

Total Quality Management - Indian Paper Industry

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ABSTRACT: *Today product and Service Quality are becoming truly our national concerns to participate in global economy. Traditional customer base is being eroded. To become more competitive and have to follow the leaders in business, we seek total quality in every sense. The integration of all efforts in the organisation towards quality and customer care is vital.*

World class quality is the target that every organisation has to aim at in today's competitive environment. To achieve this World class quality Total Quality Management (TQM) is one of the important and emerging management techniques.

The important components for successful implementation of the TQM are--

1. *Management commitment*
2. *Customer - Supplier chains*
3. *Systems*
4. *Statistical Process Control (SPC) tools*
5. *Team work.*

To understand TQM philosophy, it is worth remembering Dr. Deming famous 14 principles on TQM.

Further, ISO 9000 standards and third party certification provides pass port for the product to European and other markets. These provide a starting point for TQM. Though TQM is gaining momentum in India, still the Paper Industry is lagging behind due to complex problems faced by the industry. Though it is a Herculean task, to begin with, in view of multiple benefits of TQM philosophy, Indian Paper Industry must start aiming at TQM. This is important for the survival in the domestic market and for entry into global markets.

Today, Product and Service Quality are becoming truly our national concerns to participate in global economy. Traditional customer base is being eroded. To become more competitive and have to follow the leaders in business, we seek total quality every sense. The integration of all efforts in the organisation towards quality care is vital. World Class Quality (1) is the target that every organisation has to aim at in today's competitive environment.

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WHAT IS THE WORLD CLASS QUALITY?

World class Quality is the production of goods and services that are capable of capturing and retaining markets elsewhere or any where in the world on the basis of superiority of performance and providing trouble free service as customers expectation.

World Class Quality is not the gimmicks, tricks or fads. It comes from developing culture of openness, trust, fairness, integrity and hard work. It is the result of several management concepts and processes that are continuously pursued and implemented in an organisation to impart work culture, work ethics and attitudes of all people. It is the combination of many inter linked processes and practices directed at quality and customer care. To achieve this World Class Quality, some of the practices being followed are Total Quality Management (TQM), Quality systems such as ISO 9000 Bench marking practices etc.

TQM is one of the emerging management techniques. TQM represents a customer oriented and quality focussed management philosophy. TQM enhances quality of work life, employee satisfaction through participation and involvement and consequently the image of organisation. TQM has described as "a management frame work to ensure continuing excellence". Among the other benefits, TQM results in--

Committed Customers

Increased productivity

Reduced cost

Better profits

Improved Company image

Employee motivation

Team working and increased participation

Improvements in attitudes and value system

Dedicated management and positive organizational culture

For the successful implementation of TQM, certain components are very essential. As per OAKLAND MODEL (1), the important five component are--

1. Management commitment

The role of leading and introducing change has to stem from senior management. The success achieved in TQM directly depends upon their commitment. The entire company management has to be committed to it and not just few individuals.

2. Customer - Supplier Chains

This concept is at the heart of Oakland Model. It is guided by the improvement in processes and management of these processes.

3. Systems

The systems for quality management need to be documented to ensure procedures and compliance.

4. Statistical Process Control (SPC) tools

One of the important requirement of TQM is continuously upgrade the process capability and continuously ensure and control performances. This is achieved by applying SPC tool and techniques.

5. Team Work

This component means that a culture based on team work. Participation and involvement should be encouraged and implemented throughout the organisation.

The application of TQM principles to all departments of an organisation shifts the emphasis from short term profit making objectives to long term business relations where a company's quality mission involves the identification and consistent satisfaction of customer needs. "TOTAL CUSTOMER SATISFACTION or DELIGHTING ONE'S CUSTOMER" are the buzz words frequently intoned in board rooms and documented in corporate plans.

TQM IN PAPER INDUSTRY (3)

During the past 10 to 15 years, a quality revolution occurring throughout the world in manufacturing sector. The pulp and paper industry has been strongly

affected by this movement, with suppliers in every process area as well as the mills themselves implementing various quality related programs and process that offer documental proof of a consistent, well made product. Just a decade ago most quality efforts were focussed on tools to improve product consistency and physical characteristics. Statistical methods such as SPC/SQC, Pareto diagrams, histograms, control charts etc. were practiced at pulp and paper mills to improve quality achievements.

During the past 5 years, how ever quality has moved to the next stage by becoming systems oriented. Focus no longer placed on the end product but on the entire manufacturing organisation include purchase, administration, sales and service. Corporate management attitudes are now just as important as final inspection and testing, because those attitudes drive the quality process.

Further, vast development in the fields of Printing, Packaging and allied industries took place and their expectation of paper and paper board quality is very high for trouble free performance on their converting machinery. As small and medium sized units may not be in a position to go for On line process automation due to high capital investment, the big giants have to think for on-line process automation for quality up gradation, and aim for ISO 9000 certification. Before starting ready for ISO 9000, the philosophy of TQM should be clearly understood. The important 14 principles of Dr. Deming (4) on TQM are worth remembered to understand the TQM philosophy. They are--

1. Constancy of purpose for improvement of quality
2. Adopt the new philosophy of improvement. Acceptance of poor product and service is road block to productivity.
3. Cease dependency on inspection for quality. Replace by improved processes.
4. End the practice of awarding contract to the low bidder.
5. Constantly improve product, process and service.
6. Institute modern methods of training on the job.
7. Adopt and institute leadership/ supervision.
8. Drive out fears from the minds of everyone.
9. Break down the barriers between people within

department and between the departments.

10. Eliminate numerical goals, slogans, posters etc. Don't ask for new levels of productivity without providing methods.
11. Eliminate production target.
12. Institute pride of workmanship.
13. Institute training programmes for every one.
14. Top management should be committed to the task and try to help everyone accomplish the transformation towards commitments.

WHAT ARE THE ISO 9000 STANDARDS?

The ISO 9000 standards (2) were developed by the International Organisation for Standardization (ISO), which provide a model for quality assurance system. That is, they describe the basic elements of a comprehensive quality system. If we can prove to be an impartial outside auditor that our quality system meets or exceeds the standards, our company will receive registration. Note that our operation system, not our product to the ISO standard. The quality of our system - Purchasing, order entry, receiving, manufacturing, testing, shipping and so on - is audited, registered and reaudited on and on going basis.

In an increasing number of markets and industries, third party certification is becoming a prerequisite for doing business. In Europe, already both large and small purchasing organizations place great importance upon the ability of the supplier to demonstrate that they are operating effective quality systems which meet the requirement laid down by the ISO 9000/EN 29000 series of standards. The fact that the company operate a quality system complying with the standard allows purchaser to have increased confidence in the quality of product concerned and the service associated with the supply of the product. to the supplier, it is inevitable to provide tangible evidence that he operates an effective quality system which has been examined by an independent and well qualified third party. ISO 9000 certificate provides pass port for the product especially to the European market. ISO 9000 is divided into five documents viz. ISO 9000, 9001, 9002, 9003 and 9004.

ISO 9000 is titled "Quality management and

Quality assurance Standards- Guideline for Selection and use". It sets forth principle quality concepts and describes the use of these standards with in purchaser/supplier contracts, and providing guidance in the use of other four standards.

ISO 9001 is the first of three standards that a purchaser may contractually require a supplier to meet and that are suitable for use in external second party quality requirements. This is more comprehensive. It is appropriate when contract calls for the supplier to develop, design, produce, install, service and supply a product or service. It includes all of the requirements of other two standards ISO 9002 and 9003.

ISO 9002 is most appropriate when contract calls for the supplier to produce and supply to existing design.

ISO 9003 applies when the supplier is required to supply based on final inspection and testing.

ISO 9004 in contrast to ISO 9001 to ISO 9003, is guide line for internal quality management activities. It includes a set of quality elements that any company can use to develop its own internal quality system. A company that uses the practices discussed in ISO 9004 easily should able to meet a purchaser's requirement for compliance with ISO 9001 to ISO 9003.

The ISO 9002 standard generally is most appropriate choice for manufacturers that produce to customers specification. So, more than 90% of companies likely to apply for ISO 9002 certification. When we undertake ISO certification to appease key customers, to enhance export sales opportunities, or to provide starting point of TQM, It expects a major undertaking that will require participation of all employees. The more you put into it, the more you will get out of it. Potential benefits of ISO registration includes.

- Reduced cost through increased efficiency
- Improved and streamlined operating procedures
- Upgraded system to produce quality products and services
- Enhanced access to growth in overseas markets.

TQM - INDIAN SCENARIO

Though the TQM is gaining momentum in India, still the paper industry is lagging behind. Some of the limitations for successful implementation of TQM in Paper industry are--

1. In the Indian Paper Industry, besides few bigger gaints, many are small and medium sized units, which are based on agricultural residues. The small units are producing cheaper grade varieties catering to local markets. These mills can not afford modernization plans due to high capital investment, hence TQM in these uints is not feasible.
2. Due to scarcity of major input i.e. fibrous raw material the standardization is difficult.
3. Most of the other inputs like chemicals, additives etc. are being manufactured by small sector, which are not well equipped with sophisticated process technology for production of standardized product. Hence paper industry also have no option, but for usage of substandard chemicals.
4. The machinery and technology of age old mills is obsolete.
5. Futher Indian Paper Industry is more labour intensive. Their traditional way of work culture and attitudes are to be changed for more quality consciousness. Better training facilities and worker education programmes facilitates for changing their attitudes and motivate them to learn quality culture. Introduction of Quality Circles etc. will help in getting workmen participation in company's vision.

Conclusion

Though it is a Herculean task to begin with, in view of multi benefits of TQM philosophy Indian paper industry must start aiming at TQM. To begin with at least the big mills have to tighten their belts to start ISO 9002. This is quite possible at least for Indian giants in view of their modernization plans. This has become need of the hour for the survival in the domestic market as well as to cress the national frontiers for entering into the global markets.

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