

Internal Obstacles To Quality For Small Scale Enterprises

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***Abstract:** The Small scale manufacturing enterprises are facing critical problems while selling their products. As the SSE is not having huge financial backup and so they depend very much on the revenue earned after selling their product. The product sales can only increase if the manufactured product is meeting the desired level of standard of the customers' requirement. But actually it is not doing so. In this paper, we have tried to analyse the problems in the context of internal obstacles to Quality by taking survey with the help of questionnaire for the SSE.*

***Keywords:** , Customer , Profit Quality, Quality loop, SSE.*

1.0 INTRODUCTION

Organizations are facing changes since the working environment changes. This creates pressure for organizations to adapt new ways of doing things. As a result, we are now living in the world where organizations are in the different phases of changes depending on the area of industry on development within it. Differences are recognized in the sizes, structures and culture of the organizations. Therefore, different factors are disturbing organizations having best possible effort on total quality and customer satisfaction.

Quality has its operational view. Quality is the degree to which the customer requirements are met. All the stages are contributors to quality and are said to form a “quality loop” encircling the “customer & producer “or “customer & supplier”. An organization generally seeks to accomplish three objectives with regard to quality. These are (i) to achieve & maintain the quality of its products & services to meet its customer needs, (ii) to gain confidence of its customers that the quality has been, or will be achieved & maintained and (iii) to support management’s confidence that the quality system has been installed & it is effective. Thus, quality is the sum total of the knowing what customers need, designing to meet those requirements and reliable “bought in” components.

Powell (1995) carried out study on closer customer relationships; closer supplier relationships, committed leadership; adoption and communication of TQM, benchmarking, open organization, zero-defects mentality, flexible manufacturing, process improvement, and measurement in increased training under employee empowerment. Youssef *et al* (1996) conducted empirical study on customer focus with top management commitment, organizational learning, process and function improvements, learning top management role models, middle management teams, problem solving. Forker *et al* (1997) made study on supplier quality management leadership and quality policy; product/service design; process management; quality data and reporting; role of the quality department employee relations; training. Easton and Jarrell (1998) studied on customer focus; supplier performance and supplier relationships, process focus; systematic improvement; company wide emphasis; recognition of TQM as critical competitive strategy under employee involvement and development; cross-functional management. Douglas and Judge (2001) focused on the customer management by fact; continuous improvement of process; adoption of quality philosophy; use of TQM methods with top management team involvement; emphasis on TQM-orientated training. Chandler and Mc Evoy (2000) studied for closeness to the customer waste; quality tools; cleanup management involvement. Ho. Duffy and Shih (2001) focused on supplier quality management role of top management; role of quality department; product design; process management; quality data reporting; supplier quality management, employee relations and training.

Majority of the small scale units use old techniques of production & outdated machinery & equipment. Updating of technology & achieving economies of scale is one of the major problems facing the small scale sector. They cannot afford new machines & equipments and are not in a position to use the latest techniques of production. They do not find it possible to conduct research and development on a continuous basis. Therefore, productivity & quality in small scale firms tend to be low while unit cost of production is generally high. But with the liberalization of economy the SSIs are facing stiff competition from imports and, as such, need technological updating in order to have better quality products at cheaper rates.

The challenges to quality are both internal and external obstacles. To overcome the aforesaid obstacles to quality, several remedial measures have been suggested in this study. In this paper, we are trying to focus on these problems by the application of quality concept in small scale industries, which suggests quality model that will result in the enhancement in the overall operational performance with the desired level of quality along with the requisite improvement plan and policy.

2.0 FACTORS BEHIND QUALITY OF SSE

Philip Crosby stated in the 1970s that quality is free (Crosby 1979). He developed pragmatic concepts, which are now considered as the foundational elements of the body of quality knowledge, based on his Four Absolutes of Quality Management:

- ✓ Quality means conformance to requirements, not goodness;
- ✓ Quality is achieved by prevention, not appraisal;
- ✓ Quality is measured by the price of non-conformance, not indexes.
- ✓ Quality has a performance standard of Zero Defects, not acceptable quality levels;

Other quality experts and authors, e.g. Feigenbaum, Juran, Deming etc., have elaborated on the meaning of quality for productivity. Feigenbaum identified the quality costs in his PAFmodel (Preventive-Appraisal-Failure –costs) (Dale 1994). Deming (1986) created his fourteen point program for quality improvement, where one point is the continuous development of different processes in order to improve quality and productivity. One basic quality tool – the PDCA-circle (“Plan-Do-Check-Act”) - was determined by Deming. Kaizen philosophy stresses process-oriented thinking, because processes have to be improved so that better results can be achieved (Imai 1997). Juran (1989) stressed the importance of customer satisfaction and the role of management in lowering quality costs.

During the last decade, statistical quality methods have become increasingly popular in order to raise productivity and quality. Modern computers and software have made it possible to collect and analyse efficiently almost any amount of data.

The factors that are going to affect the quality of an SSE are as under:

- (a) Supplier, (b) Process, (c) Leadership, (d) Strategy and policy
- (e) People and (f) Customer

3.0 OBSTACLES TO IMPROVEMENT IN QUALITY

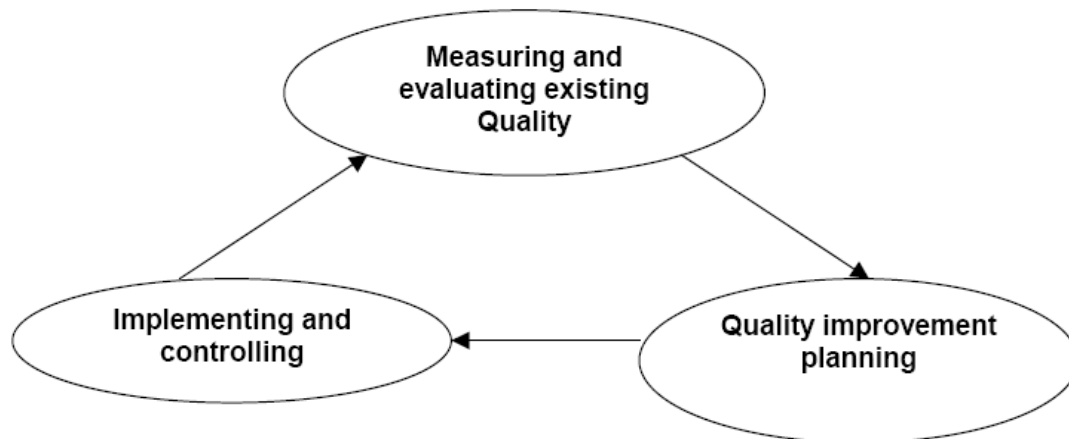


Fig.1 Quality improvement cycle

- INTERNAL OBSTACLES:

The internal obstacles to quality improvement are factors, which are inside the small manufacturing enterprise. It is possible to affect these internal obstacles by actions performed inside the firm. Basically, the internal obstacles are, thus, factors, which are under the control of the small manufacturing enterprises. The management and the workers can eliminate these internal obstacles. They can adopt several measures to weaken their effects. For example lack of time is one typical internal obstacle. In many small manufacturing enterprises there are nowadays so few employees that nobody has time for planning or even thinking about quality improvement. If there are some employees who could spend time for quality assessment, the situation would be much better. Dearth of knowledge, professionalism, work values and poor methods are also typical internal obstacles. There is not enough knowledge concerning quality improvement, and neither the superiors nor the workers have enough knowledge to recognize the problems in quality or to improve it. This situation has a clear connection to the level and suitability of the production methods and equipment. Also, for example, the attitudes of the personnel can be internal obstacles.

- EXTERNAL OBSTACLES:

There are many external factors that are acting as obstacles to the quality or affecting in the other way round. The external factors may not be within the control of the SME but the organization can take precautions to overcome these factors. For this, a SSE is to identify these obstacles and the issues should be given priority as per degree.

-SCRUTINY OF INTERNAL OBSTACLES TO QUALITY:

This section illustrates the research procedure to investigate the internal obstacles that create barrier to the quality improvement process. The analysis of the obstacles is based on a survey carried out in the small manufacturing enterprises located around Kolkata, Howrah and South 24

Parganas districts of West Bengal. The survey forms were supplied to the SSEs for getting data for this study through a structured questionnaire.

4.0 RESULTS AND DISCUSSION OF THE SURVEY

- FOR INTERNAL OBSTACLES:

The results of these questionnaires were processed with general methods. The deviation & mean of every possible external obstacle were calculated. The most meaningful obstacles were found on the basis of the mean of the questions. If the mean was high, the obstacles were significant. If the respondent's answers' mean was low, the obstacle was of less importance. In this survey, all possible obstacles were considered as restraining quality improvement whereas the main interest of this study concentrates only on internal obstacles. In figure 2, the internal obstacles are presented in the order of meaningfulness according to the answers of questionnaires.

- Format of Questionnaire for Internal Obstacles to Quality in SSEs

Basic Information:

| | | |
|--------------------------------|--|--|
| 1 | Name of the Unit Address/Email/Contact No. | |
| 2 | Type of Constitution (Proprietorship/Partnership/Pvt ltd.) | |
| 3 | Investment (Land & Plant & Machinery) Rs. In Lakhs | |
| 4. | Employment | |
| 5. | Age of the Company | |
| 6. | Turn Over | |
| Supportive Information: | | |
| 7 | Quality of Staff: i) Skill Level ii) No. of employees does repetitive Task. ii) No Of Training conducted in a year. iii) Priority of Organization on quality / Production | |
| 8 | Process Improvement Level: i) Any Quality Tools Used. ii) Production/Rejection Analysis done. iii) Customer Redressal done or Not iv) Frequency of Supplier | 5S/ ISO9000/Kaizen/QC/Feed Back System/ Log Book Information/ Slogan Display/Standard Operating Procedure |

| | Evaluation | |
|-----------|--|---|
| 9 | Cost Control Approach: i) Raw Material cost ii) Manpower iii) Improvement Cost iv) Reject Cost | |
| 10 | Delivery Performance: i) Mode of Transport used ii) Delivery Schedule followed iii) Packaging /Packing Material Used | |
| 11 | Safety Level: i) Handling of Hazardous Material ii) Fire Extinguisher Used iii) Accident Handling Plan is there or not iv) Emergency Preparedness Plan | |
| 12 | Govt Policy: i) Towards Statuary Requirement ii) Govt Clearance easily available or Not iii) Subsidy/Incentives Aailed iv) Govt Promotion Policy for the Sector | SSI Registration/Tax/VAT registration/Pollution Control/Fire License/ etc |
| 13 | Quality Target: i) Quality Policy of the Org ii) Customer Feedback system established or Not iii) Product promotional Scheme | |
| 14 | Organization Characteristics: i) First/Second Generation Entrepreneur ii) Type of Product iii) Skilled Level of Staff | Precision Product/High Value/Regular High Consumption |

General Information:

- I) Any specific Problem of your Company:
- II) Probable Solutions/Suggestions:

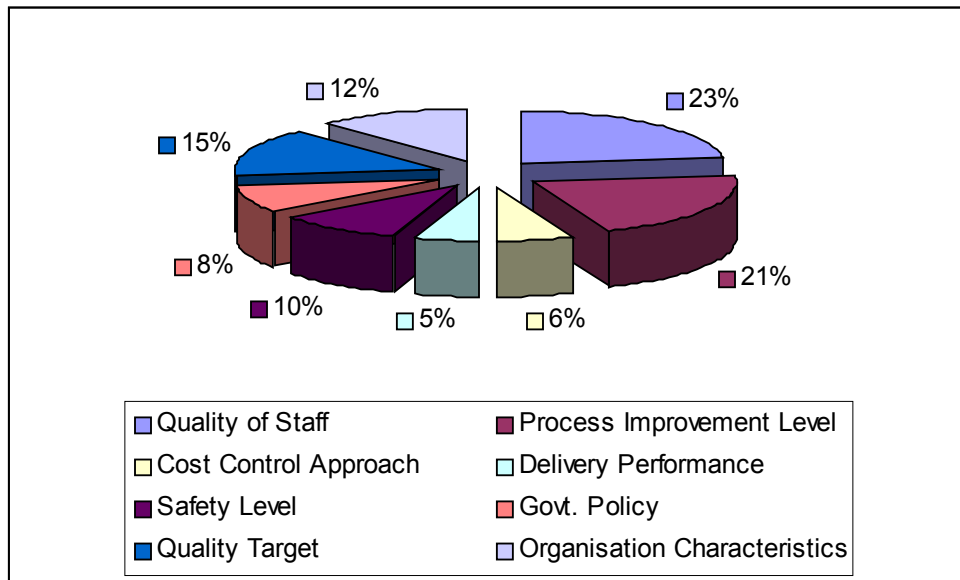


Figure 2 Pie-Chart Showing The Meaningful Internal Obstacles To Quality Of SSE

In Figure 2, the internal obstacles to quality are presented in the order of meaningfulness according to the mean of the answers of questionnaires. The three most meaningful internal obstacles to quality in SSE were the quality of staff, process improvement level and quality target in the firm. Next internal obstacle is the organization characteristics as what generation of entrepreneur is running the enterprise and the type of product the firm is handling and the level of skill of the staff members working in the factory. After that comes the safety level as another internal obstacle to quality. The other internal obstacles are government policy, approach to cost control and delivery performance accordingly. This highlights the fact that lack of quality human resources and process is the main internal obstacle restraining quality improvement in small scale enterprises in West Bengal.

5.0 SUGGESTED QUALITY IMPROVEMENT MODEL CONSIDERING INTERNAL OBSTACLES

The quality improvement's problematic sides are observed during the study & interview with the employees & staff of the management of small scale enterprises.

- i) The entrepreneurs of SSE do not carry out any sort of quality study that is required for their own survival and existence.
- ii) The employees are not having requisite qualification & expertise in the aspect of improvement in quality.

- iii) Some staff members are having ideas but fear from their higher authority restricts them from suggesting new concept for the improvement of quality.
- iv) The management is just interested to sale more number of units they produce. Thus, they always go for short term benefit and no long term planning is there in that regard.

From the above observation, it is apparent that the internal factors are going to affect the quality of small scale enterprises. Thus, the SSE must put emphasis over internal factors immensely affecting the quality. Once Internal obstacles are controlled by the organization they should bring idea for external factors. So the SSE has to change as per the need of fast changing global environment.

A core group of managers must be there in SSE who are going to give required suggestions to the concerned authority for requisite changes required for improving and removing the hindrances to the quality improvement.

This is developed through an integrated approach with senior management and engineering groups as shown in figure 3.

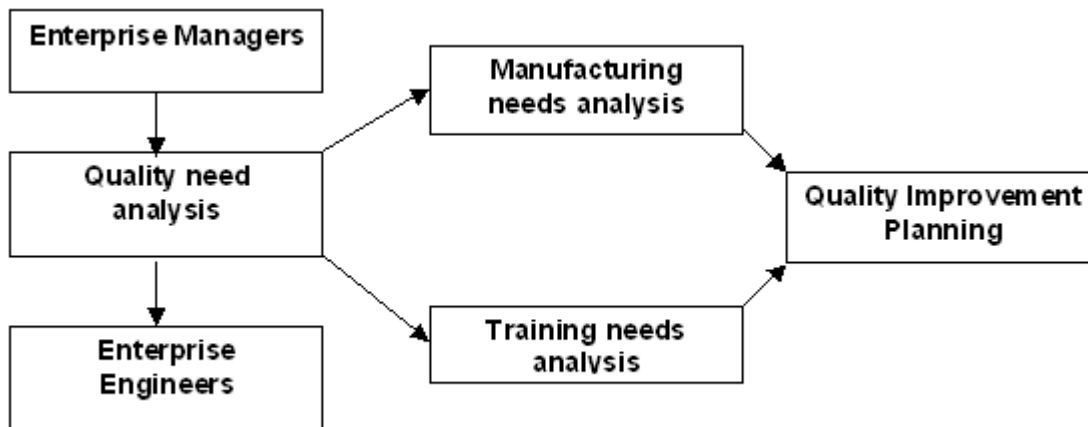


Figure 3 Quality Improvement model under Internal Obstacles

6.0 CONCLUSION

The main result of this study is to collect the data and information about internal factors, which restrain the ability of the firms to improve quality. The most important internal obstacles to quality for SSE were the factors involving the quality of staff, process improvement level and quality target in the firm. These factors are common to all sectors of SSEs.

These obstacles restraining quality constitute a difficult situation, where internal and external obstacles affect each other. This paper has focused on internal obstacles to quality only. Internal factors are in the control of the SSE directly but if they are aware of these factors, they may restrain their enterprises. These internal factors are to be dealt with proper priority & importance. And requisite measures are to be adopted by quality need analysis and the SSE's management. Managers along with employees must train & equip themselves for removing the obstacles being created by the different factors of the environment and make their product more reliable in the minds of the client and customer for more acceptances.

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