

A STUDY OF 'KAIZEN' PRACTICE IN MSME

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Abstract

Purpose: The purpose of this paper is to give an explanation of the 'Kaizen' concept by literature review and to check its prudence in the small industry. It has been studied on selected units in the field.

Study Domain: The area of study area is the MSME units operating in the Swarn Kundla Taluka of Saurashtra.

Finding: The systematic 'Kaizen' Practice is not implemented in one, As well as the owners and employees of the unit lack knowledge of this. The degree of study is low in the unit's manpower. But the unit continuously improves positive momentum. Knowing that this concept is inadvertently being executed.

Keyword: 'Kaizen' practice, Micro, Small and Medium Enterprise

Paper Type: Research paper

1. INTRODUCTION:

'Change is a natural law of universal' its means we can observe anywhere, but here we will consider this word in the area of industrialization. The the current time is globe competition time, where we have to make our business capable to compete with all over world. In such an environment transformation is necessary for the unit, if not then, it can't be last long. In present time, the principle of 'KAIZEN' is spread in the field of business world, which is related to be the change. It is a Japanes world, which means 'Change for Better' it's basically related to japanes culture it we take this principle in the relevant of a production unit in over business , it demand the change of each and every aspect of unit, include the less waste and production cost control, improvement in the production ect. In this paper we are going to discuss about 'KAIZEN' Principle in the field of Small enterprises.

2. About MSME

Micro, Small and Medium Enterprise, which is briefly referred to as MSME. In Gujarati language it can be called subtle, short and medium enterprise, which is classified according to MSME Act-2006. For manufacturing unit: As mentioned in the above summaries, these industries have been divided into three categories based on the investment they have made.

Enterprise Category	Investment in plant & Machinery
Micro	Not exceeding Rs. 5 crores
Small	Between Rs.5 crores to 75 crores
Medium	Rs. 75 to 250 crores

3. About 'KAIZEN' :

Kaizen	
Kai	Change
Zen	For the Better

'KAIZEN' is a japanes world which contain two worlds ; 'KAI' and 'ZEN' which means ' change for better', kai= better and zen= change, it we look to the technical meaning of the world then it means continuous Improvement. Kaizen is a continuous process in which the collective effort should be made by including all the employees of the unit's various fields. All the employees are inspired for the innovation and positive improvement at workplace. In nut shell the continuous reinforcement should be provided for the innovation and renovation it also stress on the degradatation of waste and high production cost.

(I) History :

Japan defeat in Second World War, it's badly affected on business organization, production houses and many industries. They were destructed, so to make stand again the American expert W.Edward deming's Guidance was implemented which main stressed on 'statistical control method' and created outline to decreased the waste and production cost. Under that principle 'training with Industry program'-1951 had introduce three 'J'. three J stand for 'Job instruction', 'Job Method' and 'Job Relation' which is named as improvement in four steps that contain ; Kaizen, Eno, Yon and Dankai. Its first step is KAIZEN which will be discussed in details.

In the book 'Kaizen': The Key to Japan's Competitive Success" author Masaaki Imai introduced to the West in 1986 the idea of continuous improvement and 'Kaizen' to business. Today, many organizations throughout the world apply 'Kaizen' as a way to get a competitive advantage.

(II) The Importance of 'Kaizen' :

a	Increasing Competition	d	Product innovation
b	High customer expectations	e	Supply chain efficiency
c	Customers want value for money	f	Need for continuous improvement

(III) 'Kaizen' approaches :

a) Flow 'Kaizen' :

A system or flow 'Kaizen' deal with an entire value stream being evaluated for opportunities of improvements and will usually include action from several level organization

b) Process 'Kaizen' :

A Process 'Kaizen' is a concentrated improvement of a single process (or groups of the same type of process). This type of 'Kaizen' will usually include a cross functional team dedicated to improving that individual process

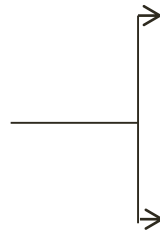
(IV) Element of 'Kaizen' Method :

a	Teamwork	c	Improved moral	e	Suggestion for improvement
b	Personal discipline	d	Quality circle		

Seiri	Tidiness
Seiton	Orderliness

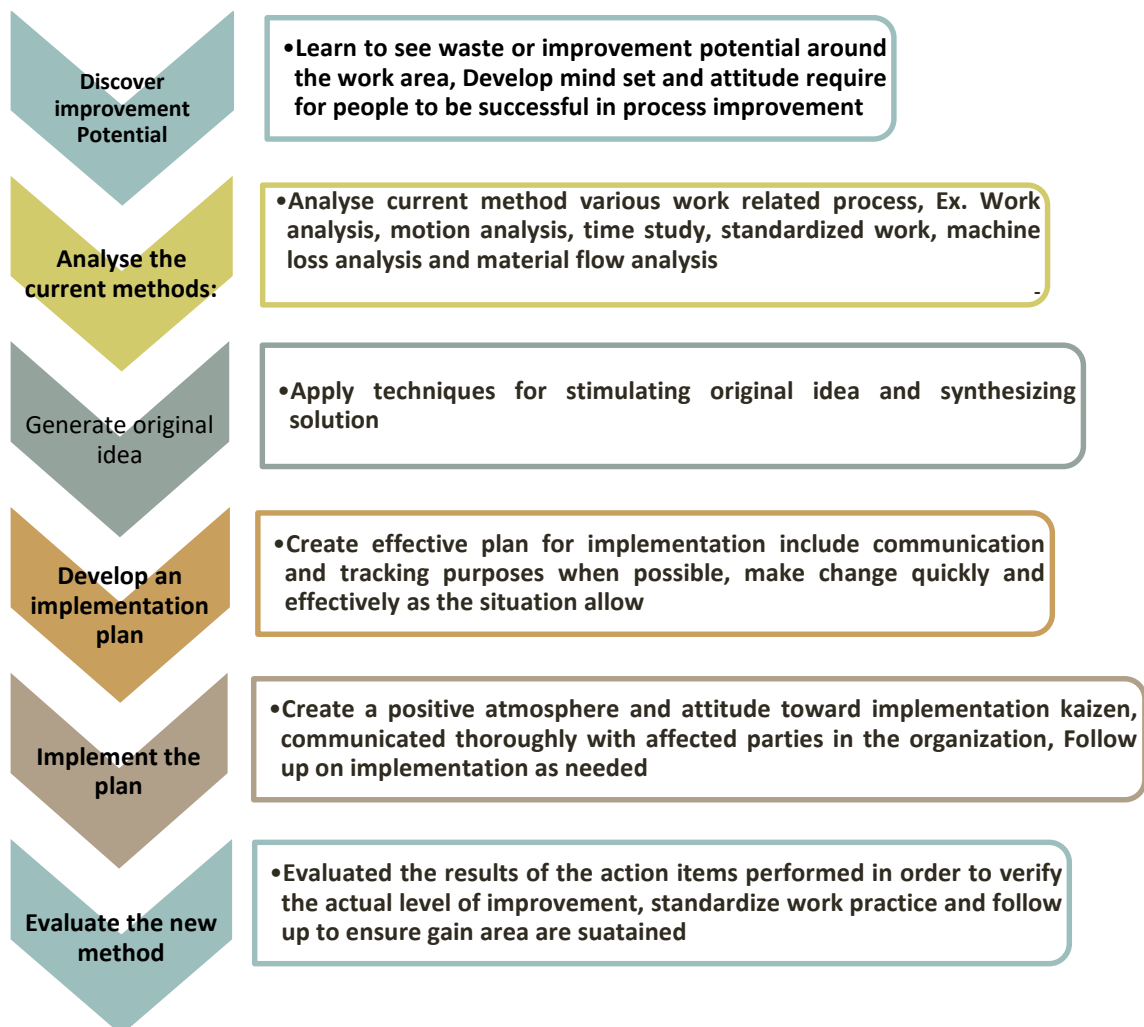
(V) Key Factor in 'Kaizen' :

- a) Elimination of waste(Muda) and Inefficiency
- b) Good Housekeeping (5'S Framework) :
- c) Standardization



Seiso	Cleanliness
Seiketsu	standardized clean-up
Shitsuke	Discipline

Reference : <http://www.valuebasedmanagement.net>

(VI) 'Kaizen' Procedure : Six steps of 'Kaizen'

Source: kato and smalley, operational excellence consulting

(VII) Implementation :

There are so many techniques to implement the 'KAIZEN' the effectiveness of the technique will be depend on the size and structure of the organization. But the generally implemented technique are two.

a) PDCA Cycle :

PDCA means Plane, Do, Check and Act. To keep all these things into continuous process means PDCA cycle. It was first Introduced by W.Edward Deming and that's is why this cycle is also known as 'Deming cycle' or

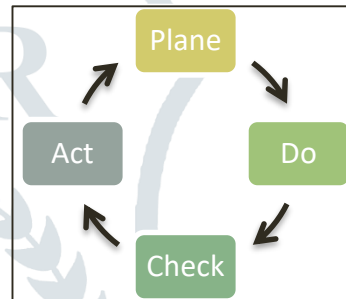
'Problem solving cycle'. These Four stage of PDCA is being implemented continuously improvement of the organization. It is continuous process, so it demand again and again reimplementation.

b) 5'Why' :

'Why' the world indicates the question why any problem in organization in the organization and which are the root of the problem. This type of questions are always discussed to find the cause of the problems, that is why it is called 'Root case Analysis' or 'Fishbone diagram' in which all the factors related to the problems are discussed.

4. Review of Literature

The concept of 'Kaizen' is currently being implemented in big business houses and international companies. Since large companies have scientific management resources and expert human force, it is easy to execute. While small-scale industries are somewhere less in these things somewhere. Since MSME-size industries are mostly family or traditional businesses, things like lack of scientific principles in the system of systems also seem to be construed as an incentive for implementation of this 'Kaizen' system. However, owners of businesses may not be unaware of the concept of 'Kaizen' and implementation. But they have their own thing or service at the He is constantly striving to take himself to the bounded border. improvements in the item and production process by keeping in views coming from customers.



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MSME sized
scientific
best level,
Consistent
mind the

4.1 The opinions given by scholars in their grasp on the concept and execution of 'Kaizen' are as follows.

- 'Kaizen' has been implemented aiming to reformulate the classical management model of Fayol, continuously improving processes and operations in Japanese companies (Singh and Singh, 2009). The concept of Kai Zen is formed on the basis of Japanese culture. After breaking down in the war, it is not only in the industry but also in the daily life to increase consistent reforms.
- According to Singh and Singh, (2009), 'Kaizen' refers to continuous improvement in performance, cost and quality. 'Kaizen' Practice leads the employee to work satisfaction and achievement, which creates a feeling of pride in the employee. It only reduces waste and not increases focus on manufacturing processes.
- Watson (1986) 'Kaizen' strategy depends on human efforts to improve results, and this requires process improvement. This concept bases on CONTINUE IMPROVEMENT.
- Teian (1992) delineate that 'Kaizen' is over simply of improvement as a result of its daily struggles occurring within the geographic point and therefore the manner within which these struggles area unit overcome. 'Kaizen' is applied to any space wherever would like of improvement.
- Bessant and Caffyn (1994) outlined the CI conception as "an organization-wide method of targeted and sustained progressive innovation"
- Deniels (1995), the thanks to succeed basic improvement on the workplace is by empowering operators to ascertain their own measures, aligns to the organisation ways and uses these to campaign their 'Kaizen' activities.
- Womack and Jones (1996) named 'Kaizen' as lean producing. Its systematic approach to serving to organizations consistently scale back waste, or muda while not sacrifice productivity.

- Ghalayini et al. (1997) delineate that 'Kaizen' is characterised by operatives on the workplace distinguishing issues and proposing solutions – the epitome of spontaneous, bottom-up amendment. Small-scale standardisation of a system, by its terribly nature, is probably going to be low value, generated from associate degree intimate data of atiny low a part of the system.

4.2 Cash study :

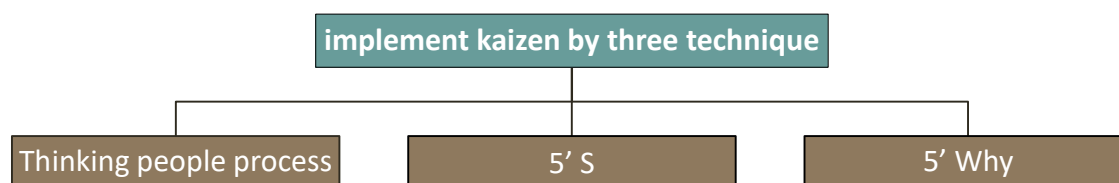
There is 'Moonlight Engineering Industry' Rajpur Parghana No. 24, West Bengal. It supplies oil dispensary pumps to various parts of the country. It is a small industry unit. The unit is competing with big companies through the implementation of "Kaizen" and LEAN TOOL. Regarding the technology being implemented in the unit

- a) Reduce material loss: The plate which was 9 * 8.5 inches and 10.66 grams for preventing wastage in the unit has been reduced to 8.5 * 6.5 inches and 820 grams. In Plate Unit Rs. 11.50 / - has been saved.
- b) Reduce cost: To change the dial fram content to produce at a lower cost. Whenever the alumineum is made, its cost per unit costing Rs. Was 105 / -. Instead of reducing the cost of rubber, 35 / - to be ready.
- c) De-Skill the Job: The simplification of the production process reduces the employee's additional mobilization. The Bacalite sheet that was cut with the hand was first attached to the counter and arranged as it was cut with a cut. As a result, the 5 minutes that were cut before, the cost of Rs. 2 / - was used. It is now in a minute's time, Rs. 0.41 / - was spent on cost.
- d) Reduce the size: Bush's circumference in the unit decreased from 44 mm to 40 MM. At this stage, 4 mm material per unit is being defended.

Apart from this, other smaller steps have been competing at the national level by improving the quality of the manufactured goods and the production process.

4.3 Three excellent companies and how they apply 'Kaizen' in the real world.

- a) **TOYOTA.** : Toyota a world famous automobile company has accepted kaizen principle as a core value. They implement kaizen by three technique.



This system is also known as 'Toyota production system' all the employees of the company inspire for the development of thinking process, problem solving, improvement and innovations.

- b) **Lockhead martin:** It is American Aerospace Company. It develops the various defence item and weapons by using the advance technology. It had decreased 38% of the production cost between 1992 to 1997 by the implementation of kaizen with that it had also saved the 50% time. for this purpose it had won 'shingo prize for excellence in management' in 2000.

c) NESTLE : It is food processing company of Switzerland. The company saved many resources and increased the work ability (Labor force) by starting 'Lean production processes and lay changing its name to NCE (Nestle continuous excellence) in 2008.

5. Kaizen in India Industries :

All the company try to sell their product in low prize and improved the quality of production, because they also want to compete with the global market and for that they use the latest technology and management practices in organization. In such theory of kaizen provided very effective. Every day its implementation in indian production houses is increasing and those companies who hase implemented it they are getting a good and effective result. 'More Indian Firm Turn to kaizen to Cut Wast', it an article Published in 'Business Standard' in 2008, which described the Kaizen practice in supreme companies in india. This article described the necessary of decreasing the waste in 70 to 80 percent indian company and those companies who are applying the kaizen has decreased the 30% of production rate

In indian various company like Reliance industry, Zydus Cadila, Arvind Mill, Gujarat Gov., Raymand, ABB Ltd., Suzlon, BHEL ect. Have implemented Kaizen practice

In Zydus the Kaizen practice is done under the name of Lean Integrated Mamagement. Because of this dramatic changes can be observe in company. Thus, not only industrial sector and production houses but also effectively applying in other sectors.

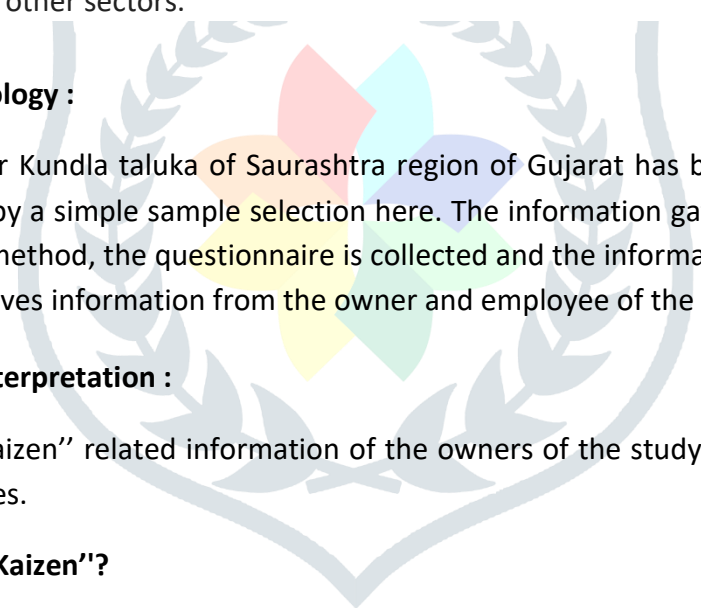
6. Research Methodology :

As the field of study, Swar Kundla taluka of Saurashtra region of Gujarat has been selected. There are a total of 15 units selected by a simple sample selection here. The information gathered through the survey method using the survey method, the questionnaire is collected and the information collected. The study's questionnaire mainly receives information from the owner and employee of the unit.

7. Data Analysis & Interpretation :

Information about the "Kaizen" related information of the owners of the study and its implementation is presented in the summaries.

(1) You know about "Kaizen"?



Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
6.66%	6.66%	6.66%	60%	20%

As mentioned in the above summaries, 80% of the owners of the unit are unaware of the concept of 'KaiZen'. They do not even have general knowledge about this. About 13% of the owners know about Qi Zen. It is obvious that there is a lack of knowledge related to QEZ in the MSME unit owners. Enhancing awareness about this can be a quick development of the units.

(2) The continuous positive improvement in the functioning of the unit is done.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
53.33%	33.33%	13.33%	00%	00%

According to this, there is 53.33% complete connotation and 33.33% confirmation as mentioned in the summit, meaning that the owners of the units are unaware implementing the daily working day of the unit even though they are unaware of the theoretical knowledge about kai-zen.

(3) Innovations are done in every aspect of the system.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
73.33%	26.66%	00%	00%	00%

Even here, 73.33% shows complete conviction and 26.66% positivity, it is obvious from the fact that Kai Zen is practically executed here.

(4) Employees are encouraged to continuously make positive improvements in the workplace.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
60%	26.66%	13.33%	00%	00%

Although these units do not have sufficient knowledge of human resources management and separate management, some of its basic principles are implemented, it is found from the above mentioned entries. Here, 60% of the total conviction and 26.66% are agreed, which means that the unit owners are constantly encouraging the employee to make positive improvements in the units.

Overall Analysis:

Checking the above analysis clearly shows that about 80% of the units are completely unaware of the concept of “Kaizen”. While 13% of owners are aware of this. When 86.33% of the owners of the unit accept the implementation, they continue to make positive improvements in the workplace and the systematic pass. About 99% of the unit owners have expressed their assurances. It is encouraged to keep employees continuously making positive improvements on the workplace. About 86% of the unit owners expressed their assurances.

In short, the owners of the MSME units do not have the theoretical knowledge of the concept of Kaizen but implement it practically in the daily routine of business. When MSME units are aware of the concept of Kaizen concept or are systematically implemented by the training, take advantage of today's professional competition.

8. Finding :

In one, systematic ‘Kaizen’ practice is not implemented, as the owners and employees of the unit do not have knowledge about this. The degree of study is low in the unit's manpower. However, due to periodic

improvements in process and unit-manufactured items, it can be said that even if not directly, Kai Zen-related technology is being implemented indirectly.

9. Conclusion :

The modern concepts of management like “Kaizen”, 'Five S', 'Six Sigma' are mainly taught in 'Business Schools' and are being implemented in a progressive company or multinational business environment. Our general belief that MSME size businesses are not implemented in it. That's not completely wrong. Since the owners of these units generally study less, they have less ethical knowledge about this. But its unit knows that these concepts are inadvertently executed. It is clearly evident from the information obtained in the study. If MSME units are trained by learning about this related theoretical knowledge, then it can be systematically implemented. Through which the unit's production process, the quality of the product and the productivity of small and small improvements can be made. Which will play an important role in changing the challenge of existing industrial competition in one occasion. Thus, efforts should be made to increase the knowledge related to Kai Zen in MSME for greater progress.

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