcher finding shows that employee's participation and motivation is another second factor to implement kaizen successfully in Horizon Addis Tyre Share Company. Despite, many issues on kaizen implementations under the category of employee's involvement and motivation, employees encouragement, recognize, empower and reward genuine participation of 52 employees towards kaizen implementation and being enthusiastic about kaizen implementation were the most important requirement that contribute kaizen implementation.

According to interviewee employees participation and motivation is essential for sustainable kaizen implementation .Without employee's participation and motivation the implementation of kaizen might be difficult. Kaizen implementation ensured through the involvement of employees. Success full implementation of kaizen determined by employee's genuine participation and morale to implement 5S, employee's initiative to implement work on a daily basis, full participating company kaizen promotion efforts. These are important contribution issues that expect from employee's participation and motivation. More over interviewee added readiness to implement kaizen; Employees must be treated with dignity and respect, employees empowerment and reward also influence on kaizen implementation.

Based on these qualitative analysis employees participation and motivation is essential for success full kaizen implementation .employees motivation, and empowerment, respect,

employees' genuine participation and morale were significant influence of kaizen implementation. (Maarof and Mahmud, 2015) they argue that if the company wants to implement kaizen correctly, Companies strongly emphasize the involvement of the front line workers with some level of empowerment given to them to identify and solve problems related and can encourage employees to think differently about their work and build employee morale and the sense of responsibilities among the employees regarding their workplace.

Utilization of human potential is strong competitive weapon. On the one side, it can bring a lot of good ideas for change what can contribute to company progress. And on the other side, by direct human involvement to the improvements issues can be ensured easier enforcement and maintenance of implementing changes in practice. Dysko, (updated). What about your employees' attitude (commitment) towards implementing the strategy? According to researcher conducted interview with Horizon Addis Tyre Share Company managers and employees were Positive to ward kaizen implementation but they have little knowledge about kaizen. So they need additional awareness and training.

Beside employees need additional incentive they were positive to implement and exercise kaizen in the work shop, some company employees are careless to implement kaizen continuously and they are not adapt kaizen as a part of their work. Some employees seen kaizen as not a part of work rather than it is the responsibility of janitor's. Some employees are not accept kaizen is not a part of management philosophy or change management strategy as result they have low motivation to implement kaizen in continuous way.

Table 4. 3.4 Quality control that necessitate kaizen implementation

No.	Items	Response					Mean	
		1	2	3	4	5		
1	Having QCC Kaizen organizational structure	F	7	5	11	102	77	4.20
		%	.5	2.5	5.4	50.5	38.1	
2	Organization coordination and support	F	14	9	30	84	65	3.88
		%	6.9	4.5	14.9	41.6	32.2	
3	QCC leaders, facilitators play their role	F			3	102	97	4.46
		%			1.5	50.5	48	
4	Participation of QCC members	F		1	5	132	63	4.28
		%		5	2.5	65.3	31.2	
5	Apply best QCC practice	F	8	25	45	97	27	3.57
		%	4	12.4	22.3	48	13.4	
6	Having regular QCC Evaluation and	F	10	31	24	97	39	3.60

	Monitoring	%	5	15.3	11.9	48	19.3	
7	Having record data before and after Kaizen	F	18	29	42	77	35	3.41
		%	8.9	14.4	20.8	38.10	17.3	
8	Having QCC Coordination and Communication	F	24	67	35	46	30	2.95
		%	11.9	33.2	17.3	22.8	14.9	
	Grand Mean							3.79

Source: Field survey, 2021

shown under Item 1 in Table 4.3.4 indicated that out of 202 respondents, 102(50.5%) respondents agreed and, 77(38.1%) strongly agree but, 5(2.5%) disagree, 7(3.5%) strongly disagree and 11(5.4%) undecided. Average mean score is 4.20 it implies average of respondents agreed establishing well QCC Kaizen organizational structure is important item that influence kaizen implementation.

In Table under Item 2 illustrated the responses of the respondents about Organization coordination and support. A total of 84(41.6%) agree, 65(32.2%) strongly agree, 9(4.5%) disagree, 14(6.9%) strongly disagree and 30(14.9%) undecided. Cumulative is 3.88 which Indicated more of the respondents agreed on existence of participative Organization coordination and support. is affected kaizen implementation. As disclosed under Item 3 of Table 202(50.5%) agreed and 97(48%) strongly agree the rest are undecided (neither agree nor disagree).

The mean vale of this item 4.46 this indicated that sample respondents agreed QCC leaders, facilitators play their role is the greatest item that affects kaizen implementation. As shows on table 4.4 item 4 almost all respondents 132(65.3%) agree and 63(31.2%) strongly agree, only 5 (2.5%) undecided on the issues of Participation of QCC members to implementation kaizen. This means almost all employees agreed the success of kaizen implementation determine the participation of QCC members.

The mean score is 4.28 which means respondents agreed Participation of QCC members during kaizen implementation are the second most important variable items that affect kaizen implementation.

As indicate table 4.3 item 5 the response of respondents 97(48%), 27(13.4%) ,25(12.4%) ,8(4%) and 45(22.3) expressed their attitude which ranged from agree , strongly agreed, disagree, strongly disagree and undecided respectively.

The mean score of the respondents' attitude was calculated to be 3.57 this means that it is closer to 4. Therefore, average respondents were agreed with applies best practice support kaizen implementation. Under item 6 of table 4.4 generated response from the respondents' on regular QCC evaluation and monitoring concern with kaizen implementation 97(48%) agree, 39(19.3%) strongly agree,31(15.5%) disagree,10(5%) strongly disagree and 24(11.9%) undecided .

The mean score 3.62 this Shows that average respondents in the company agreed having regular QCC evaluation and monitoring was affect kaizen implementation

As indicated in Item 7 of Table 4.4 77(38.1%) agree, 35(17.3%) strongly agree, 29(14.4%) disagree, 18(8.9%) strongly disagree and 42(28.8%) undecided the above-stated statements. This shows more respondent agreed kaizen implementation record data before and after kaizen implementation is influence of kaizen implementation. However, based on the mean score 3.41 the respondents in the study could neither agree nor disagree with the issue.

As illustrated in Table in the last item 54(26.7%) agree, 30(14.9%) strongly agree, 93(46%) disagree, 5(2.5) strongly disagree and 20(9.9%) undecided. However, based on the mean score 2.95 the respondents in the study could neither agree nor disagree with the issue.

The grand mean (total mean score) of the variables under QCC was found to be 3.79. This shows that the respondent's average agreed qcc was an issue of kaizen implementation. Based the grand mean of the respondents, researcher could be concluded that Quality control circle is one of the issues of kaizen implementation in Horizon Addis Tyre Share Company.

Based on interviewee from the company manager however, many contributed issuesfor sustainable kaizen implementation in relation to Quality control curricule, know how QCC hand book manuals , Regular QCCs evaluation scheme and notify their results on kaizen board, recognition and rewarding best performing of individuals, apply best practice, Quality control team members play their role and ,QCC team leader their role play .Some managers they have complain regular meeting insignificant to implement kaizen

From this the researcher concluded that understand QCC hand book manual, QCC evaluation, recognize and reward, apply best practice, QCC team leader and QCC member participation has influence kaizen implementation.

Summary of kaizen implementation practices

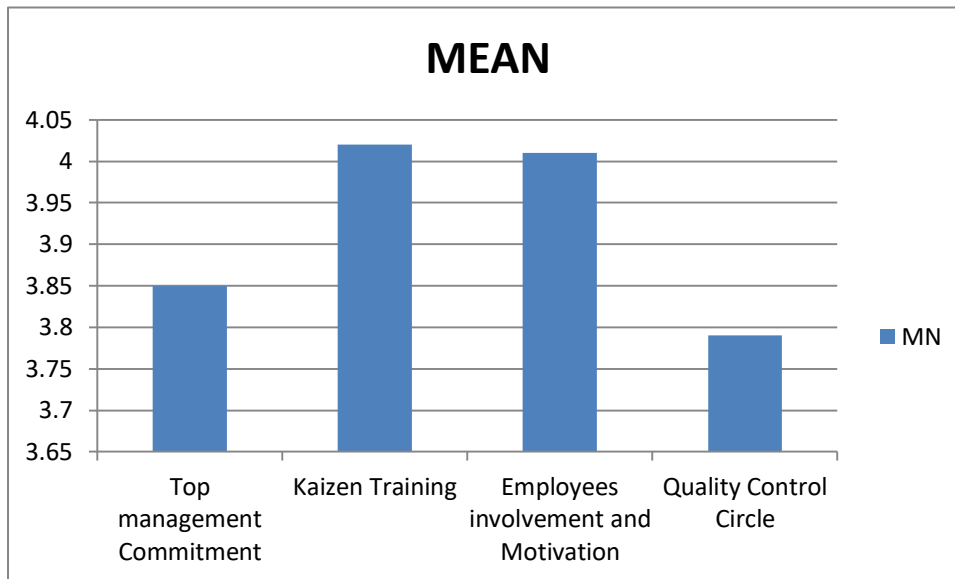


Figure 4.4.1 Figure: compare four issues

Source: Field Survey, 2021

As shown in figure 4.4.1, kaizen training and employee's involvement and motivation have the highest factors, followed by top management and quality control circle. The grand mean of each factor is 4.02, 4.01, 3.85, and 3.79 respectively. This means the findings show that kaizen training and employee's participation and motivation were the most important factors of kaizen implementation at Horizon Addis Tyre Share Company.

Generally, the researcher's findings show that all factors affect kaizen implementation. But provision of kaizen training and employee's participation and motivation were the most important factors of kaizen implementation. According to the finding by MATHENGE (2012), training had the highest influence on kaizen implementation. Continuous kaizen training is the most influence of kaizen implementation in flower industries. The other authors (Assayehu and Zerihun, 2016) argue that the most important factors for successful implementation of Kaizen philosophy in manufacturing industry is top management commitment.

Respondents were asked to identify the challenges that hinder the implementation of kaizen in the company. The first problem selected by about 81 percent of the respondents is lack of continuous kaizen training and education program to build employees' capacity. Giving poor attention about kaizen education and training like other work or fields is the other prominent issue agreed by 75% of the respondents for the successful implementation of

Kaizen in Horizon Addis Tyre Share Company. Unable to building and developing kaizen implementation system and procedures and structure (66%), and lack of kaizen trainers building capacity and absence of experience sharing from domestic and foreign companies (66%) were found the consecutive challenges experienced by the company. Ineffective coordination, integration and communication among QCC are also agreed by 61% of the respondents as a challenge followed by employee’s negative attitude and misconception about kaizen (On the other hand, lack of building and developing kaizen implementation system, procedures and structure, lack of employees commitment take kaizen as a culture of work, and Having Employees resistance to change were labeled as a problem hinders the implementation by 47%, 44% and 31% of the respondents respectively. 51%).

On the other hand, lack of building and developing kaizen implementation system, procedures and structure, lack of employees commitment take kaizen as a culture of work, and Having Employees resistance to change were labeled as a problem hinders the implementation by 47%, 44% and 31% of the respondents respectively.

It is possible to conclude that, from the above discussions, kaizen implementation has several challenges. Have employee’s negative attitude towards kaizen, low motivation in to implement kaizen. Based on obtained percentage for each items, many respondents agreed there were challenges encountered in the implementation of kaizen. The majority of the respondents’ agreed no continuous training was given as well as there is no adequate administrative supports, feedbacks and encouragement from top management

Table: Challenges of Kaizen implementation

		Frequency	Percent
Lack of building and developing Kaizen implementation system , procedures and structure	Strongly disagree	30	14.9
	Disagree	39	19.3
	Undecided	34	16.8
	Agree	64	31.7
	Strongly agree	33	16.3
Leaders are focused on administration area rather than Kaizen implementation	Strongly disagree	16	7.9

	Disagree	26	12.9
	Undecided	185	8.9
	Agree	85	42.1
	Strongly agree	49	24.3
Employees negative attitude and misconception about Kaizen	Strongly disagree	18	8.9
	Disagree	38	18.8
	Undecided	36	17.8
	Agree	85	42.1
	Strongly agree	21	10.4
Having employees resistance to change	Strongly disagree	44	21.8
	Disagree	63	31.2
	Undecided	29	14.4
	Agree	43	21.3
	Strongly agree	21	10.4
Lack of employees commitment take Kaizen as culture of your work	Strongly disagree	24	11.9
	Disagree	52	25.7
	Undecided	33	16.3
	Agree	64	31.7
	Strongly agree	25	12.4
Intention about Kaizen education and training like others wrk of fields	Strongly disagree	6	3
	Disagree	17	8.4
	Undecided	24	11.9
	Agree	94	46.5
	Strongly agree	59	29.2
Lack of continuous Kaizen training and education program to building employees capacity	Strongly disagree	3	1.5
	Disagree	14	6.9
	Undecided	17	8.4

	Agree	98	48.5
	Strongly agree	67	33.2
Lack of Kaizen trainers building capacity and absence of experience sharing from domestic and foreign companies	Strongly disagree	20	9.9
	Disagree	29	14.4
	Undecided	37	18.3
	Agree	58	28.7
	Strongly agree	56	27.7
Ineffective coordination, integration and communication among QCC	Strongly disagree	18	8.9
	Disagree	35	17.3
	Undecided	24	11.9
	Agree	74	36.6
	Strongly agree	49	24.3

However, the company started to implement kaizen; the company could not be fully implemented. To sustainable kaizen implementation in Horizon Addis Tyre Share Company managers, facilitators, supervisors and team leaders should be play as main actors. According to interviewee there has been a challenge of kaizen implementation in relation to top management commitment in the company.

For example communication between managers and staff workers has weak due to few managers ‘manage number of employees. Managers have limited to establishing formal, continuous and organize kaizen training because each employee assign for each machine. Therefore, it could be difficult giving training continuously. Programmed and organized training more focused on technical aspect rather than kaizen. Many companies could not be successful implementing kaizen due to managers not fully committed to making kaizen strategy, heavily bureaucratic organization), lack of employees support, lack of training on kaizen (Admasu, 2015).

The presence of limited skills of employees, were found to be challenges encountered in the implementation of kaizen strategy. According to data collected from interviewees. However, kaizen training is essential for employees to implement kaizen successfully; the given training could not be enough. Employees’ capacity about 5s, waste management still not

developed. In availability of kaizen training modules was one of the most important challenges of kaizen implementation. Another interviewee said that there were not given appropriate kaizen training in the company. Therefore, employees they have lacks practical know how to implement kaizen continuously. Hence continues skill development is important for both employees and manager's essential .Even though the company given short term refreshing kaizen training, the training was lack of consistency and lack of organized and planned training programs due to inattention detail about kaizen. The Finding of Tiwari (2017) shows that in relation to employee's attitudinal problems, employees are seen KAIZEN implementation as a short term project, lack of commitment, and resistance to accept change are the main challenges which obstacle of the success of KAIZEN implementation.

However, employees participation were vital to sustainable kaizen implementation with in Horizon Addis Tire Share Company, there have been challenges in relation to employee's participation and motivation. According to interviewees, employee's commitment towards kaizen implementation was challenged. For example Lack of readiness to implement kaizen and, Lack of tolerance to implement continuously. Moreover, some employees they are not accept kaizen as part of management philosophy or change management strategy. The Finding of Tiwari (2017) shows that in relation to employee's attitudinal problems, employees are seen KAIZEN implementation as a short term project, lack of commitment, and resistance to accept change are the main challenges which obstacle of the success of KAIZEN implementation

Although, QCC is a tool to implement kaizen in Horizon Addis Tyre Share Company, there were challenges. based on information collected from Horizon Addis Tyre share company managers disagreement among group, poor knowhow QCC hand book manuals, Low participation during meeting, Poor Regular QCCs evaluation scheme and notify their results on kaizen board., weak kaizen audit report of QCC performance, weak communication between QCC leaders and QCC members all these are challenges of sustainability implement kaizen in Horizon Addis Tire Share Company.

CHAPTER FIVE

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

In this chapter presented the conclusions and recommendations were discussed. For clarity purpose, the conclusions are based on the research objectives of the study. Based on the findings of the study recommendations are made to government bodies, to employees, manager, supervisor and team leaders and suggestion for other researchers and stake holders.

5.1. Summary of Major Findings

The summaries of major findings are presented based on data analysis The researcher finding showed that majority of the respondent believe that training is essential issue for success full implementation of kaizen on Horizon Addis Tire Share Company.

Employee's participation and motivation is another most important issue for implementation of kaizen successfully in the company.

Researcher could be concluded that Quality control circle is one of the issues for kaizen implementation in Horizon Addis Tyre Share Company.

The first problem selected by about 81 percent of the respondents is lack of continuous kaizen training and education program to building employees capacity. Giving poor attention about kaizen education and training like others work or fields is the other prominent issue agreed by 75%.

Ineffective coordination, integration and communication among QCC are also agreed by 61% of the respondents as a challenge followed by employee's negative attitude and misconception about kaizen (51%).

5.2. Conclusions

The following conclusions are drawn taking the research major findings into consideration.

Flexible production with shorter lead time, managing waste, satisfied customer, increase product quality, cost reduction , Health and occupational safety of workers are some of Outcome of continuous improvement activities both in manufacturing and service sectors. As a result, it has been essential to implement this philosophy in Addis Tire Share Company. However, its implementation and sustainability in the company still be a challenge.

Training is the greatest issue of kaizen implementation in the company. For example kaizen training manuals, employees' awareness creation about kaizen, continuous employees training on managing waste were identified as a contribution item issues for kaizen implementation.

Based on the cumulative mean from survey study Quality control circle and top management commitment is also an issue for kaizen implementation in the company.

The finding analyzed through interview almost it has similar with the field survey of the questionnaire. This shows that kaizen implementation issues and challenges could be clearly determined by both managers and employees.

According to the previous research studies from various literature reviews showed that top management commitment is greatest issue for kaizen implementation and employees involvement is also another important issue for kaizen implementation.

5.3. Recommendations

Research is carried out to provide possible solutions for identified problems. Therefore the following *recommendations are forwarded for the company management considerations.*

- The company should create provision of Sustainable short and long term kaizen training program with the coordination of Ethiopia kaizen institute
- The company should encourage its employees through financial and non-financial reward mechanism (like recognition, incentive, bonus, promotion) for the group or individuals
- Company employees should have accept kaizen positively and exercise as a part of their work because implement kaizen is not only the benefit of the company but also it is a part of their life.
- It could be better Managers, kaizen trainers, facilitators, employees sharing experience from domestic and foreign best model kaizen implemented companies. "seeing believes," this technique is extremely effective for promoting kaizen implementation throughout a company
- Top manager should give an attention for kaizen implementation throughout developing kaizen strategy, motivate employees, develop kaizen implementation structure in order to cut unnecessary procedures, establish long and short kaizen training program

- In order to understand the concept of kaizen it is better integrate Kaizen education in all educational systems as curriculum
- Training manuals, quality control circle hand book should be well prepared both in English and Amharic version to be understood by employees easily because manual can create more understanding for employees, supervisors, and managers through reading.

5.4. Suggestions for further research

This study focused on practices and challenges of kaizen implementation in the case of Horizon Addis Tyre Share Company only. On the other hand kaizen implementation is not only focused on this industry but also It was implemented other Ethiopian manufacturing and service sector from large to small enterprise. Therefore, researcher will suggest that other investigator should study issues on other industries this is because kaizen practice new concept it needs further study. Moreover, the researcher suggests practices and challenges of kaizen implementation will not be determined by top management, commitment, employee's participation and motivation, kaizen training and team work. Therefore, the researcher will suggest that researcher to study other issues for kaizen implementation.

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APPENDIX I: Questioner Administer

St. Mary's University

School of Graduate Students

Questionnaire to be filled by company employees

Dear respondent,

I am a graduate student in the department of management, Saint Marry University. Currently, I am undertaking a research entitle 'Factors Affecting implementation of kaizen at Horizon Addis Tyre S.C. You are one of the respondents selected to participate on this study. Please assist me in giving correct and complete information to present a representative finding on 'Factors Affecting implementation of kaizen at Horizon Addis Tyre S.C. Your participation is entirely voluntary and the questionnaire is completely anonymous.

Finally, I confirm you that the information that you share me will be keep confidential and only used for the academic purpose. No individual's responses will be identified as such and the identity of persons responding will not be published or released to anyone. All information will be used for academic purposes only. Thank you in advance for your kind cooperation and dedicating your time.

With best regards

Demelash Hailu

Instructions

- No need of writing your name
- For Likert scale type statements and multiple choice questions indicate your answers with a check mark (√) in the appropriate block

SECTION ONE

BACK GROUND INFORMATION INSTRUCTIONS:

Please answer by making a tick (√)

1. Gender: A. Male B. Female
2. Age. A.18-28 B. 29-39 C. 40-50
3. Current position: A. Managerial B. Non-managerial
4. Educational Background (tick only the highest level you have): A. Masters B. Bachelors C. Diploma D. Completed High school F. Others----- E. Completed Elementary School

SECTION TWO

REQUIREMENTS OF KAIZEN IMPLEMENTATION ON HORIZON ADISS TYRE SHARE COMPANY

The major factors that affect kaizen implementation on Horizon Addis Tyre Share Company are listed below. Please indicate the degree to which these factors are affecting the kaizen implementation of your business enterprise. After you read each of the factors, evaluate them in relation to your business and then put a tick mark (√) under the choices below. Where, 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree and 1= strongly disagree.

Top management commitment

Please indicate the degree to which you agree with the following statements concerning top management commitment factors

No.	Items	5	4	3	2	1
1	Establish a system for employees encouragement, incentives, and rewards					
2	Committed to formulate long and short term kaizen implement strategy, system, policies and procedures					
3	Allocation of kaizen implementation tools or resource					
4	Influence for employees to implement new change management					

5	Build and develop Effective kaizen implementation structure					
6	Create kaizen implementation culture in the organization					
7	Work Evaluation and make direction base no organization mission					
8	Build short and long term training					

Education and training about kaizen

Please indicate the degree to which you agree with the following statements concerning to Education and training

No.	Items	5	4	3	2	1
1	identify employees skill gap Before start kaizen training					
2	Having Continuous to learn more about 5 s					
3	Prepare understandable kaizen training manuals					
4	Acquiring Knowledge of kaizen techniques, concepts and skills					
5	Employees awareness creation about kaizen					
6	Continuous employees training about managing waste					
7	Kaizen trainer capacity					

Employee's participation and motivation

Please indicate the degree to which you agree with the following statements concerning employee's participation and motivation factors

No.	Items	5	4	3	2	1
1	Being enthusiastic about kaizen implementation					
2	Having Employees decision making involvement to implement kaizen					
3	Having employees Encouragement , recognize ,empower and reward of good individual performance					
4	Genuine participation of employees towards kaizen implementation					
5	Effective communication and feedback from leaders					

Quality control circle (QCC)

Please indicate the degree to which you agree with the following statements concerning quality control circle factors

No.	Items	5	4	3	2	1
1	Having QCC Kaizen organizational structure					
2	Organization coordination and support					
3	QCC leaders, facilitators play their role					
4	Participation of QCC members					
5	Apply best QCC practice					
6	Having regular QCC evaluation and monitoring					
7	Having record data before and after kaizen implementation					
8	Having QCC coordination and communication					

SECTION 3

CHALLENGES OF KAIZEN IMPLEMENTATION

Please indicate the degree to which you agree with the following statements concerning Challenges of kaizen implementation

No.	Items	5	4	3	2	1
1	leaders are Lack of commitment to take kaizen as management					
2	Leaders /managers are Lack of building and developing kaizen					
3	Leaders are Focused on administration area rather than kaizen					
4	Having Employees resistance to change					
5	Lack of employees commitment take kaizen as a culture of your work					
6	inattention about kaizen education and training Like others work or fields					
7	lack of continuous kaizen training and education program to building employees capacity					
8	Lack of kaizen trainers building capacity and absence of experience sharing from domestic and foreign companies					
9	Ineffective coordination, integration and communication among QCC					

APPENDIX II: Amharic Version of Questioner

የጽሑፍ መጠይቅ

በቅድስተ ማርያም ዩኒቨርሲቲ የድህረ ምረቃ ትምህርት ማኔጅመንት ት/ክፍል የቢዝነስ አስተዳደር ድህረ ምረቃ ት/ቤት

ክፍልአንድ:-መግቢያ

እኔ በ ቅድስተ ማርያም ዩኒቨርሲቲ የድህረምረቃ ትምህርት ማኔጅመንት ት/ክፍል የቢዝነስ አስተዳደር ድህረ ምረቃ ተመራቂ ተማሪ ስሆን፤ በአሁኑ ሰዓት የመመረቂያ ፅሁፌን በማዘጋጀት ላይ እገኛለሁ። የጥናቱ ርዕስም “በአዲስ አበባ ከተማ በሚገኘው ሆራይዘን አዲስ ጎማ አክሲዎን ማህበር በካይዘን ትግበራ ላይ ተፅእኖ የሚያሳድሩ ተግዳሮቶችን” ይመለከታል። እርስዎም በዚህ ጥናት እንዲሳተፉ ተመርጠዋል። እርስዎ የሚሰጡትን ትክክለኛውን መረጃ ለጥናቱ ውጤታማነት በጣም አስፈላጊ መሆኑን በመገንዘብ መጠይቁን በጥንቃቄ እንዲሞሉ እጠይቃለሁ። ተሳትፎዎ በእርስዎ በጎ ፈቃደኝነት ላይ የተመሰረተ ነው። በመጨረሻም የሚሰጡት መረጃ ሚስጥራዊነቱ የተጠበቀና ለዚህ ጥናት ዓላማ ብቻ እንደሚውል አረጋግጣለሁ። የማንኛውም መልስ ሰጪ ማንነት በማንኛውም መልኩ የማይታተም ና የማይሰራጭ ይሆናል። ሁሉም መረጃዎች ለትምህርታዊ ዓላማብቻ ይውላሉ። ጊዜዎን ሰውተው ስለሚያደርጉልኝ ትብብር በቅድሚያ አመሰግናለሁ።

ደመላሽ ኃይሉ

ማሳሰቢያ:-

- በመጠይቁ ላይ ስም መፃፍ አያስፈልግም። - መልስዎትን በሳጥኑ ውስጥ የእርማት ምልክት (✓) ያስቀምጡ።

ክፍል 1: የግልመረጃ

1. ያታ:

ሀ. ወንድ	ለ. ሴት	
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2. እድሜ:

ሀ. 18-28	ለ. 29-39	ሐ. 40-50	መ. 50+
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3. አሁን ያሉበት የስራ ደረጃ:

ሀ. ማናጀሪያል	ለ. ባለሙያ
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4. የትምህርት ዝግጅት

ሀ. ማስተር	ለ. ድግሪ	ሐ. ድፕሎማ
መ. አስረኛ ክፍል ያጠናቀቀ	ሠ. ስምንተኛ ክፍል ያጠናቀቀ	ረ. ሌላ

ክፍል 2:

በአዲስ አበባ ከተማ በሚገኘው የሆራይዘን አዲስ ጎማ አክሲዎን ማህበር በካይዘን ትግበራ ላይ ተፅእኖ ሊሆኑ የሚችሉ ነገሮች ተዘርዘረዋል። ከተዘረዘሩት ችግሮች የእርስዎን ስራ ዘርፍ ይበልጥ ተፅእኖ የሚያሳድሩትን በደረጃ ያመለክቱ። ለእያንዳንዱ ጥያቄ ከአማራጮቹ አንድ ጊዜ ብቻ የ(✓) ምልክት በማድረግ ምላሽ ይስጡ።

5 = በጣም እስማማለሁ 4 = እስማማለሁ 3 = ለመወሰን እቸገራለሁ 2 = አልስማማም
1 = በጣም አልስማማም

ከአመራሮች ወይም ከስራ ሀላፊዎች ጋር የተያያዙ

ተ. ቁ	ዝርዝር ተግባራት	5	4	3	2	1
1	ለሰራተኞቻቸው የሚገኝ ጋራ እና የሽልማት ስርዓቶች ማዘጋጀት					
2	ካይዘን ለመተግበር የሚያስችል የረዥም እና የአጭር ጊዜ ስትራቴጂ፣ ፖሊሲ እና አሰራር መግደፍ					
3	ለካይዘን ትግበራ የሚሆኑ ቁሳቁሶችን ማቅረብ					
4	ሠራተኞች ለለውጥ እንዲተገኙ ተፅዕኖ ማድረግ					
5	ውጤታማ የካይዘን ትግበራ አደረጃጀት ማፍጠር፣ መዋቅር ማዘጋጀት እና ማስፈጸም					
6	ካይዘን የሥራ ባህል ማፍጠር					
7	ሥራዎችን በድርጅቱ ተልዕኮ አንፃር እየገመገመ መሆኑን አቅጣጫ የሰጡ ማሳሰቢያ					
8	ረዥም እና አጭር የካይዘን ስልጠና እንዲኖር ማድረግ					

ከካይዘን ትግበራ ትኩረት ስልጠና ጋር የተያያዙ

ተ. ቁ	ዝርዝር ተግባራት	5	4	3	2	1
1	ከስልጠና በፊት የክህሎት ክፍተት ማለያ					
2	አጭር ጊዜ “ማ” ዎችን ስርአት አድርጎ ማዘለቅ የሚያስችል ስልጠና					
3	የሚሰጠው ሰነዶችን ለካይዘን ትግበራ በሚያስችል መልኩ ማዘጋጀት					
4	ካይዘንን ለመተግበር የሚያስችል ማዕዘን እና ወቅት ክህሎት					
5	ሰራተኞች ስለካይዘን በቂ ግንዛቤ እንዲኖራቸው ማድረግ					
6	ተከታታይነት ያለው ተከታታይነት ቁጥጥር ስልጠና					
7	ስለካይዘን ስልጠና የሚሰጡ ሰነዶች አቅም					

የሰራተኞች ተሳትፎ እና ተነሳሽነት ጋር የተያያዙ

Employee's participation and motivation

ተ. ቁ.	ዝርዝር ተግባራት	5	4	3	2	1
1	ካይዘንን ለመተግበር ያለው የወስጥ ተነሳሽነት					
2	ሰራተኞች በካይዘን አተገባበር ውሳኔ ላይ ያላቸው ተሳትፎ					
3	የተሻለ ፈፀሞ ያላቸው ሰራተኞች የማረጋገጫ እና የሥራ ስሜት ለማረጋገጥ የሚያስፈልጉት					
4	የእኔን ትስማኝ የተላበሰ የሰራተኛ አማካኝነት					
5	ከበላይ ሀላፊዎች ጋር መላካት የሚገባ ችግር እና ግብረ መላኪያ መኖር					

ካይዘንን ለመቆጣጠር የሚያገለግል ጋር የተያያዙ

Quality control circle (QCC)

ተ. ቁ.	ዝርዝር ተግባራት	5	4	3	2	1
1	የልማት ቡድን አደረጃጀት መኖር					
2	ተቋም አቀፍ ትብብርና ድጋፍ					
3	የካይዘን ቡድን መሪዎች ወይም ሀላፊዎች መኖራቸውን መወጣት					
4	የካይዘን ቡድን አባላት ተሳታፊ መሆን					
5	የተሻለ ተግባር ካላቸው ቡድኖች መቀመጫና መተግበር					
6	ካይዘንን ለማስቀጠል የሚያደርገው ውክትትልና ድጋፍ					
7	ቅድመ ድህረ ካይዘን አተገባበር መረጃ አያያዝ					
8	በልማት ቡድኖች መካከል የትብብር ፤ የግንኙነት እና የቅንጅት ስራ መኖር					

ክፍል 3:

እባክዎትን ከዚህ በታች ከተዘረዘሩት አጠቃላይ ጉዳዮች ለካይዘን ትግበራ ይበልጥ እንቅፋት የሆኑትን በመጠን ያመልክቱ፡ ለእያንዳንዱ ጥያቄ ከአመራጮቹ አንድ ጊዜ ብቻ (x) ምልክት በመድረግ ምላሽ ይስጡ፡

5 =በጣም እስማማለሁ 4= እስማማለሁ 3=ለመውሰን እቸገራለሁ 2=አልስማማም 1=በጣም አልስማማም

ተ.ቁ	ዝርዝር ተግባራት	5	4	3	2	1
1	አመራሮች ካይዘንን አንዱ የለውጥ አካል አድረጎ የመውሰድ ችግር					
2	አመራሮች ካይዘንን በቀጣይነት የሚያስቀጥል ስረዓት፣ አሰራር እና አደረጃጀት መፍጠር አለመቻላቸው					
3	አመራሮች ካይዘንን ከማስተግበር ይልቅ በበአስተዳደራዊ ጉዳይ ማጠመድ					
4	ሰራተኞች ስለካይዘን ያላቸው አማካኝነት አሉታዊ አማካኝነት					
5	ለውጥ ለመቀበል ዝግጁ የሆነ ሰራተኛ አለመኖር					
6	ሰራተኞች ካይዘንን አንዱ የስራ ባህል አድረጎ የመውሰድ ችግር					
7	እንደ ሌሎች የስራ ማከኮች ለካይዘን ትምህርት እና ስልጠና ትኩረት አለመካተት					
8	ሰራተኞች የለውጥ አካል እንዲሆኑ አቅማቸውን በተከታታይነት ሊገነባ የሚያስችል የስልጠና ሂደት አለመፈጸም					
9	የካይዘን አሰልጣኞችን የማንባት፤ የወጪ እና የሀገር ወስጥ የልምድ ተጠቅሞ ማግኘት አለመቻል					
10	በልማት ቡድኖች መካከል የትብብር ፣ የግንኙነት እና የቅንጀት ስራ አለመኖር					

ማንኛውም በካይዘን ልምድ ላይ ተጨማሪ አስተያየት ካለዎት እባክዎ በአዲስ ገፅ ላይ አስተያየትዎን ያስፍሩ።

ስለተሳትፍዎ እና ማከገፍ ለን።

APPENDIX III: Interview Questions Key operational Officials

This interview schedule will collect data on factors affecting kaizen Implementation on Addis Tire Share Company in Addis Ababa. Please respond to questions and statement honestly. Your identity will be treated with confidentiality. Don't indicate your name.

SECTION I: Background information

1. What problems did you face while running kaizen implementation in relation to?
 - a. Top management commitment
 - b. Quality control circle
 - c. Education and kaizen Training
 - d. Employee's participation and motivation?
2. What factors more contributed the implementation of kaizen in relation to
 - a. Top management commitment
 - b. Quality control circle
 - c. Education and kaizen Training
 - d. Employee's participation and motivation?
- 3) How do you judge the Knowledge of the employees regarding Kaizen philosophy/strategy?
- 4) What about your employees' attitude (commitment) towards implementing the strategy?
- 5) What possible course of action do you recommend as way forward to address the factors affecting implementation of Kai-Zen in your department?