

An Integrative Review on Factors Affecting Kaizen Implementation in Private and Government Owned Organizations in Ethiopia: Gaps on Existing Literatures and Insights for Future Researchers

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Abstract: *The aim of this research is to present and explore gaps regarding factors affecting Kaizen implementation in private and government owned organizations in Ethiopia. Qualitative with descriptive analytical synthetic approach was designed to study. Integrative review is used to summarize the previous empirical and theoretical literatures. This study used cross organizational analysis to address the topics among different contexts. By using various search methods 34 researches were found and 9 of them were discarded from the study because they were out of study contexts. This study delimited to 26 researches from which 9 researches were conducted in private owned, 13 researches targeted on government owned and the remaining 4 researches targeted private and government owned organizations. Seven themes were approached to the study and nowadays researchers who studied factors that affect kaizen implementation in Ethiopia focused on the issues of top management commitment, management support reward and recognitions, coordination, cooperation, motivation, effective leadership, communication, integration, team work, knowledge, skill education, training, culture, attitude towards kaizen, follow up, supervision and monitoring, preparation, planning, material resources and infrastructure. Practical knowledge gap, population gap, methodology gap and knowledge gaps were identified and future researchers are suggested to carry out researches by filling these gaps and focusing on an explored issue such as, working habit performance appraisal, organization structure (organic vs mechanistic), health and safety and organization life cycle through incorporating public sectors.*

Keywords: Standardization, Waste elimination, 5S, integrative review, analytic synthetic, Ethiopian public sectors

1. Introduction

This work starts from the fact that every organization needs change in order to provide the required products and services for the users. Change is advocated in various management literatures, but the type of change needed for an organization is a debatable issue. Revolutionary changes required to invest high capital, greater skills and greater speed, pre-assume that all old working methods have to be changed. On the other hand evolutionary change is incremental and requires little capital. The best example for revolutionary change is Business process re-engineering whereas Kaizen is an ideal example for evolutionary change management tool for organizations.

The aim of this paper is to present factors affecting kaizen implementation in Ethiopian private and government institutions and exploring gaps on existing literature and provide insights for future research directions. It is known that the study findings regarding factors affecting kaizen implementation vary, to perceive qualitatively these differences are also parts of the study. What challenges organizations are facing in kaizen implementation? So this work approaches in wide sense the question of kaizen in contemporary organizations.

2. Theoretical references of the study

According to (Thessaloniki, 2006), Kaizen means improvement, continuous improvement involving everyone in the organization from top management, to managers then to supervisors, and to workers. Similarly (Desalegn & Zerihun, 2016; Saleem, 2015), indicate that Kaizen implementation is focused on improving productivity, quality, cost reduction, quick delivery, establishing safety and raising workers moral. Thessaloniki,(2006), postulated that Kaizen is not only an approach to manufacturing competitiveness but also everybody's business, because its premise is based on the concept that every person has an interest in improvement and with Kaizen, the job of improvement is never finished and the status quo is always challenged. According to (Bayou & Korvin, 2008), whether it is service, merchandising or manufacturing, small or large, private or government organization; kaizen is applicable in any organization, since the goal of organization is to create value to end customer.

As mentioned by (Thessaloniki, 2006), the three pillars of kaizen are housekeeping, waste elimination and standardization. The aim of Kaizen 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). Workplace organization (5s) is considered one of the basic pillars of Kaizen to maximize efficiency in the workplace, higher quality, lower costs, reliable deliveries (Rakesh & Vikas, 2012). Housekeeping was developed by Hiroyuki Hirano, and is called 5S because the initials of the Japanese words Seiri, Seiton, Seiso, Shitsuke Seiketsu meaning classification, order, cleanliness, standardization and discipline (Santamaria & Kalkowska, 2013). Immonen,(2016), Visco,(2016), Pate & Thakkar, (2014), postulates the benefits of implementing workplace organization

(5s). Specifically, the benefits of seiri are, process improvement by costs reduction, stock decreasing, and better usage of the working area and prevention of losing tools. The benefits of seiton, are process improvement (increasing of effectiveness and efficiency), shortening of the time of seeking necessary things and safety improvement. The benefits of seiso are, increasing of machines' efficiency, maintenance the cleanness of devices, efficiency, keep the clean workplace, easy to check, quick informing about damages (potential sources of damages) and improvement of the work environment, elimination of the accident reasons. Benefits of seiketsu are, safety increasing and working out the procedures defining the course of processes. The benefits of shitsuke are, increasing of the awareness and morale of employees, decreasing of mistakes quantity resulting, improvement of the internal communication processes and improvement of the inter-human relations.

The second pillar of kaizen is to eliminate wastes. According to (Wisner, Tan, & Leong, 2012), the objective of kaizen is to eliminate all forms of waste in the production process. The desired outcome of waste elimination is value enhancement. Firms can thus reduce costs and add value to their products and services by eliminating waste from their productive systems. Any activities or processes which the customer is not willing to pay for is a waste inherent in production processes and must be identified and eliminated (Okpala, 2014). According to (Alemayehu, 2014), waste in economics refers to the overall poor performance of a plant from different perspectives such as underutilization of resources, improper assignment of resource to the wrong position, process inefficiency, and ineffectiveness of transforming the right input to the right output. A systematic attack on waste is also a systematic attack on the factors underlying poor quality and probably fundamental management problems. According to (Wisner, Tan, & Leong, 2012), The Japanese term for waste is "Muda" Forms of waste include 7 deadly wastes caused by overproduction, waiting, transportation, unnecessary stock, over processing, motion, and a defective part.

Standards are the third pillars of kaizen. Standards are set by management, but they must be able to change when the environment changes. Companies can achieve dramatic improvement as reviewing the standards periodically, collecting and analyzing data on defects, and encouraging teams to conduct problem-solving activities. Once the standards are in place and are being followed then if there are deviations, the workers know Standards can be explained and presented by the PDCA cycle (plan-do-check-act), known as Demming cycle (Thessaloniki, 2006).

Organizational literature shows that the experience of public and private organizations that have implemented Kaizen has not always been positive. Failure is frequently identified as the implementation issue, rather than failure of the concept and many researchers prove it. There are numerous Factors affecting Kaizen Implementation. Foreign Researchers like, Pankaj,(2017),(Saleem, 2015) , Soltero, 2004), Jørgensen & Laugen, (2006) , Farris, VanAken, & Worley,(2008), Marin-Garcia, delVal, & Martín, (2008),Watanabe (2011), Rakesh & Vikas,(2012) and García, Alvarado, & Rivera,(2013), disclosed that there are many factors that affect kaizen implementation, some of these are organization structure, top management commitment, organizational kaizen culture, personal initiatives, and reward & recognitions.

According to (Yosef, 2011), generally developing countries have problems of service delivery due to the inefficiencies of their management systems. Specifically Ethiopia's Manufacturing industries have problems that arise from poor management commitment, poor quality, most enterprises don't have their own business culture to support total employees involvement in quality improvement and misconception about kaizen (Daniel & Fasika, 2003). Furthermore a recent research conducted by (Tekeba, 2018), stated that Ethiopia's Manufacturing industries have problems unskilled labor forces with limited experience; limited infrastructure and external pressure from global market.

2.1. Kaizen historical overview

The concept of kaizen is rooted to japan. In 1980's management techniques focusing on employee involvement, and empowerment through teamwork approach and interactive communications and on improving job design were not new, but Japanese companies seemed to implement such techniques much more effectively than others .The business lesson of the 1980's was that Japanese firms, in their quest for global competitiveness, demonstrated a greater commitment to the philosophy of continuous improvement than Western companies did. For such a philosophy the Japanese used the term Kaizen (Thessaloniki, 2006). One person or company did not create Kaizen, but rather multiple experts collaborated and created tools that would eventually evolve to what we know as Kaizen. William Edwards Deming (October 14, 1900 – December 20, 1993), an American management consultant and statistician, built upon Walter Andrew Shewhart concepts of statistical process controls to develop management concepts with cycles and the idea of improvement. Following World War II, Deming was sent to Japan to study agricultural production problems and other issues in the nation damaged by the war.

Kaizen as a change management tool was introduced in Ethiopia in 2009 with JICA in response to the request from the government of Ethiopia to Japan government as part of the development cooperation the two countries have had for many years. The government of Ethiopia was keen to implement the Kaizen philosophy to enhance the national development strategy to foster economic growth through improving productivity and efficiency. The Government of Japan through JICA agreed to offer assistance in transferring the Kaizen technology and the Kaizen project was designed with the close support from JICA (Abebe, 2019).

3. Research Methodology

This research is qualitative with descriptive analytical synthetic approach. Integrative review is used to summarize the previous empirical and theoretical literatures. This study used cross organizational analysis to address the topics among different contexts. Regarding the knowledge filed area kaizen covers a wide range of areas since it is studied in production management, supply chain management, business management and logistics. This study is delimited to factors affecting Kaizen implementation in private and government owned organizations in Ethiopia. All researches irrespective of the type of organization and type of research which available in the internet were searched. Based on using various search means 34 researches were found and 9 of them were discarded from the study because they were out of contexts. This study delimited to 26 researches from which 9 researches were conducted in private owned, 13 researches targeted on government owned and the remaining 4 researches targeted private and government owned organizations.

4. Results and Discussions: The Integrative Review

After search process finalized, factors affecting kaizen implementation in private and government owned organizations Ethiopia were summarized through grouping such as authors, researches focus, type of organization, type of data sources used, paper title and synthesis, main factors affecting kaizen implementation.

By reading papers displayed in Table 1, it was found that nowadays researchers in Ethiopia focused on the issues of top management commitment, management support reward and recognitions, coordination, cooperation, motivation, effective leadership, communication, integration, team work, knowledge, skill education, training, culture, attitude towards kaizen, follow up, supervision and monitoring, preparation, planning, material resources and infrastructure. The concerns of researches were grouped in to seven themes and the occurrence of these themes is presented in figure 1.

Table 1: Targeted Researches Detail

Authors	Focused on	Type of organization	Type of data sources	Paper title	Synthesis, main factors affecting kaizen implementation.
Esubalew (2016)	Standardization waste elimination	Manufacturing!	Questionnaire	Determinants of effective kaizen implementation : The case of Kadisco paints and adhesive share ompany	<i>Top management and perception towards kaizen implementation</i>
Yabibal & Tibletie (2020)	Housekeeping waste elimination	TVET college(service)	Questionnaire	Factors affecting the successful implementation of kaizen in Ethiopia	Top management and commitment support, education level, teamwork, and organization culture
Assefa, (2012)	TPM, just in time	Manufacturing	<i>Questionnaire, interview, focus group discussion and direct observations are used.</i>	Factors and challenges affecting implementation of continuous-improvement (kaizen) tools in garment factories	Employees' motivation ,Top management commitment and employee participation
Gelila, (2017)	Standardization waste elimination	Manufacturing	Likert scale questionnaire and interview	Assessment of kaizen implementation and challenges toward sustainability	Management commitment, training system, rewards and recognition
Abebe, (2019)	5s, Standardization waste elimination	Manufacturing	Literature review and secondary data analysis	Kaizen practice in Ethiopia: Challenges and Opportunities	Culture and motivation
Haftu et al , (2017)	waste elimination	Manufacturing	Questionnaires'	Critical success factors model developing for sustainable Kaizen implementation in manufacturing industry in Ethiopia	Preparation (training& education), recognition &reward, employee's attitude, effective leadership
Suleyeman, (2017)	Standardization	TVET college(service)	Structured interviews, and Likert scale questionnaire	Factors affecting the sustainability of kaizen implementation in Wolkite poly-technique college	Top management commitment, reward and recognition, Knowledge, material resources.
Zerihun&	Standardization	Manufacturing	questionnaire, interview	Challenges and prospects of	<i>Top management's</i>

Desalegn, (2016)	waste elimination		and focus group discussion	implementing change management tools: Kaizen (The case of Wonji and Kadisco chemical industries)	<i>commitment, kaizen-training, and communication.</i>
Azeb, (2014)	5s	Manufacturing	Questionnaire	Factors that affect the applicability of kaizen philosophy: in o leather and London shoes maker plc.	<i>Employee commitment, cooperation, management skills conducive working environment(lay out)</i>
Tadesse, (2020)	Waste elimination	Service (university)	Questionnaire(Likert scale)	Factors affecting kaizen philosophy implementation (with special reference to Assosa University, Ethiopia)	Employees training, management commitment; team work and communication
Asayehgn, Hadush, Alula, & Mengstu,(2014)	5s Standardization waste elimination	Manufacturing	<i>questionnaire, interviews, direct observation</i>	Analysis of kaizen implementation in northern Ethiopia's manufacturing industries	Top management and commitment training
Kinfe, (2018)	5s Standardization waste elimination	SME (manufacturing)	Questionnaire Likert scale	Practice and challenges in the application of Kaizen in Addis Ababa	<i>Knowledge, attitude towards the kaizen</i>
Admasu, (2015)	Standardization	Manufacturing firms targeted review	Past literatures	Kaizen Implementation in Ethiopia: Evidence in literature	<i>management support, training</i>
Eden, (2017)	5s	Manufacturing	Questionnaire and interview	Assessment of kaizen implementation practices and challenges in the case of Tikur Abbay shoe share company	Education and training, communication process, human resources integration, management commitment, employee motivation material resources and infrastructure.
Demsew, (2018)	Standardization (quality circle)	Manufacturing	questionnaire	Factors affecting implementation of continuous improvement (kaizen): the case of Kombolcha textile share company	<i>Training, employee's participation and motivation, top-management, commitment</i>
Geteye, (2018)	5s standardization	Service	<i>Likert scale questionnaire and interview</i>	The Effect of Kaizen Implementation on organizational performance of a service Provider Public Institution ;The Case of Ethiopian management Institute	<i>Attitude towards kaizen and top management commitment and support.</i>
Getu, (2016)	5s waste elimination	Service	Likert scale questionnaire	Assessment on the Implementation of kaizen and its challenges: The case of African union commission	Material, resources, skilled manpower ,attitude towards kaizen
Michael, (2014)	5s	Manufacturing	<i>Questionnaire</i>	Assessment of kaizen implementation process, success stories, challenges and employees' work attitude:The case of Wonji/Shoa Sugar manufacturing factory	Training, knowledge about kaizen, lack of necessary materials, coordination, communication and integration within departments.
Tigist, (2015)	<i>5S, Kamban and Just-in-Time</i>	Manufacturing	<i>questionnaire, interviews& observations</i>	Assessing the effectiveness of kaizen implementation in Wonji Sugar Factory Plc	Work environment and employees' work commitment

Tefsehit, (2017)	<i>standardization</i>	Service	<i>Questionnaire and secondary data</i>	Assessing the implementation of Kaizen project in a public inter-governmental organization(AU)	education and training, Perception about kaizen, communication process, human resources integration, management commitment
Berhanu, (2014)	<i>5s waste elimination 5s standardization</i>	TVET college(service)	<i>Questionnaire(Likert scale) secondary data</i>	Practices and challenges of kaizen implementation at Entoto polytechnic cluster college: the case of woreda three enterprises of Gulele sub-city in Addis Ababa city administration	Training, top management commitment
Sara, (2019)	<i>5swaste elimination</i>	TVET college(service)	<i>Questionnaire(Likert)</i>	Kaizen Implementation and Practice at Nifas Silk TVET College	Attitudes towards kaizen,
Wubshet, (2018)	<i>5s waste elimination, 5s standardization</i>	Manufacturing	Questionnaire and interview and secondary data	Identification of key success factors and kaizen implementation for sustainable development (Case in selected manufacturing industry in Addis Ababa)	Management support, follow-up ,monitoring and supervision
Haftu & Bassa, (2015)	<i>5s Waste elimination standardization</i>	Manufacturing	Questionnaire and secondary data	Critical success factors for sustainable kaizen implementation in manufacturing industry: The case of Peacock shoes manufacturing industry	communication, ,preparation, planning, effective leadership, recognition & reward, employee's attitude
Hailu & Habtamu, (2019)	5s, standardization (PDCA)	Manufacturing	questionnaire includes closed and open ended questions	The achievements and challenges of Kaizen implementation: A case study on Asela Malt factory	commitment of the top management ,cross-functional teams
Asefash, (2014)	5S	TVET(service)	Likert scale questionnaire and interview	Practice, successes and challenges in the application of kaizen in Addis Ababa city government TVET colleges	<i>reward and recognition and training</i>

4.1. Research themes

Researchers have addressed various issues and the study concerns of researches were grouped in to seven themes and the occurrence of these themes is presented in the following figure.

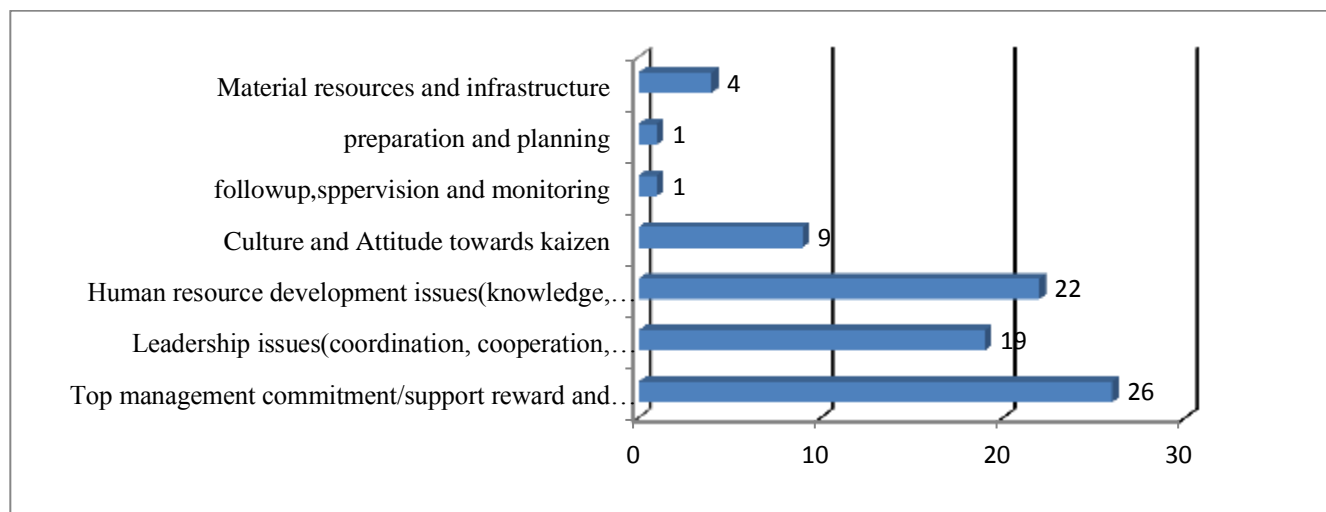


Figure 1: Research themes approached

Nowadays the most common topic of organizations in Ethiopia regarding the determinant factors in kaizen implementation seems under the theme of top management commitment /support, reward and recognitions. Together this theme (top management commitment /support, reward and recognitions) has the highest effect in kaizen implementation, which accounts 26 observations. Researchers like Assefa,(2012), Yabibal & Tibletie,(2020),Hailu & Habtamu,(2019),Gelila,(2017), Abebe(2019), (Haftu, et,al(2017), Suleyeman,(2017), Zerihun & Desalegn,(2016), Tadesse,(2020), Asayehgn, Hadush, Alula, & Mengstu,(2014), Eden,(2017), Demsew,(2018), Geteye,(2018), Getu,(2016), Michael, (2014), (Tigist, 2015), Tefsehit (2017), finds that top management affects kaizen implementation. Admasu (2015), Demsew,(2018), (Yabibal & Tibletie,(2020), concludes that management support affects kaizen implementation. Finally Researchers like Gelila,(2017), Haftu, et,al (2017), Suleyeman(2017), find that reward and recognitions affect kaizen implementation.

The second theme is about human resource development issues (knowledge skill, education, and training) also highly affects kaizen implementation. Researchers like Kinfe,(2018), Suleyeman(2017), Michael, (2014), finds that knowledge of the workers have significant effect on kaizen implementation. The research finding of Eden,(2017), Haftu,etal(2017), Tefsehit,(2017), Yabibal & Tibletie(2020), indicates education status of the workers affects kaizen implementation. From this theme training is the most investigated topic which accounts the highest observation in determining kaizen implementation. Researchers like Gelila,(2017),Haftu et al , (2017),Zerihun& Desalegn, (2016), Azeb, (2014), Tadesse, (2020), Asayehgn, Hadush, Alula, & Mengstu,(2014),Admasu, (2015),Eden, (2017), Demsew, (2018), Getu, (2016), Michael, (2014 and Tefsehit, (2017), finds that training affects kaizen implementation.

The third theme is regarding the issues of leadership. This theme includes many variables such as coordination, cooperation, motivation, effective leadership, communication, integration and team work. The research findings of Michael (2014), concludes that coordination affects kaizen implementation. Azeb(2014), in her research at in o leather and London shoes maker finds cooperation significantly affects kaizen implementation. Assefa, (2012), Abebe,(2019), Eden, (2017), and Demsew,(2018), conclude motivation significantly affects kaizen implementation. Haftu et al, (2017)also discover effective leadership affects kaizen implementation. Eden, (2017), Tadesse, (2020), Zerihun & Desalegn,(2016), Michael(2014) and Tefsehit(2017), finds kaizen implementation is affected by communication. Other researcher Eden, (2017), Michael (2014) and Tefsehit, (2017), finds that integration significantly influences kaizen implementation. Research conducted by Tadesse(2020), at Assosa University finds teamwork affects kaizen implementation.

The fourth theme is about culture and attitude towards kaizen. Researchers like Kinfe(2018), Geteye, (2018), Sara,(2019), and Getu,(2016), find attitude towards kaizen significantly affects kaizen implementation. The fifth theme is about material resources and infrastructure. Researchers like Getu,(2016), and Michael, (2014), conclude that material resource and infrastructure significantly affects kaizen implementation. The sixth them is preparation and planning. Haftu, etal,(2017), postulated preparation and planning has effects on kaizen implementation. The seventh theme is about follow up and monitoring. Wubshet,(2018), finds follow up and monitoring affects kaizen implementation.

Even though researchers conducted their researches by considering the above variables (figure 1), they failed to incorporate variables such as performance appraisal, working habit organization structure (organic vs mechanistic), health and safety and organization life cycle. Gurus of management, industrial engineering and supply chain management firmly believes that kaizen is affected by organization structure (organic vs mechanistic), health and safety and organization life cycle.

According to (Imai, 2012), kaizen goals can be achieved by respecting the environment and the health and safety of the employees. Organizations that implement kaizen maintain health and safety for its team members, so they can concentrate on their jobs delivering the best quality products and more efficient. Kaizen effectively works in flexible (organic) organization system, therefore mechanistic organization structures hinders kaizen implementation (Robbins & Coulter, 2012) and (Wisner, Tan, & Leong, 2012). Robbins & Coulter(2012), in their management book discovered organization structures highly affect this process oriented approach (kaizen), because mechanistic structures are rigged and not allow flexibility that strictly follow formalization. Furthermore they add that organization life cycle also determines organization effectiveness. At entrepreneurial stage, organizations are more concerned with technical activities of production and marketing, therefore less emphasis is given for employees. According to this statement even though kaizen emphasis on employees to improve process and create value for customers, at entrepreneurial stage due to less emphasis is given for employees' kaizen implementation will be affected.

It is obvious many researchers in Ethiopia discover employee training affects kaizen implementation. But none of them studied how performance appraisal affects kaizen implementation. Armstrong,(2014), postulates that performance appraisal helps to improve the quality of job performance and to identify training need. Therefore based on Armstrong(2014),premis we can conclude performance appraisal will have agreeet contribution for kaizen implementation.

Here we can identify apparent knowledge gap in previous researches concerning factors affecting kaizen implementation. The prior researches as mentioned earlier didn't address issues such as performance appraisal, working habit, organization structure (organic vs mechanistic), health and safety and organization life cycle.

4.2. Type of organizations

To analyze the researches, organizations are intentionally divided into service (TVET), manufacturing and other service organizations. Types of organizations and their scores are presented in the following figure.

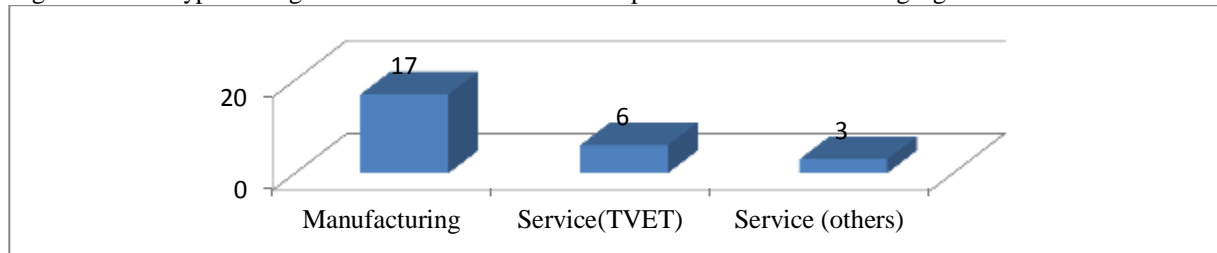


Figure 2: Type of organizations

Here majority of the researches' 17 out of 25(68%), were conducted on manufacturing organizations. Even 5 of twenty five were conducted on Technique and vocational college. According to (MoE, 2008), Technique and vocational colleges have a duty to implement kaizen; therefore it is not surprise about their intention to implement kaizen. Only the remaining 3 researches were conducted on other service institutions. The research findings of Henok, (2017) and Girma,(2016), indicate that public service institutions in Ethiopia are inefficient and create discontents. The research finding of (Girma, 2016), indicates that service providing public institutions in Ethiopia are suffered from problems such as weak institutional and human capacity and lack of qualities of servant leadership. Furthermore, (Henok, 2017), public sectors in Ethiopia are suffered from limited awareness and practical skills among some leaders, managers and team leaders. However no researches are conducted in Ethiopian public service institutions. Here the major gap researchers failed to address is that population gap, because no research is undertaken which targeted the population of public sectors.

4.3. Source of data

Researchers have used various data collection methods which are presented in the following figure.

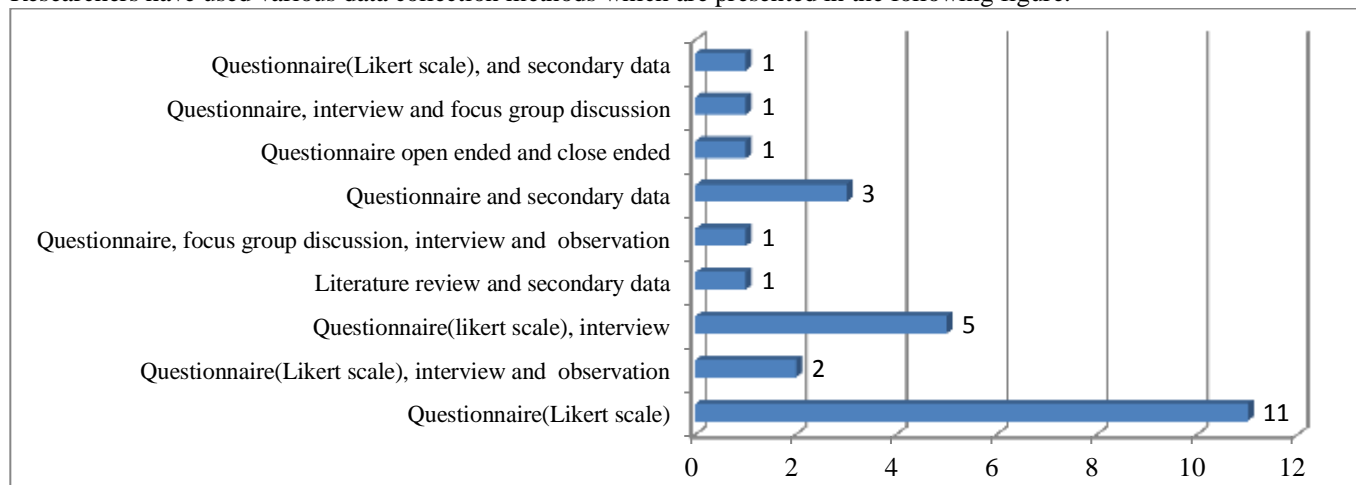


Figure 3: Source of data

As it can be shown from the above figure most researches were conducted by using Likert questionnaire. Using Likert scale has its own problems, because respondent must indicate a degree of disagreement or agreement from the given alternatives. Therefore respondents are not allowed to illustrate their own ideas which affect the research finding. Researchers like, Jonald(2010), James, (2000), and James(2013), conclude that in Likert scale questionnaires respondents avoid choosing the extremes options on the scale and often choose the midpoint of the Likert scale to avoid actually answering the question, which produces skewed results. The other problem is due to the fact that using only one method of data collection has its own problems, because it lacks validity. Therefore most researches neither achieve their objective nor are their studies reproducible.

The other problem associated with the study is that using observation as data source. From the outset scholars argue that observation is not an appropriate data collection technique for social sciences which requires subjective judgment. Walliman, (2006), Bhattacharjee, (2012) and Willis,(2007) argued that observation is best suited for natural science researches. Positivists advocate the use of observation as a data source. Positivism proposes that theory can be derived from research observations. The above scholars conclude observation is an appropriate data collection technique in disciplines such as physics, chemistry, Ethnography and biology.

The second problem regarding observation is, observer may have his own ideas of right and wrong he may possess as preconceptions regarding on activity which affects the objectivity of research (Kothari, 2004). The third problem regarding using observation as data source is difficulty in checking the validity. Many phenomena of an observation cannot be defined with sufficient precision which results in a failure to draw valid generalization (Creswell, 2005). According to (Willis, 2007), all isolated, empirical observation is idle, and even radically uncertain; the observer would not know what he ought to look at in the facts before his eyes. A researcher has his own subjective judgement about which he observes and even sometimes he fail observe phenomena's. For example is it really observable the quarrel between or within work teams? Conflicts or quarrel between or within work teams are not apparently observable, but affect their kaizen implementation.

Finally, Bhattacharjee (2012), and Willis,(2007), indicate the serious problem regarding observation is faulty perception. Let us consider the following examples.

Example1: let us assume an observer focus is the issue of utilized man power. The observer understands the worker is working his work very well therefore he perceives the worker is utilizing his potential but the worker observed by the researcher may be overloaded.

Example 2: the observer may feel that a worker is reducing waste of waiting because there is no queuing of service users but it may be due to the fact that he is over lazy and customers left his service.

Example3: the observer may see a worker who seem a good worker because he is always sitting in his sit and looking for his desktop and make himself busy by searching for things(documents) but it may be due to his faller to sorting documents.

Example 4: the observer may see little inventory which an observer may understand reducing or eliminating un necessary inventory or overproduction but it may be due to lack of inputs or little work.

Example 5: the observer may understand that as if workers are continually improving their process but you may not observe the cost that organization incurs for the celebration of their success.

From the above example we can understand that as if workers seem they are implementing Kaizen but all are against kaizen principle which leads wrong conclusion of research findings.

According to (Imai, 2012) , In order for a problem to be correctly understood and solved, the problem must be recognized and the relevant data gathered and analyzed. Trying to solve a problem without hard data is neither very scientific nor objective approach. Collecting data on the current status helps you to understand where you are now focusing; this serves as a starting point for improvement. You have to collect data regarding delivery, value creation, cost reduction and waste elimination. Secondary data is very important to indicate the improved processes, changes before and after Kaizen implementation, values created and costs reduced.

There is a methodology gap here because most researches are undertaken only by using Likert scale questionnaire as data source. Furthermore nearly 81% of the total researches were carried out by using primary data. It must be noted the usefulness of using varying data collection methods.

4.4. Focuses of Studies

The study focuses of researchers and their respective frequency is presented in the following figure.

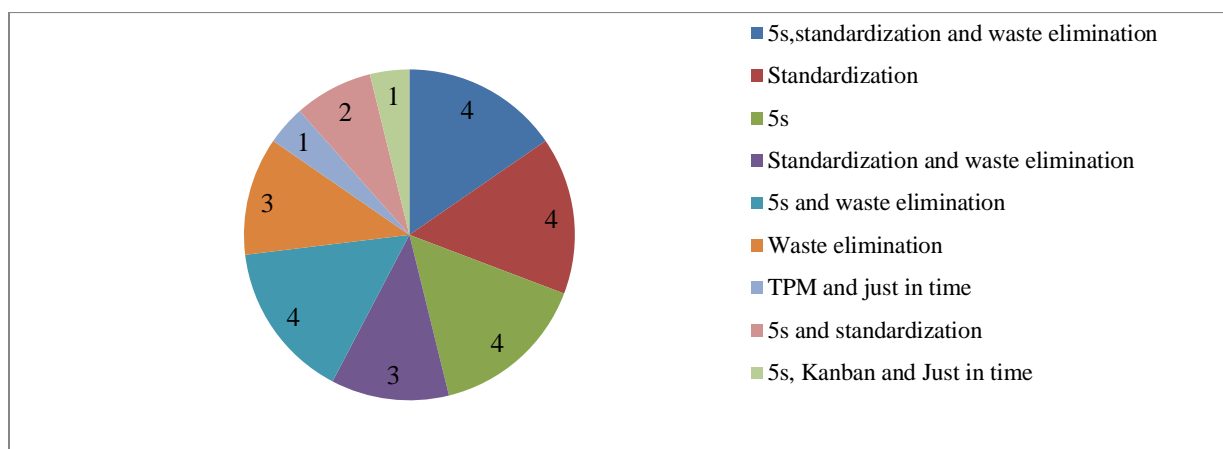


Figure 4: study focus

The ultimate aim of Kaizen is to eliminate waste by using standardization and housekeeping. It is known that kaizen has three pillars: standardization, waste elimination and housekeeping (5s). Even though kaizen has these three pillars it is only four researchers, who undertake study on all these three pillars. Thessaloniki,(2006) and Imai, (2012), stats, waste elimination and good

housekeeping (5S) often go hand in hand. Standards show the relationship between cause and effect. Therefore without standards or not following standards invariably leads to abnormalities, variability, and waste. If organizations need to eliminate waste they need to use housekeeping (5s) and standardization. Separate analysis of kaizen pillars couldn't result in full understanding of kaizen.

Practical knowledge gap appears in the previous literature. There is a lack of rigorous research in the prior literature. Many of the prior researches focused kaizen pillars at an individual and fragmented basis, especially 5s. Nearly 85% of the total researches investigated kaizen pillars separately. Most researches failed to investigate the whole kaizen pillars. It is only few researches (around 15%) are conducted by including all the three Kaizen pillars.

5. Conclusion, and directions for future research suggestions

This study has presented factors affecting Kaizen implementation in private and government owned organizations in Ethiopian. Based on descriptive analytical synthetic approach, seven themes were approached to the study. Nowadays researchers who studied factors that affect kaizen implementation in Ethiopia focused on the issues of top management commitment, management support reward and recognitions, coordination, cooperation, motivation, effective leadership, communication, integration, team work, knowledge, skill education, training, culture, attitude towards kaizen, follow up, supervision and monitoring, preparation, planning, material resources and infrastructure.

Through careful analysis of researches the following problems were identified. First, public sectors, which are nowadays the source of discontent, were ignored. Second most researchers have failed to investigate the whole kaizen pillars together. Third most researchers used questionnaires and observation while ignoring secondary data. This would result in fault research results. Finally important issues which potentially affect kaizen implementation such as performance appraisal, working habit, organization structure (organic vs mechanistic), health and safety and organization life cycle are not studied yet.

After analyzing the targeted research works practical knowledge gap, population gap, methodology gap and knowledge gaps were identified. Therefore future researchers are suggested to carry out researches by filling these gaps and focusing on unexplored issue such as, performance appraisal, working habit, organization structure (organic vs mechanistic), health and safety and organization life cycle by incorporating public sectors.

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