

KAIZEN METHOD IN PRODUCTION MANAGEMENT

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Abstract

The Kaizen management is dedicated to the improvement of productivity, efficiency, quality and in general of business. The Kaizen method acknowledged as method of improvements applied to key processes will generate the major of company's profit, while constituting a secure way to obtain the clients loyalty and fidelity. The Kaizen management represents a solid strategic instrument, with a view to reach and surpass the company's objectives. The 5S's represents a fundamental technique which allows the enhancement of efficiency and productivity, while ensuring a pleasant organizational climate. The paper presents in a concrete way a study regarding the application of these concepts in a real organization which builds its business success on the phenomenon called knowledge.

Keywords: *Quality, Quality Management, Kaizen, 5S*

JEL: *M11 - Production Management*

1 INTRODUCTION

The Kaizen Method has been particularly distinguished as the best methods of performance improvement within companies since the implementation costs were minimal.

It is nowadays more than ever that the relationship between manager and employee is crucial and the Kaizen technique have a major contribution to the reinforcement of this relationship since the achievements of a company are the results of the mixed efforts of each employee.

These method bring together all the employees of the company ensuring the improvement of the communication process and the reinforcement of the feeling of membership.

The companies that want to have a performance must keep their leader position on market by increasing the quality level of services provided, reducing costs and last

but not least motivating the whole staff in order to implement the concept of performance oriented organization.

Kaizen is a solid strategic instrument which is used to achieve and overcome the company's objectives.

The Kaizen method and technique are valuable instruments that can be used to increase productivity obtain competitive advantage and to rise the overall business performance on a tough competitive market like the one in the Europe (figure 1.).

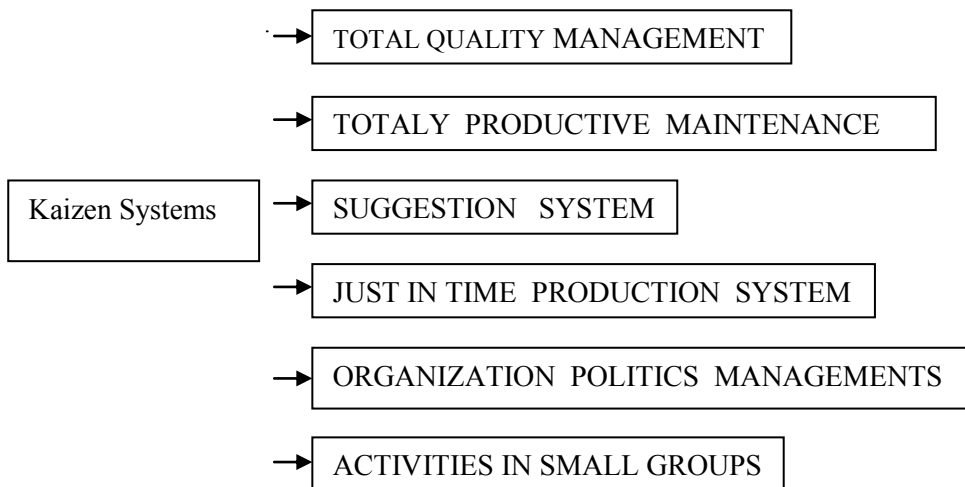


Figure 1 KAIZEN Systems

We must think of the fact that the way in which we fulfill even the daily tasks today is not the most efficient way to perform.

Therefore, we must continuously look for new ways of achieving our objectives in the easiest manner and of course at the lowest costs. We will further present some definitions which will help us.

2 THE 5 STEPS OF GOOD MAINTENANCE

The columns of the TQM House are: productive maintenance; preventive maintenance, 5S, auto maintenance and continue improvement, as we can observe each column has his importance, the conclusion it is that the 5S column must to be identify and respect in the company (Figure 2).

The 5S techniques are fundamental techniques which allow the increase of efficiency and productivity while ensuring a pleasant organizational climate.

5S also is not a list of action items, but is an integrated concept of actions, condition and culture.

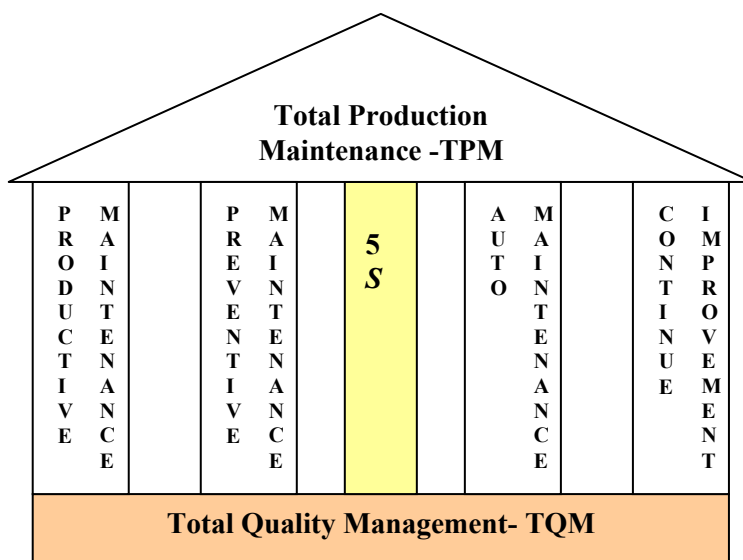


Figure 2 The Base columns of M.P.T (Total Productive Maintenance)

To get the greatest success, the nature and implication of each "S" need to be understood by each employee and should be regularly practiced.

It has been generally notice that, at the moment the organization decides to implemented the Kaizen concepts, the personnel shows resistance to change and the most frequent motivation will be the following:

- What is so special about sorting and arranging
- Why should we clean since it gets dirty again
- Sorting and arranging will not increase the results

2.1 Study case

Within the present economical content, considering the importance of revenues, the management focus has been transferred from sale departments to the after sales department and costs reduction specific to this activity has become one of the tactic objectives of the organization. The implementation of the concept of continuous improvement involves:

1. continuous improvement of product and process;
2. periodical evaluation of the performance standards of excellence criteria previously set in order to identify the areas which need improvement;
3. continuous improvement of productivity effectiveness and efficiency of all processes in the organization;
4. promotion of prevention based activity;

5. education and instruction of each employee in order to be able to use the techniques of continuous improvement such as:

- innovation technique. the Deming cycle PDCA planning, do, check, act;

- the technique and instruments of quality management;

- process reengineering;

- process;

6. setting the objectives concerning improvement and the necessary measure to achieve them;

7. recognition of the results obtained by the organization staff concerning the continuous improvement particularly speaking of processes.

2.2 Research hypotheses

The tools used at the data analysis stage include diagrams, histograms, Ishikawa diagrams which present the frequency distribution of factors causing problems under study (Figure 3).

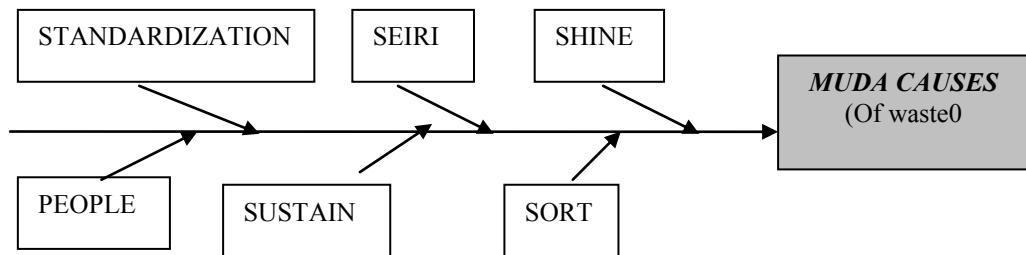


Figure 3 Fishbone diagram for waste causes

This data driven approach employee to prioritize alternative hypothesis and focus scarce organizational resources on eliminating important, correctable causes of a problem.

Kaizen improvement of technological manufacturing, approach systematic steps to improve technological process: process mapping, analyze the process and redesign the process.

Life Cycle is used to assess the environmental aspects and potential impacts associated with a product, process, or service.

It involves making detailed measurements during the manufacture of the product, from the mining of the raw materials used in its production and distribution, through to its use, possible re-use or recycling, and its eventual disposal process, the new trends of eco-age, must begin with a new design process of sustainable products.

2.3 Data interpretation

After the examination of company activity the following PDCA cycle or "Deming cycle" of implementing 5S was identify (figure 4).

We are talking about a never-ending process of improving quality not only of the product, technological process but of the entire system company and the cycle has to follow a process approach.

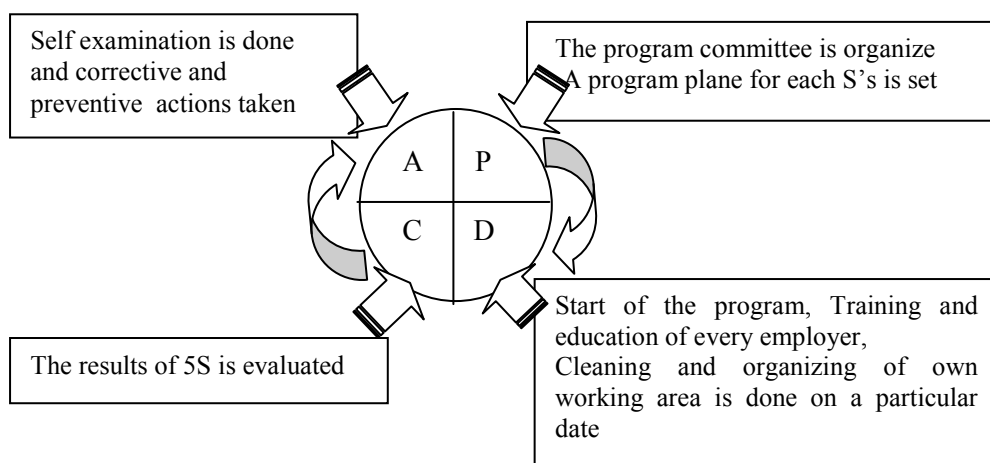


Figure 4 Deming cycle in company

5S is not only a system for house keeping, it is an integrated approach for productivity improvement.

5S is a whole a culture which increases production, improves quality, reduces cost, makes delivery on time, improves safety and improves morale.

This leads employees to waste time and motivation searching, waiting, reworking or just plain giving up.

A 5S a visual workplace eliminates questions, generating significant improvements in productivity, quality, customer satisfaction, safety and more the TQM of company.

The primary objective of 5S is to create a clean, orderly environment- an environment where there is a place for everything and everything is in its place.

Beyond this, many companies begin their lean transformation with 5S because it exposes some of the most visible examples of waste. It also helps establish the framework and discipline required to successfully pursue other continuous improvement initiatives.

3 CONCLUSION

After visual evaluation of company workplace, environment the conclusion was taken from theme self.

A primary cause of waste is information deficits-employees simply lack the knowledge to do their jobs efficiently and effectively.

After successful finish of pre-production phase manufacturing phase incoming, in this phase company have to search new processes for cost reduction, cost management in manufacturing phase title kaizen costing.

Next cost reduction it is possible to achieve in manufacturing process such as:

1. New manufacturing technology development;
2. Increasing of machine performance;
3. Limitation of wasting in manufacturing;
4. Increasing of employees performance.

Immediately the target costs are determined, they are basic plan and control limit for company.

Before start of production every company department and company top management authorized strategy for new product which includes target price, planned profit and target cost.

The problems encountered during the current activities allow continuous improvement of the results:

- reduce consumption and costs increase productivity;
- reduce delivery time,
- increase flexibility in meeting customer requirements, etc. all these improvements with the effect of increasing competitiveness.

The examples on this pages are designed to help the people interested about how visual devices can benefit different aspects of a company's activity, how a company can improve productivity, profitability, customer satisfaction, and employee attitude.

Target cost has to be classified into all internal company departments such as design, marketing, manufacturing, technology, administrative and logistics but also outside contractor too.

In the next step it is necessary to search all possibilities for cost reduction in every department. This step is most exacting step in target costing process.

Very good instrument for this step is value analysis and value engineering.

After fulfillment of all steps mentioned above it is possible come up to manufacturing, but this is not end for product cost management.

Next step is continually product improving and searching for other cost savings. Continuous cost control is denoted by kaizen costing.

Kaizen costing gets on with cost reduction in manufacturing phase

According to the research paper, the paper defines some models to relative environmental profiles of :

- new material choices or packaging options.
- to reduce environmental impact at its source in the design phase.

- to serve as a communication tool between companies and consumers
- to establish from the design stage the re use of some materials,
- to identify which are the recycle materials.
- to compare existing products with planned alternatives
- to compare existing company products with products of competitors
- realize an internal information and training
- new strategies in marketing, advertising policies
- joining eco-criteria
- environmental cost allocation
- assess the gap from eco-label criteria
- radical changes in product life cycle

It is easier and faster to train employees in a work area that is orderly and well marked.

Another way to measure 5S benefits in the workplace is to take pictures. Pictures are very effective at the visual impact and present the feed back of 5S implementation.

5S is one of the most widely adopted techniques from the lean manufacturing toolbox.

5S is considered a foundational concept, as it establishes the operational stability required for making and sustaining continuous improvements in a company.

The primary objective of 5S is to create a clean, orderly environment, a place for everything and everything inside that place.

Beyond this, many companies begin their lean transformation with 5S because it exposes some of the most visible examples of waste.

It also helps establish the framework and discipline required to successfully pursuing other continuous improvement initiatives for the company.

Acknowledgement: This work has been realize as a topic from a research work to diagnose the regional potential of market place, the pulse of industry in a city where economic crises put his signature on industry and people life.

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