

<u>Abstract</u>

Need of quality is everywhere. It is the prime mover of any business. Everything is useless without quality. The nature of quality is dynamic and its demand is ever lasting. Quality makes everything from zero to hero. It is quite common that the failure of business establishments without commitment to the quality is increasing. Quality Management ensures that the Product/Service is planned, designed and delivered to meet the Customer's requirements. A company which is trying to improve its quality requires the same level of efforts to improve all of its inputs. Workers motivated by the company's welfare, responsibility and leadership team will have a high morale on achieving a good amount of quality improvements. A quality gives the value to product and service, which will make it sustainable in the competing markets. A quality product generates more revenues, which will reflect on the employee productivity. Achieving and maintaining quality is the function of continual improvement and profit generation. After maintaining the quality, if, any business starts to concentrate on quantity only, it is certain that business will close shortly. Quality Management ensures that product which exceeds their expectations. Quality also decreases the time to market the product/services. This also helps in promoting international trade and enhancing marketing. Product of excellent quality always delights the customers.

Key Words-

Customer, Requirement, Reliability, Cost, Quality, Goal, Products, Services, SQMS (Statistical Quality Management System), QA (Quality Assorance), Six Sigma.

Introduction

Business is extremely dynamic in new economic era and, therefore, one of the key challenges for enterprises is to transform the organizational design into a more modern and more flexible way. Functional silos and the principle of "command and control" can significantly interfere with implementation of the strategy, so, managers have to renounce those (Kaplan & Norton, 2001)⁹. On the other side, with help of process approach to management and employee empowerment, managers create conditions for understanding strategy and talking about strategy, and also for its successful implementation. Accordingly, changes in the way of formulation and implementation of strategy must be accompanied by changes in the way of measuring the success of its implementation. Not only financial criteria should be considered, but also other criteria should be noticed in long term and from all aspects (Salehi & Behzad, 2011)14.

This means that, besides financial, managers need to use non-financial measures and criteria, which indicate the extent to which the enterprise uses the intangible resources (Hanson & Erikson, 2002). Non-financial measures supplement the financial, as indicators of future financial picture of the enterprise. Concerning both, financial and nonfinancial criteria and depending on what is the basis of competitive advantage, few dimensions of competitiveness can be identified, and they are (Chase, et al., 2004)².

- Costs (make it cheap)
- Quality (make it good)
- Delivery speed (make it fast)
- Delivery reliability (deliver when promised)
- Volume flexibility (change its volume as required)
- Innovativeness (change it continuously)

These factors of competitiveness can be classified into three dimensions-

- Costs (in terms of product price),
- Quality and reliability (in terms of product functionality and continuous fulfillment of customers' requirements),

Time and flexibility (in the sense that the product is always available to customers and that is always delivered on time, or that new products and processes are introduced in time)

According to Skinner (Rao et al., 1996)¹², the dimensions of competitiveness are in the trade-off

*Prof. (Dr.) Shankar Bakhsh Srivastava, Professor, Motilal Rastogi School of Management,Lucknow Email- sb_srivastava1@rediff.com

15

NO.- 2

relationship because it is not possible to simultaneously achieve high quality, low costs and on-time delivery of products.

Literature Survey

Quality has been present throughout the history of human development, and its significance has not decreased yet. On the contrary, the last few decades can be considered as the decades of quality and science that is concerned with quality issues is accepted as quality management science. Pioneers in the development of the quality management science are Edwards Deming, Joseph Juran and Armand Feigenbaum. The work of these people was recognized in the late 1940 and since then they have been embraced by Japanese businessmen. In 1947 Deming held the first lecture on quality control. Other famous scientist concerning quality management science was Mr. Juran. He emphasized the importance of vertical management and technical methods of quality control. Except Deming and Juran, Feigenbaum has gained recognition due to his work in Japan. He is known for developing the approach of Total Quality Control TQC (Feigenbaum, 1986)⁶. The most famous among Japanese experts in the field of quality are Kaoru Ishikawa, Genichi Taguchi and Shigeo Shingo. They are responsible for the further development of Total Quality Control. Ishikawa argued that the implementation of quality control means the development, design, manufacture and service of quality products, which is the most economical, most useful way, and which always meets the needs of customers. Genichi Taguchi's philosophy refers primarily to the manufacturing process management. Shingo has developed a method known as Poka-Yoke (error proofing) for such a production management system in which, theoretically, errors and unnecessary costs cannot occur. When Japanese enterprises shown their business results and they confirmed the importance of quality management, quality started to occupies the attention of American theoreticians, practitioners and businessmen.

According to Simon (Simon, 1991), business modeling system involves the definition of inputs, processes and outputs with feedback. In the context of quality management, this principle implies connection of process management and quality assurance processes (Foster, 2004)⁷. During the 1970's and 1980's, Mr. Philip Crosby and Claus Moller gave a great contribution to development of quality by their research. Philip Crosby pointed out that quality is free because the costs of prevention will always be lower than the costs of identification and elimination of errors and mistakes that have already been made (Crosby, 1979)³. Claus Moller in his work has pointed out about the quality of care for people. According to Srivastava, S.B., quality of maintenance enhances production (Srivastava, S.B, 2009)¹⁵. The foundation of learning of Claus Moller is the focus on the human factor. In this sense, he has formulated 12 principles (Laguna & Marklund, 2005)¹⁰ that may be useful in improving quality. Bill Smith is known as founder of the Six Sigma concept at Motorola. He was inspired by many innovations and achievements in the field of quality production.

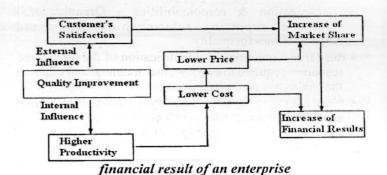
Importance of Quality in Business- Quality helps to



determine a firm's success in a number of ways like -

- Customer loyalty they return, makes repeat purchases and recommends the product or service to other customers.
- Strong brand reputation for quality...
- > Retailers want to stock the product.
- As the product is perceived to be better value for money, it may command a premium price and will become more prices inelastic.
- > Fewer returns and replacements lead to reduced costs.
- > Attracting and retaining good staff.
- >Increasing profit and market share.

These all points can help and support the marketing function in a business. However, firms have to work hard to maintain and improve their reputation for quality, which can easily be damaged by a news story about a quality failure of your product and services. Here, in Figure No. 1, lower cost means that cost of production will come down due to increase of productivity and consequently per unit price of the product will also reduce which will increase the market share of the product resulting increase in the Financial Results. The ways for achieving these goals is to increase the level of production quality and the quality of business in general. Mainly, higher quality of realization of production and processes leads to reduction of variability and defects, and increases finished product quality that increases saving and reduces cost. Influence of quality is shown in Fig. No.1.



Also, the effort for improvement of quality results in increase in higher productivity, satisfaction and loyalty of customers, competitive advantage, market share growth and, finally, leads to increase of financial results. The impact of quality improvement, therefore, can be viewed internally and externally. Internally, high quality means higher productivity, which, consequently, allows lower prices and higher competitiveness, market share and profits. On the other hand, high quality, in terms of reducing of variations and defects, and therefore reducing of costs and increasing value added, also provides a positive effect on financial results (Soin, 1992). From an external point of view, higher quality means increased customer satisfaction, creating a good reputation of the enterprise and increasing the number of loyal customers. Figure No. 1 shows the influence of quality improvement on financial result of an industry.

Determination of Quality by Customers-

The determination of quality is being done by customers itself as shown in figure number 2. Following is

16

NO.- 2



customers itself as shown in figure number 2. Following is the model for determination of quality by customer where customer determines the quality in two ways i.e. by requirement and by assessment. Quality is upgraded at every time with the development of mankind and society. There was a time when not only in Europe but in our country also, the complete manufacturing processes or activities were performed by the cottage and very tiny units spread in the small village and remote areas, away from metropolitan cities. At that time all the work was done by craft men. Craft man train to their children who take their position later on. This trend is still very common in the area of printing

manually on loop cloth; lock smithy, statue making, wood works, sculpturing and making earthen parts etc. Figure No.2 shows that how the customers determine the quality.

Organizational Quality Plan Content

- An organizational quality plan is typically prepared by the Quality Manager and covers the following issues-
- Quality objectives and goals The overall objectives of the quality management program together with measurable goals to be achieved.
- Quality management system scopes Who and what will be impacted by the quality management system. For example- process scope, product scope, organizational scope.
- Organization & responsibilities Organizational structure, reporting relationships, roles and responsibilities for quality.
- Resource requirements Identification of the people and resources required to develop, use, maintain and improve the quality management system.
- Cost benefit analysis- A quality program cost benefit analysis addressing issues such as the cost of poor quality, the cost to improve quality and the cost benefits to be achieved.

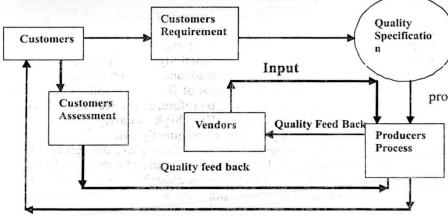


Fig. No. 2, Determination of Quality by Customers

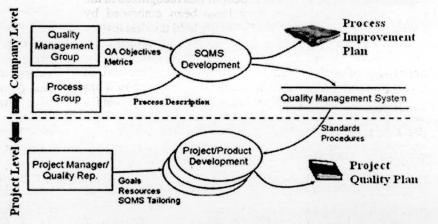
- Activities and deliverables- The quality management system elements can produce or improve the quality management system development activities required.
- Schedule The timeframes in which the work will be achieved together with major milestones for quality

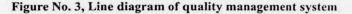


management system element delivery, its review and deployment.

• Risk analysis - An analysis of what could go wrong together with strategies for risk reduction.

In the figure No. 3, a line diagram has been given for quality management system. Quality is managed basically at two stages, one is at project management stage and another is at plant level or at company level. Both stages are important for quality management point of view. Here SQMS stands for statistical quality management system and QA stands for quality assurance.





Project Quality Plan Content-

A project quality plan describes the tailoring of an organization's quality management system for a particular project. It consists of Goals, Resources and SQMS (Statistical quality management system). With help of project quality plan project or product development activities are organized.

Processes improvement Plan-

At company level process improvement plans are prepared. It is divided in to two parts, one is the process group and another is the quality management group. Process group works on process description and quality management group works on quality assurance objectives and matrices. Thus both together are responsible for SQMS. Thus quality management system is applicable at project level and at company level and combining both together constitutes the quality management system.

Quality Management Principles -

NO.- 2

"A quality management standard is a comprehensive and fundamental rule/ belief, for leading and operating an organization, intended at continually improving performance over the long term by focusing on customers satisfaction while addressing the needs of all other stake holders". The

UPENG/2008/26007

eight principles of quality management are

- Customer-Focused Organization.
- Leadership.
- Involvement of People.
- · Process Approach.
- System Approach to Management.
- Continual Improvement.
- Factual approach to decision making.
- Mutually Beneficial supplier relationship.

Customer-Focused Organization-

"Organizations depend on their customers and therefore should understand current and future customer's needs, meet customer's requirements and strive to exceed customer's expectations".

Leadership-

"Leaders create unity of function and direction of the

organization. They should create and maintain the internal

environment in which people can become fully concerned in

achieving the organization's objectives." **Process Approach-**

"A desired result is achieved more professionally when

related resources and activities are managed as a process."

Realistic Approach to Decision Making-

"Valuable decisions are based on the analysis of figures and

information."

Mutually Advantageous Supplier Relationships-

"An organization and its suppliers are interdependent, so,

mutually advantageous relationship enhances the ability of

both to create value."

Conclusion-

If, the enterprise wants to be in a group of successful enterprises, it has to generate money, achieve positive financial results, constantly, day after day, and at the same time, it has to build and develop businesses which will ensure the achieved results sustainability for the long run. Quality Concept help managers in resolving the paradox that provides long-term financial results through improvement of projects/products/services and, at the same time, it also develops the quality management capacity for the future through investment in human capital and key quality processes. should be considered as prime factor to win the customer's desire. It is necessary to understand the significance of all dimensions of business quality and the necessity of providing their optimal combination of quantity. Quality increases the business profitability and sustainability. It is the key area of business success.

References-

- 1.Chandrasekaran, K., Natarajan, P., Sivasundaram, A. (2010) The Competitive Implications of Consumer Evaluation of Brand Image, Product Attributes, and Perceived Quality in Competitive Two-Wheeler Markets of India, Serbian Journal of Management, 5(1):21-38.
- 2. Chase, R., Jacobs, R., Aquilano, N., (2004) Operations Management for Competitive Advantage. Irwin: McGraw Hill.
- 3. Crosby, P., (1979) Quality is Free: The Art of Making Quality Certain. New York: McGraw-Hill.
- Dedhia, N. S., (1995) Survive Business Challenges With the Total Quality Management Approach. Total Quality Management, 6(3):265-272.
- 5. Evans, M., Bourne, P. Neely, A., (2004), An exploratory study of performance measurement systems and relationships with performance results. Journal of pertains Management, 22: 219-232.
- 6. Feigenbaum, A.V., (1986) Quality: The Strategic Business Imperative. Quality Progress, 19(2):26-30.
- 7. Foster, S.T., (2004) Managing Quality An Integrative Approach. New Jersey: Pearson Education Inc.
- Hanson, J., Eriksson, H., (2002), The impact of TQM on financial performance. Measuring Business Excellence, 6(2):44-54.
- 9. Kaplan, R. S., Norton, D. P., (2001), The Strategy Focused Organization: How Balanced Scorecard Enterprises Thrive in the New Business Environment. Boston: Harvard Business School Press.
- Laguna, M., Marklund, J., (2005), Business Process Modelling: Simulation and Design. New Jersey: Pearson education
- Önsel Ş, at al., (2008), A new perspective on the competitiveness of nations. Socio-Economic Planning Sciences, 42(4):221-246.
- Rao, A., Carr, P., Dambolena, I., Kopp, J., Martin, J., Ralfi, F., Schlesinger, F., (1996), Total Quality Management: A Cross Functional Perspective. New York: John Wiley & Sons.

NO.- 2

In order to gain sustainable competitive advantage, quality

Journal of MLRSM

VOLUME-VII

