

## **Kaizen Practice in Ethiopia: Challenges and Opportunities**

Article by Abebe Nigatu  
PhD, Management Texila American University  
Email: [abebe.nigatu@gmail.com](mailto:abebe.nigatu@gmail.com)

### **Abstract**

*This article describes the Kaizen practices that have been observed in Ethiopia. Best experiences, learnings and challenges and opportunities will be discussed. It demonstrates the Kaizen approach in Ethiopia context has proven success in companies in terms of improving productivity and efficiency of the business operations. As it is now, there is also a huge opportunity of learning from the implementation of Kaizen in terms of identifying the exiting opportunities to scale up the best practices and improve in some areas where challenges have been encountered. The findings come from literature readings and secondary data analysis on the research conducted and the reports on the Kaizen implementation processes of the piloted companies. The employees and the management understood and applied Kaizen concepts and tools, and significantly improved key processes, for example, The findings of one of the research made on Kaizen in Ethiopia indicated that in one of the piloted projects of a company called Kadisco Chemical Industry in Addis Ababa, Ethiopia, the implementation of the Kaizen culture was found to increase labor productivity by reducing, on average of 50%, time wastage for searching tools; improved a defect ratio which ranged from 50% to 70%; and improved lead time in the range of 16% to 90%.*

**Keywords:** *Kaizen; Ethiopia; Productivity; lead time; Kaizen Culture; Improvement.*

### **Introduction**

Corporations in the developed world have proven that successful Kaizen approaches can deliver increased productivity, maximization of profit, customer satisfaction, and market share. But does Kaizen apply to the developing economy context of Africa. This article shares the case of Kaizen experience of Ethiopia. We begin with a brief introduction to Lean Kaizen Principles.

The principles and approaches of Kaizen have raised interests among researches as it enhances the productivity of companies, produce quality products and services with minimum efforts and resources deployed. Several authors have written on the concept of kaizen for instance Abhijit Chakraborty, et al. (2013), Deniels (1996), Alsmadi, S. (2009), Aoki, K. (2008), Chase, N. (1998), Cheser, R.N. (1998) and Imai M. (1986). In all these and other sources, the concept Kaizen approach is discussed in the perspective of identifying what is of value from the customers perspective and producing quality products and services.

According to Womack and Jones (1996) cited by Andrew Parris (2013), the Lean Kaizen approach contributed to the rise and success of Toyota production system.

Implementation of Kaizen may not result in transformational production system without the lean thinking and principles internalized by the implementers from top to down. Spear and Bowen (1996) mentioned that the success of work in Toyota is due to the principles of lean being understood and implemented well by the management and staff. The fundamental principles identified by the Spear (2004) are:

- One must observe the actual work being done
- Experiment (test) proposed changes
- Experiment as frequently as possible
- Managers should coach, not fix.

Kaizen as discussed by Winy Utari (2011) is vital in making continuous improvement in producing quality product and provision of quality services and it is critical in a stiff competitive business environment and in a context where productivity is very low as in the case of developing countries. There is strong

evidence and background how kaizen helped Japan companies to overcome the productivity and quality challenges when the Japanese companies encountered were challenged by the competition from American and European manufacturers after mid-1940s (Chen, et al., 2000).

In various literatures Kaizen is defined as Japanese ‘Continuous improvement’. Alberto in his working paper titled the role of Kaizen in economic transformation he defined kaizen as “Kaizen is a Japanese term to mean ‘improvement’ and refers to a process of innovation in firms involving the entire work force. It involves customer orientation, quality control, new product development, just in time and automation, cooperative employer – employee relationships and so on.” Alberto E. Lemma (20018).

With the success of Kaizen implementation and as it has become culture of work in Japan. It has become a strategic approach in Japanese government as a package in the assistance it offers to many developing countries like Ethiopia and many other African countries through private and public channels of development assistance. Izumi and other scholars’ emphasis that there are huge untapped potentials of implementing Kaizen in Africa to improve the productivity and inefficiencies challenges African countries suffer from (Izumi Ohno, et al., 2009).

In line with the what we discuss above in terms of the opportunity of getting support from Japanese government through development assistance programs, the introduction of Kaizen in Ethiopia has been started with full assistance of Japanese International Cooperation Agency( JICA) following the request from Ethiopian government for the transfer of Kaizen technology transfer through National Graduate Institute for Policy Studies( GRIPS) by the time when Ethiopia developed the national Growth and Transformation Plan with the desire of improving the managerial capability and capacity to implement the national strategy( GRIPS, 2011).

The introduction of Kaizen outside Japan through the support from JICA and records of Japan’s success in Kaizen implementation has encouraged other developing countries and in countries where Kaizen has been implemented, one of these case is Ethiopia, significant changes have been registered in terms of producing quality products and improving productivity and has become as the key success factors not only for the success of companies but the countries as well in competing in global markets.

The kaizen implementation in some of the Industries in Ethiopia real changes were made and proven significant saving in resources and improve efficiency (Bethlehem, Herald Changing the way Ethiopian Industries work, June 2018). Ethiopia having a lot of challenges in its endeavor in increased export income and in the national strategy of sector shift from agriculture-based economy to industry led economy with the strategy goal of import substitution the productivity and quality improvement are key for the achievement of the goal. Notwithstanding the challenges, there have been records of encouraging results from manufacturing companies which implemented the Kaizen initiative in Ethiopia. Looking forward, therefore, would be scaling up the achievements registered in a few companies focusing on the learnings and areas of improvements in the implementation of Kaizen. This article will come up with a recommendation based on the analysis of the practice of Kaizen in the country considering samples of companies which have been implementing the Kaizen culture of doing business.

## **Work culture challenges in ethiopia**

The Japanese work culture and the thinking is more amiable to high productivity and innovation is a reason for success in Kaizen implementation. According to George the socio-cultural traits of the Japanese influences the work culture in offices and has been good ground for success in Kaizen culture (Georg O. Tasié, 2009).

Culture affects the management styles, decision making processes, the employee responsiveness and perceptions of problems. According to George Japanese have developed their own skills of management, which stem directly from culture and social values and beliefs. The Japanese culture has been influenced by Taoist, Confucian, Asian and Western ideas. Unlike Ethiopians the Japanese are homogenous race, both linguistically and culturally and most importantly in relation to the change management Japanese are highly flexible to embrace change which is key for Kaizen implementation. Ethiopians and Japanese have also

similarities in terms of having high power distance, high uncertainty avoidance and being high collectivist unlike the western Culture.

The question, therefore, is that the work culture in Ethiopia is it amicable to the Kaizen culture how can the Kaizen principles and tools be contextualized without costing the standard of the Kaizen approach. So, the challenge is how should a company in Ethiopia implement the Kaizen principles with contextualization of the approach to the values and norms and at the same time transforming the culture to favorable work environment to Kaizen philosophy.

As Andrew Parris (2013) indicated in his research “Improving Process for Good in East Africa” Work Culture in Africa in general and Ethiopia in particular, timeliness is not a priority. Andrew clearly said in his article that meetings and social events start late. And lateness is acceptable and even expected. Andrew also cited Mandela saying “South African have no concept of time and this is also why we cannot solve poverty and social problems (Mandela, 2003).

In his research Andrew identified more cultural challenges that the researcher, being an Ethiopian, believes the identified issues are truer to Ethiopian Context than other African countries. The cultural issues identified are

- High level of corruption which required extra reviews and approvals burden processes.
- People don't follow written instructions
- Poor quality is the norm
- It's not a problem until it's a problem
- Life is unpredictable
- Workers are not expected to innovate

The findings of the research by Andrew informs that the Kaizen implementation in Ethiopia will have challenges related to culture change. To make decisions faster and to remove the none value adding processes steps, it clearly requires culture change; the way how people do their work and the mindset shift from 'it is okay' to 'we need to change' thinking. Other researches like Eden M. (2017) and Tigist, H. (2015) in their thesis for their Master's degree also confirmed the same culture related issues are bottlenecks of the Kaizen implementation in companies which piloted the implementation. Many researches affirm that culture change is critical factor in successful implementation of Kaizen when transferred to other cultures. Anh et al (2011) emphasized the fact that the success of Kaizen culture transfer is highly dependent on the culture context of a given country where Kaizen is implemented.

### **Kaizen implementation practice in ethiopia and results achieved**

Kaizen as a 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. As indicated in GRIPS report (2011) cited by Admasu (2015), 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 (GRIPS, 2011).

According to Shimada, the director of Research Program Division of JICA Research Institute, the project was designed jointly by JICA and Ministry of Industry (Ethiopia) with a project life from October 2009 to 2011. The sector focused for the piloting phase was manufacturing sector of 28 companies selected. The project was designed with three objectives:

- Polite project performance to scale it up to national level
- Human Resources Development aiming to transfer Kaizen skills to staff of ministry of industry (Ethiopia)
- National Plan Formulation- to disseminate the Kaizen activates across the manufacturing companies in Ethiopia.

As can be seen in the diagram below Ethiopian is one of African countries which are implementing Kaizen in Africa since 2009.



**Source:** JICA research program division

As reports from JICA Research Institute presented by the director to audience gathered for a workshop on Kaizen summarizes the results achieved from the piloted projects.

### Qualitative results achieved:

- Clean working environment created,
- Team work and motivation of workers developed,
- Health and occupational safety of workers improved,
- Lower level workers accustomed to suggesting improvement
- ideas to management decisions – Increased Employee Participation,
- Knowledge obtained on how to meet quick delivery and to reduce costs.

### Quantitative results

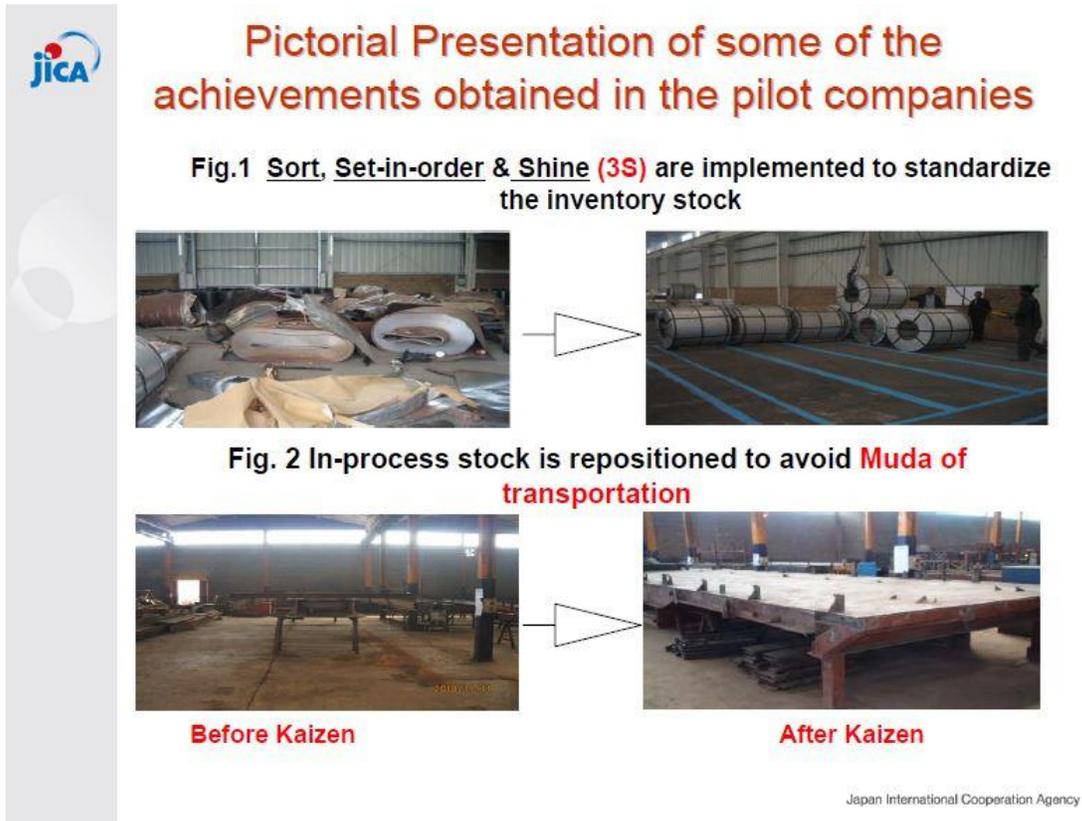
- Monetary impact from the improvements reported is ETB 500,000/company.
- The reporting ranges from ETB 10,000 to ETB 3.2 mill.
- By Reducing costs (a) ETB 10,000 per month and (b) ETB 78, 000 per annum;
- By generating additional income of ETB 1.2 million per year;
- By just decreasing down time ETB 204, 000 per day,
- By rectifying raw materials defect used for manufacturing ETB 2.4mill;
- By identifying, repairing and reusing of usable machines & equipment worth of ETB 3.25 mill.

### 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%.

Note: Note: USD1 = approximately ETB 17.1 as of Aug. 2011



Source: JICA research department

After the project completion it was found that out of 28 companies piloted 10 (more than one-third) were graded with excellent achievements which can be considered as success to have Kaizen Model companies. This result encouraged the government of Ethiopia and JICA to scale up the Kaizen implementation in other companies as well. After the piloting phase, several companies implemented the kaizen philosophy across the country mainly in manufacturing factories.

### **Analysis of researches/ studies made on companies which implemented kaizen culture**

This analysis was made on researches available on the practice of Kaizen implementing companies in Ethiopia. Three studies were consulted for the analysis.

The study made by Tigist Hailegiorgis for fulfillment of her Master's Degree "Assessing of the Effectiveness of Kaizen Implementation in Wonji sugar Factory".

This study was made in one of the oldest sugar factories in Ethiopia. The finding was stated as

*"The Kaizen implementation was recorded as success in terms of minimization of waste and, as a result production cost reduction, increasing efficiency, creation of good relationship between employees and management, increasing employees' attitude towards teamwork, facilitation of the factory's conducive working environment and improving work commitment. "(Tigist, 2015)*

Woni Sugar factory being one of the oldest factories in terms of time of establishment, it is encouraging that Kaizen tools applied in the processes of the factory resulted in increased efficiency. From the result of the study one can see that Kaizen philosophy is getting into the thinking of the employees and the management. The Kaizen tools changes the work culture but not easy as indicated by Tigist in her study

indicated that sustaining the changes achieved is critical. Sustainability can be ensured only when the mindsets and the culture change embrace continuous improvement. Kaizen philosophy is all about continuous improvement and implementers should not be contented with the results achieved in a given period of time. It should be continuous and better in the future. Tigist suggests that to sustain the change the factory should apply different motivation scheme to employees so as to enhance engagement of employees for more change and better. Tigist's recommendation is in agreement with the opinion of another researcher Asayehgn Desta.

“Implementation of kaizen in manufacturing companies needs to be fully committed to boosting the morale of their workers to develop members' capabilities, to achieve self-actualization, and to work cooperatively, these commitments are vital to the process for improving the quality of the training output.” Asayehgn Desta (2011)

The study made by Eden Mekonnen for her Master's Thesis with the topic “Assessment of Kaizen Implementation Practices and Challenges in the case of Tikur Abbay Shoe Share Company “(Eden M., 2017) shows the results of the Kaizen implementation in this shoe manufacturing company has not shown much successes. The challenge indicated by Eden is that the management and employees seem to lack clarity on the engagement level of employees in the change process (Eden m., 2017). This study raises some concern as the study was very recent and the results contradict the good achievements during the piloting phase seven years back. It is important that further research is made on the status of Kaizen implementation in Ethiopia in terms of how sustained the results have been in several other companies after significant period of time for the Kaizen philosophy expected to be rolled out across the country and integrated well in the traditions and culture of Ethiopian companies. Some findings like these ones, after seven years, create curiosity to scholars and invite research on the practice of the Kaizen tools.

Eden has also mentioned in her study that conceptual misunderstanding between middle level managers and front-line employees on Kaizen was observed. The employees are not buying in the new culture of Kaizen either due to lack of proper communication or training.

Eden explains her observation obtained through interview of employees and the Kaizen officer as:

“there are still conceptual gaps on the knowledge of continuous improvement and have the impression of the traditional hierarchical work trends and these trends are still challenges for change. The situation could also have implications on quality of products and services and it has also depressing effect on the generating and sustaining improvements.”

When there exists a gap in understanding of the Kaizen philosophy and the tools the impact expected of Kaizen on quality production of products and services will be adversely affected and may even cause negative impact on the sustainability of the Kaizen continuous improvement approach. This study, therefore, indicates that Kaizen implementation has not been success in a few of the companies which have undergone implementation.

The success depends on planning for rolling out of the tools and the commitment of leadership to engage all employees from top to bottom. In countries where organizational culture is more hierarchal and more of rigidity in managerial practice, kaizen implementation needs more effort culture change before launching of any project. As Kaizen is a continuous process improvement philosophy, the transferability of the kaizen culture is dependent on the level of engagement of employees and the decision-making process. The managerial decisions should be employee driven and the synergy between the kaizen culture and the organizational culture is key for the success of effective and sustainable transfer of Kaizen technology.

A study conducted by Nesra Seid ( 2012) in one of a chemical industry called Kadisco indicated that the productivity of a company was significantly improved as a result of improvements made on time wastage which is registered to be reduced by average of 50% and defected ratio improvement on average from 50% to 70% and lead time on average from 16% to 90% which proves that the kaizen culture has brought changes which can be scaled up in other manufacturing. Asayhegn desta et.al (2014) also conducted a study on three companies (Mesfin Industrial Engineering PLC, Almeda Textile Factory PLC., and Sheba Leather and Tanning Industry PLC), among selected for piloted project during phase I of the Kaizen implementation

he indicated in his finding that the transferability of the culture was challenged by the existing organizational culture that the results were not successful. From this study and others, we can see that Kaizen Culture success depends largely on the change in the culture. As some studies indicate a certain level of improvements in productivity and efficiency can be achieved but the sustainability depends critically alignment of the organizational culture to the Kaizen culture. When there is lack of synergy between the Kaizen culture and the existing culture of an organization, sustainability can be guaranteed. Most organizations which failed in Kaizen implementation simply due to the lack of cultural transformation. In Ethiopia it has been about 10 years since Kaizen was introduced. It is, therefore, attractive for scholars to do research to know if Kaizen has been successful or to identify challenge and opportunities in Kaizen implementation in Ethiopia.

### **Unique challenges to kaizen implementation in ethiopia**

Due to continuing economic, environmental, cultural, and political difficulties, life in Ethiopia continues to be difficult and somewhat unpredictable. Despite all the political and global economic challenges Ethiopia has registered a double-digit economy growth for the last ten years. Recently a political reform has been taking place which introduced economic reforms through opening up the market and more privatization.

Despite the government effort to change the economic structure one of the challenges for Ethiopia has been competitiveness in the global market. According to Getinet and Admit Ethiopian experience in industrialization and competitiveness was found to be poor (Getinet and Admit, 2005). Competitiveness is key in sustaining the development efforts in the globalized world. Competitiveness is a must to face it and can only overcome challenges and grasp the opportunities provided by globalization when only when an economy is competitive in the world market. This is more appealing to the countries like Ethiopia which aspire to have export led economy.

For a growing economy like Ethiopia low productivity has always been an impasse to be competitive in the global market. The extent of productivity improvement counts more to competitiveness than other production factors. Most of growing manufacturing factories both private and public in Ethiopia suffer from the inefficiency of production mainly due to poor processes. To improve efficiency and productivity, therefore, Kaizen tools would be appropriate to the Ethiopian manufacturing and services sectors. Several cases studies conducted in the companies which implemented Kaizen show that productivity and efficiency is significantly being improved.

The critical challenge for manufacturing sectors in Ethiopia and like most other developing economies is the lack of managerial methodologies like Kaizen (Izumi Ohno, et al.,2009). It is true that lack of capital and technological capabilities are major problems in the manufacturing and service sectors, the most feasible and that can be easy and quick to be improved with a little investment and resources is changing the managerial capacity with Kaizen tools Kaizen (Admasu A., 2015). This is why Kaizen becomes an appropriate tool for developing economies.

Andrew Parris discussed in his study on the challenges of process improvement in East Africa that with low level of economy , the scarcity of capital and resources to cover budget required for investment in innovation and technological improvement becomes a challenge to a country and may lead to fragility, outdated, inefficient and ineffective infrastructure, equipment/tools and processes( Andrew P.,2013).

In a context where capital scarcity is high, when processes are not efficient and effective and when productivity is low, the need for Kaizen culture becomes more evidently appealing. The drive for continuous improvement with a kaizen methodology is due to the low investment the Kaizen tools requires. Kaizen does not take huge investment and expertise. It only takes available resources, commitment, engagement and mindset to change the way business is done, i.e. culture change.

The culture aspect also is major challenge in the implementation of Kaizen. The cultural factors have led to inflexible, bureaucratic process with too many hand- offs, reviews, and approvals have been challenges

to Kaizen implementation. When the processes are not well integrated as a result of the culture result in poor quality products and services and long lead time in process.

In addition to these unique challenges, we note some trends affecting developing countries. Some of the challenges below were discussed by Andrew Parris in his research on what international NGOs are facing in their work in his article on “Improving Processes for good in East Africa” (Andrew P.,2003). The researcher believes and is convinced that some of the issues discussed in this article are also true for business companies operating in Ethiopia. Some of the issues are found to be more relevant to Ethiopian context and borrowed from the findings of Andrew.

The contexts in which companies particularly the manufacturing companies work are getting increasingly dynamic and complex. To respond to this dynamics processes and decision-making approaches need to be improved to respond effectively to sustain the business both in local and global markets in increasingly competitive market environment.

International development partners are demanding greater impact, transparency, and accountability in the development endeavors with efficiency given a priority demand. Competition to expand market share demands responsiveness, high quality and customer values in all aspects of the business dimensions.

Global market is being affected by the policies that a few developed countries are making. For instance, the tariff/taxes and protection police introduced by US and China currently is big challenge for developing economies. On top of the challenges the poor countries already have, the new trend of global business competition is creating difficult situation. Developing nations have been striving to make long-term investments in micro and macro projects to get out of poverty and the opportunities to get loans and technology transfer through foreign direct investment is facing new era of challenge. More than ever, countries must find new, innovate ways to use available resources in most efficient and effective way. Kaizen can be the best-chosen tool to do business in innovative ways.

Technological and communications advances are significantly disrupting legacy approaches to many companies in terms of organizational effectiveness these advances require rapid and agile adaptation and innovation of companies and their employees.

Developing nations like Ethiopia are generally urbanizing faster and growing faster economically than developed nations. This requires companies s to change where and how they work, and how they provide value to the people they serve. This is why Kaizen is highly recommended to be practiced in Ethiopia.

These trends oblige companies to more quickly experiment, learn from experience, adopt new ways of doing things, and adapt themselves to their changing contexts (Andrew P., pp 2013). This justifies why Kaizen needs to be promoted in Ethiopia. Ethiopian Companies, we believe, have to quickly learn and adapt changes happening in the business environment. Researches indicate that those companies in Ethiopia which implemented Kaizen have significantly managed the changing business environment.

### **Why lean kaizen is vital for ethiopia**

The business environment globally is becoming more competitive and challenging in general and for developing economies in particular. Several studies on development of Ethiopia show that low productivity and poor quality both in production and service is the bottleneck for the economy. Birhanu Beshah (2013) in his presentation on “The need for Quality and Productivity Improvement “cited Daniel Kitaw and et al indicated that the competitiveness of the manufacturing industries is low and the quality management awareness is low.

According to the studies Brihanu mentioned in his presentation the quality problems are observed in several sectors in Ethiopia economy. In education, health, public services and construction industries quality has been recorded at low. The quality thinking is not reflected in the work culture and poor-quality product and services continues to constrain the economic development.

Ethiopian companies have been struggling to survive in the global market mainly due to quality factor in the competition world. When competition increases, developing economy is prone to failure. The need for continuous process improvement becomes essential for such economies. Increasing competition in global

economy necessities Kaizen philosophy, continuous improvement, to be implemented in developing economies like Ethiopia. Quality of products and services improvement is required by the competition in the industrial world (Winy Utari, 2011).

There is huge opportunity to effectively transfer Kaizen technology to Ethiopia due to long lived economic assistance from Japan government which makes implementation of Kaizen feasible as the assistance for kaizen through private channels such as intra-company technology transfer and support for local suppliers, as well as through public channels such as official development assistance and guidance provided by various public organizations has well established infrastructure in Ethiopia because of the political will from both governments to strengthen economic cooperation.

## **Conclusions and recommendations for kaizen approach in ethiopian context**

### **Conclusion**

The Kaizen project in Ethiopia started with three phases. The first phase was started in August, 2009, which was aimed to review the 'As Is' of about 63 companies in terms of the quality and productivity of their performance. Based on the preliminary assessment result, out of the 63 companies 30 companies were selected on the basis of their proximity to the capital city, their contribution to export revenue, portfolio of the company in terms of the level of capital and the employee size. In October 2009-2010, the first phase of the project was completed and from out of the selected 30 companies, only about 8 companies were finally chosen by Ethiopia's Kaizen Institute as Kaizen model companies (Ethiopian Ministry of Trade, 2011). The purpose of choosing the models is for scaling up the Kaizen culture to all the companies through the coordination and support of the Kaizen institute of Ethiopia.

According to the finding in this study and several other studies conducted in companies which implemented Kaizen indicate that the success of kaizen culture transferability and implementation of the kaizen practices in Ethiopia depend on the degree of compatibility between the Japanese company's kaizen culture and national culture. The culture change has been most challenging in all the organizations kaizen was implemented.

The main challenge observed during the implementation is:

- Adaptability to the change which is primarily the culture incompatibility of the host country and the Kaizen philosophy because of lack of synergy between the requirements of kaizen and the work ethics of local company workers.
- In some cases where Kaizen was implemented when the trainers or the implementation leads are insensitive to the context and organizational cultures of manufacturing companies it was observed that dysfunction of the kaizen management techniques occurs.
- Assumption of uniformity in work ethics and culture creates confusion among the employees and management. At times it becomes a demotivating and affects sustainability

The implementation of the Kaizen method in Ethiopia seems to be enforced as 'a must to do it' by the government and lacks self-motivation and ownership of the employees which affects the full engagement of the company employees.

Given that kaizen has also resulted in significant changes in cost reduction, and work flow and delivery time improvement companies should focus on the sustainability of the changes through engagement of employees that fosters bottom-up decision-making and an employee-driven management style that promotes team work and quality sensitization among employees. The company must have a strategy to positively influence the organizational culture to create engagement, ownership and clarity of why Kaizen is important for the organization. It is important that employees should not perceive Kaizen implementation is a change management tool forced by government. Such perception may be created due to the misunderstanding or miscommunication of the roles of Kaizen institute, a government organization.

As Kaizen has been introduced in Ethiopia for quite long time, it is now time for researchers to assess the achievements and challenges of Kaizen implementation in Ethiopia. The role played by the Ethiopian Kaizen institute and its capability in supporting organizations to transfer the technology need further

research. The support given by the JICA from the time of the implementation to date needs also deep review to understand and identify the critical variables needed for the transferability of the Japanese kaizen management techniques to Ethiopian context.

## **Recommendation**

Ethiopian's experience clearly demonstrates that introducing Kaizen culture to Ethiopian manufacturing and service sectors to improve work culture bears real fruit and shows promise for bringing about the improvement in productivity, product and service quality. We recommend the following for Ethiopian companies as they implement Kaizen methods;

Educate, engage, and get buy-in and sustained attention from all employees and leadership. Improve processes and achieve results that employees can be happy and care about most. Avoid the perception that Kaizen technology is what the Kaizen Institute or government wants to be implemented. Employees should internalize why the Kaizen culture needs to be implemented. Educating employees and leadership on the productivity, quality and competitiveness challenges should be first thing to be done in organizations before planning for the Kaizen technology transfer programs.

Once Kaizen is agreed to be useful to transform the existing situation of a given company, it is critical important to prioritize timely project completion and measurement of actual impact.

As several studies the major challenge of Kaizen implementation in Ethiopian context is the sustainability factor. To sustain the and adapt culture of continuous improvement we need to begin implementation of Kaizen methods with utmost consideration of contextualize Kaizen culture to reflect organization's values and priorities of the implementing companies.

Avoid government push approach and focus to create awareness among employees and leadership why Kaizen is vital for companies. Productivity, competition and factors to survive in a global dynamic environment should be understood and be reasons of motivation to adapt the Kaizen methods. Creating a culture of quality sensitivity is critical. An organizational culture where employees no longer accept poor quality and delays, but who continuously innovate to improve the way they do work and impact while reducing costs.

As companies expect their employees to be adaptable to changes, they must be also fully committed to boosting the morale of their workers and developing their ability to achieve self-actualization. Various motivation schemes should be strategically chosen and be part of the Kaizen implementation strategy of a company.

The introduction of kaizen as a management tool and success in the transfer of technology to improve and enhance productivity and managerial capability in Ethiopia needs to be strengthen in the context of the Ethiopian culture without compromising the basic methodology of Kaizen. The Kaizen methodology on one hand requires understanding the tools well and on the other hand it becomes necessary to ensure;

- The Compatibility between kaizen culture and the organizational culture of Ethiopia's company practices;

- Change habits in the workplace to adhere to the kaizen work ethics;
- Continuous improvement not one-time result
- results achieved of Kaizen projects deliver measured impact
- Instil a vision for quality products and services with the mindset of winning the competition in the market Ensuring the and inspiring vision for customer satisfaction integrates the key elements of Kaizen with the values and priorities of an organization and the country at large.

For success of the transferability of the Kaizen technology we recommend that Kaizen institute of Ethiopia should clarify its mandate as institution to ensure the companies are aware of what they expect from the institution and what the company can support them in their endeavors. It is very helpful and strategically important for Kaizen Institute to prioritize to create awareness to employees and leaders on the global challenges of competition and how companies can survive in the competition. Dissemination of facts and realities on the level of where companies are in terms of productivity, quality and efficiency should

be educated. Most of the Kaizen Institute's time should be allocated to awareness creation of the dynamics of business environment both internally and externally in collaboration with universities and other institutions, The Kaizen Culture to be integrated and adapted to the Ethiopian culture the Ethiopian Kaizen Institute should also focus on sensitization of the method and tools of Kaizen and should strengthen the collaboration with JICA for capacity building initiatives.

## References

- [1]. Anh, P. et al. (2011). "Empirical study on Transferability of Kaizen Practices." The 11th International DSI and the 16th APDSI Joint Meeting", Taipei, Taiwan, July 12-16, 2011.
- [2]. Admasu A., 2015., "Kaizen Implementation in Ethiopia Evidence in Literature", **Journal for Studies in Management and Planning** Available at <http://international journal of research.org/index.php/JSMaP>.
- [3]. Asayehgn Desta, (2013). Kaizen Initiatives at the Ethiopian Wonji Sugar Manufacturing Company. Sarlo Distinguished Professor of Sustainable Economic Development Dominican University of California.
- [4]. Alsmadi, S. (2009), Aoki, K. (2008), Chase, N. (1998), Cheser, R.N. (1998) and Imai M. (1986).
- [5]. Abhijit Chakraborty, Madhuri Bhattacharya, Saikat Ghosh and Gourab Sarkar. (2013). Importance of Kaizen Concept in Medium Manufacturing Enterprises. *International Journal of Management and Strategy (IJMS)*, Vol. No.4, Issue 6.
- [6]. Alsmadi, S. (2009). Kaizen strategy and the drive for competitiveness: challenges and opportunities. *Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness*, Vol. 19, No. 3 pp. 203- 211.
- [7]. Alberto E. Lemma (20018). "The role of Kaizen in Economic Transformation", Overseas Development Institute 203 Blackfriars Road London SE1 8NJ.
- [8]. Aoki, K. (2008). Transferring Japanese kaizen activities to overseas plants in China. *International Journal of Operations & Production Management*, Vol. 28, No.6 pp. 518 – 539.
- [9]. Andrew Parris, (2013) "Improving processes for good in East Africa", The TQM Journal, Vol. 25 Issue:
- [10]. Birhanu Beshah (2013), "The Need for Quality and Productivity Improvement- Presentation –Adama, Ethiopia. Feb 12, 2013.
- [11]. Bethlehem (2018)., Ethiopian Herald: "Changing the way Ethiopian Industries work", June, 2018.
- [12]. Chase, N. (1998). Kaizen cuts works-in-progress, boots production. *Quality*, Vol. 51– 53, p. March.
- [13]. Chen J C, Dugger J., Hammer B. (2000). "A Kaizen Based Approach for Cellular Manufacturing Design: A Case Study", *The Journal of Technology Studies*, Vol. 27, No. 2, pp. 19-27.
- [14]. Deniels R. C. (1995). *Performance Measurement at Sharp and Driving Continuous Improvement on the Shop Floor*, *Engineering Management Journal*, Vol. 5, No. 5, pp. 211-214.
- [15]. Eden M., (2017). "Assessment of Kaizen Implementation Practices and Challenges in the case of Tikur Abbay Shoe Share Company". Submitted as partial fulfillment of requirement for the Masters of Business Administration, St. Mary's university school of graduate studies.
- [16]. Ethiopian Ministry of Industry, (Mar. 10, 2011). "Ethiopia's KAIZEN has Now a Manual".
- [17]. Georg O. Tasie., (2009), *African Journal of Business Management* Vol.3 (4), pp. 233-240, May 2009 Available online at <http://www.academicjournals.org/AJBM> DOI: 10.5897/AJBM09.021 ISSN 1993-8233 © 2009 Academic Journals.
- [18]. GRIPS. (2011). Kaizen National Movement: A study of Quality and Productivity Improvement in Asia and Africa. *Japan International Cooperation Agency (JICA)*. GRIPS Development Forum.
- [19]. Getinet A. and Admit Z., (2001). "The Ethiopian Manufacturing Sector: Competitiveness and the Way Ahead" *Ethiopian Journal of Economics*, Vol X No 2, October 2001.
- [20]. Imai, M. (1986). *Kaizen: The key to Japan's competitive success*, McGraw-Hill/Irwin, New York, USA.
- [21]. . Izumi Ohno, Kenichi Ohno and Sayoko Uesu. (2009). *Introducing KAIZEN in Africa*. GRIPS Development Forum.
- [22]. Izumi Ohno, Kenichi Ohno and Sayoko Uesu. (2009). *Introducing KAIZEN in Africa*. GRIPS Development Forum.

[23]. Mandela, N. (2003), available at: [http://africanhistory.about.com/od/mandelanelson/p/qts\\_mandel\\_a2.htm](http://africanhistory.about.com/od/mandelanelson/p/qts_mandel_a2.htm) or <http://mandelainterfreeuniversity-edu.weebly.com/about-madiba-nelsonrolihlahla-mandela.html>

[24]. Nesra Seid (2012). The role of Ethiopian Government in kaizen implementation as a modern management tool for quality and productivity. *Proceeding the 4th International conference Leadership institute with the collaboration of University of Green which.*

[25]. Spear, S. and Bowen, K. (1999), “Decoding the DNA of the Toyota Production System”, Harvard Business Review, September-October, pp. 96-108, available at: <http://hbr.org/archive-toc/BR9909>.

[26]. Spear, S.J. (2004), “Learning to lead at Toyota”, Harvard Business Review, pp. 78-88, available at: <http://hbr.org/archive-toc/BR0405>.

[27]. Tigist H. (2015)., “Assessing the Effectiveness of Kaizen Implementation in Wonji Sugar Factory plc”. A thesis submitted to St. Mary’s university, school of graduate studies in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, St. Mary’s university school of graduate studies.

[28]. Winy Utari. (2011). *Application of Kaizen Costing as a Tool of Efficiency in Cost of Production at Pt. Coca Cola Bottling Indonesia*. Submitted as Partial Fulfillment of Requirement for the Accounting Department, Faculty of Economics, Andalas University, Padang.

[29]. Winy Utari. (2011). *Application of Kaizen Costing as a Tool of Efficiency in Cost of Production at Pt. Coca Cola Bottling Indonesia*. Submitted as Partial Fulfillment of Requirement for the Accounting Department, Faculty of Economics, Andalas University, Padang.