



Role of SMEs in Indian Economy and TQM

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SMEs play a very important role in the economy of any country and it is more so in a developing country like India. They play a role in boosting the economy of a country. The role of small and medium enterprises in the economic and social development of the country is well established. It contributes almost 40% of the gross industrial value added in the Indian economy.

This paper would study the role of SMEs in Indian Economy and its contribution to the economic development of the country as a whole. This paper attempts to identify the importance of factors and sub factors for the successful implementation of Total Quality Management (TQM) in Small and Medium Enterprises (SMEs) in India.

Keywords: SMEs, Indian economy, Total quality management

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Introduction

SME is the abbreviation for Small and Medium Enterprises. These enterprises can be rightly called as the backbone of the GDP of India. The SME sector in India is growing at an exceptionally fast rate due to which it is proving to be beneficial to the Indian Economy.

The small and medium enterprises today constitute a very important segment of the Indian economy. SMEs sector has emerged as a dynamic and vibrant sector of the economy. The Indian economy is expected to grow by over 8 per cent per annum until 2020 and can become the second largest in the world, ahead of the United States, by 2050, and the third largest after China and the United States by 2032.S

The good part is that it is employing close to 40 % of India's workforce and contributing 45% to India's manufacturing outputs, SMEs plays a critical-roll in generating millions of jobs, especially at the low skill level. The country's 1.3 million SMEs account for 40% of India's total exports. The bad thing is that SMEs in India due to their low scale and poor adoption of technology, have very poor productivity.

India's workforce only contributes 17% of GDP. (Malini Goyal, ET Bureau June 9, 2013, 05.00 AM IST).

Increasing competition on the marketplace has forced enterprises to seek solutions to stay competitive. Accordingly, many enterprises attempt to adopt and implement a set of operation management practices that help them to improve the efficiency of operations and processes. One of these operation management practices is TQM which has received great attention from both academics and practitioners in the last two decades [1, 2].

Successful implementation of TQM can bring many benefits into the organization, including improved employee involvement, improved communication, increased productivity, improved

quality and less rework, reduced costs of poor quality, increased market share and profit, higher flexibility, increased employees and customer satisfaction, and improved competitive advantages. However, in practice, TQM implementation is considered to be a complex and difficult process and these benefits are not easy to achieve. Evidence suggests that many enterprises have failed to implement TQM successfully [3]. Accordingly, research on the Critical Success Factors (CSFs) for TQM implementation is needed

2. DEFINITION OF SME-

SME's are the engines of growth of any country's economy. They are an essential source of a country's jobs, create entrepreneurial spirit and jobs in a country and are crucial for fostering competitiveness and employment. According to new the Micro, Small & Medium Enterprises

Service Sector

Enterprises	Investment in equipment's
Micro	less than Rs. 10 lakhs
Small	over Rs. 10 lakh but not exceeding Rs. 2 crores
Medium	over Rs. 2 crore but not exceeding Rs. 5 crores

Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) definitions are follow: In the case of enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the schedule to the industries (Development and Regulation) Act, 1951, as

Definition of MSME for manufacturing and service sector

1. Service Enterprises: The enterprises investment in plant and machinery micro enterprises does not exceeds ten lakh rupees: small enterprises more than ten lakh rupees but does not exceed two crore rupees but does not exceed crore rupees.

2. Manufacturing Enterprises: The manufacturing sector enterprises investment in plant and machinery micro enterprises does not exceeds twenty five lakhs rupees, small enterprises more than twenty five lakh rupee but does not exceed five core rupee and medium enterprises more than five core rupees but does not exceed ten core.

Manufacturing Sector

Enterprises	Investment in plant & machinery
Micro	less than Rs 25 lakhs

Small	over Rs 25 lakhs but not exceeding Rs 5 Crores
Medium	over Rs 5 Crores but less than Rs 10 Crores

Following are some of the

current figures related to the SME sector in India:

- The contribution of the SME sector to the entire output of the country is 45%
- SMEs total contribution in GDP is 17%.
- These SME units contribute 40% to the Indian Industrial Export.

Following are some of the factors that have contributed to the growth of SME sector in India.

- SME units in India are being funded by foreign and local fund providers.
- The advancement in technology has also contributed highly to the SME sector. There are numerous business directories and trade portals available online that contains a rich database of manufacturers, sellers and buyers
- To start and maintain these units, minimal investment is required.
- These SME units are now being funded by many government and private banks.
- The SME sector is one of the greatest contributors of domestic production as well as the export earnings. Many major mergers have taken place recently.

With the recent pronouncement of the MSMED Act, 2006, the Indian government has explicitly recognized the dynamic role to be played by the MSMEs in an increasingly globalized world.

The clear thrust of the recent policy initiatives has been three-fold:

- i) enhance competitiveness through encouraging an innovative ethos amongst firms and being quality conscious;
- ii) increase links with multiple stakeholders with a view to benefit from networks both nationally and globally; and
- iii) strive for a larger market presence beyond the domestic.

The policy attaches importance to networking with stakeholders both upstream and downstream in the entire global value chain, from raw material procurement to processing/manufacturing to marketing to customer services. For one thing, the Act has identified the category of 'medium' enterprises as a vital

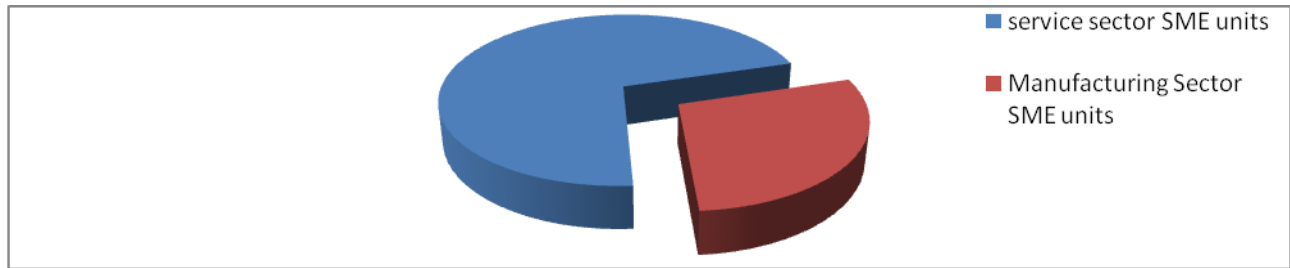
section in the manufacturing stream and, for the other, it has taken special note of distinct roles to be played by what are termed business service enterprises .

(Source:MSME online Govt. of Tamil Nadu)

SMEs IN INDIA: PRESENT SCENARIO

As per the All India census of MSME 2006-2007, there are 26.1 million MSME employing 60 million people. Out of the total MSME units, 7.45 million units are in manufacturing sector comprising 28.56% while 18.65million units belongs to service sector which is a staggering 71.44%.

They are the major creator of employment, creating 1.13 million jobs per annum. As regarded the contribution of MSME to the Indian economy, 40% of exports and 45% of industrial output are coming from this sector.



Source:SME Development Chamber OF India

IMPORTANCE OF SME

The opportunities of growth in the SMEs sector are enormous due to the following factors: 1.

Less Capital Intensive

2. Extensive Promotion & Support by Government

3. Reservation for Exclusive Manufacture by small scale sector 4. Project Profiles

5. Funding - Finance & Subsidies

6. Machinery Procurement

7. Raw Material Procurement

8. Manpower Training

9. Technical & Managerial skills

10. Tooling & Testing support

11. Reservation for Exclusive Purchase by Government

12. Export Promotion

13. Growth in demand in the domestic market size due to overall economic growth

14. Increasing Export Potential for Indian products

15. Growth in requirements for ancillary units due to the increase in number of green-field units coming up in the large scale sector.

CHALLENGES FACED BY SME:

Despite its commendable contribution to the Nation's economy, SME Sector does not get the required support from the concerned Government Departments, Banks, Financial Institutions and Corporate, which is a handicap in becoming more competitive in the National and International Markets.

SMEs faces a number of problems –

- Absence of adequate and timely banking finance,
- Limited capital and knowledge, non-availability of suitable technology,
- Low production capacity,
- Ineffective marketing strategy,
- Identification of new markets,
- Constraints on modernization & expansions,
- Non availability of highly skilled labor at affordable cost,
- Follow-up with various government agencies to resolve problems etc.

3. TQM

TQM has become the major business strategy in contemporary management and has been widely implemented throughout the world [3]. TQM is an integrative management philosophy which highlights the need to improve the processes, products and services to achieve and exceed customer expectations [4, 5] and hence to help enterprises to achieve their business objectives...

In spite of various success stories of quality management, still the concept of TQM has not been really adopted by SMEs working in the developing countries (Deshmukh and Lakhe, 2010). The key reason for not appropriate use of TQM in SMEs are, lack of sources and information on TQM, specially oriented to SMEs, lower level of awareness and understanding and cost constraints (Wilkson, 1994; Taylor, 1996).

Literature shows that, SMEs have enjoying the benefits by implementing TQM (Ahir and Gollar, 1999, Lewis, et al., 2005). Kalpande et al., (2012) has focused on framework or TQM model suitable for SMEs working in the industrially week regions. He has also focused on the identified attributes suitable for such SMEs. According to Deshmukh and Lakhe, (2010) the 67.5% SMEs of central Indian manufacturing industries are aware of the quality tools like six sigma, but very low use of these tools are found in their respective organizations. Goblell and Shea, (1995) survey report found that stated reasons for espousing TQM in SMEs are support of growth, (TQM as a marketing tool) changing expectations of customer, improving poor company performance and consistent with management style. Ahir and Goller, (1999) concluded that TQM implementation in SMEs „represents a good strategy to execute quality management practice in an integrated manner“.

Total quality management (TQM) is often regarded as a philosophy that aims to achieve customer satisfaction through continuous improvement and teamwork. The transformation towards TQM is coupled with its spread, from the manufacturing to the service sector, large scale industries to the small and medium scale industries (Chin, et al., 2002). Implementation of TQM becomes a top management agenda in many organizations in the pursuit of positive business benefits, such as better product quality, higher customer satisfaction and less quality costs. There have been several approaches and models suggested for the TQM introduction and implementation (Tan, 1997). Study report found that many organizations launched TQM programs have gained positive results (Hua, et al., 2000; Pun, 2001).

3.1 Critical Factors of TQM Implementation

The organizational requirement for successful implementation of TQM is through the identification of critical success factors (CSF). To establish empirically validated factors that influence successful implementation of TQM. It needs to be a totally integrated, continuous and open system based on the commitment from top management and employees, as well as the communication with customers (Chin et al., 2000; Tan, 1997). Saraph et al., (1989) proposed measures of overall organizational quality management for both manufacturing and service firms and identified 120 organizational requirements (prescriptions) or effective quality management. Through a judgmental process of grouping similar requirements, these prescriptions were grouped into eight separate categories. These eight categories reflected the prescription of all or nearly all of the quality gurus.

3.2 Team Processes

A team is a group of individual each with specific skills and knowledge of interests that permit the member to contribute to the achievement of common purpose. Number of team registered,

number of problem solved to number of problem undertaken and net saving in rupees by implementing the improved method suggested by team, can be considered as indicators to measure the performance of team activities (Crosby, 1979; Deming, 1982; 1986; Ishikawa, 1985; Juran and Gryna, 1988; Feigenbaum, 1991). Being its sub factor i.e. number of team activities (NT), perceived effectiveness of team process (ET) and outcomes of team activities (OT) is as an essential element for achieving TQM implementation.

3.3 Internal Customer Focus

Each employee/department is a customer for output from another employee/department and in turn has a customer to whom he provides output. This concept shows that the quality becomes an individual responsibility. Percentage of staff aware about the concept of internal customer (CI), the service received from internal supplier and percentage of staff satisfied with the quality service (QI), average no. of awareness programs conducted for internal customer (AI) are considered to measuring the components focus on in-house customer (Juran and Gryna, 1988). These functions are as a vehicle to integrate quality requirements with business.

3.4 Use of Data

Quality information programs utilize the data as a fundamental factor in the organization and the company information system which using the information to the measurement and the control of the important areas that impact quality control permanent remedial action (Feingenbaum, 1991). Total percentage of staff trained in use of data (ED), number of case in which the data is used for analysis and decision making i.e. application of data (AD), no of evidences where the past decisions are alerted due to the use of data i.e. impact of deviation on decision made (ID), can be used as a indicator for mapping the emphasis on the use of data (Crosby, 1979; Deming, 1982, 1986; Ishikawa, 1985; Juran and Gryna, 1996;).

3.5 Common Understanding Of Quality

Quality awareness also be-improved by involving all employees to enables company to make products of quality which could complete successfully in the market-place. The need is to extend training in quality related matter to personnel in all function (Juran and Gryna, 1988). Percentage of staff, aware of the concept of quality (CQ), ability to understand and express customers' needs (UC) and average no of training programs conducted to improve quality awareness (TQ) are considered as a indicators for measuring quality awareness among employees (Feingenbaum, 1991).

3.6 Understanding Customer Need

The needs of all customers have to be met, and the product / service features should be responsive to those needs. This applies to both external and internal customers. In this case of external customers, product salability and in case of internal customers, the response determines the company's competitiveness in productivity, quality etc. as well as the state of morale among internal departments. To measure this concepts, three measures are used i.e. percentage ability to express customer needs (EC) in terms of international activities objectives related to quality and its evaluation by audits and management review to create and maintain a continuous improvement. For measuring these components, the number of measures are used which includes, percentage of total number of processes documented (PD); the percentage of employees awareness about the organizational process as well as documentation (AP) and percentage clarity of the undocumented aspects/features of the processes (UF).

3.7 Supplier Partnership

The secure quality improvement, it is very necessary to achieve teamwork relationship with suppliers. To understand the standing of relationship with the supplies, the three measures can be used (Juran and Gryna, 1988; Feingenbaum, 1991).

- a. Financial and technical help renders to suppliers (HS) in terms of rupees;
- b. Numbers of suppliers continued (SC) in last three years; and
- c. Average number of seminar organized (SO),

3.8 Understanding Organization Processes

Documentation is an important tool to understand the organization process. The major two reasons shows the importance of appropriate documentation, first to achieve the company's Objectives related to quality and its evaluation by audits and management review to create and maintain a continuous improvement. For measuring these components, the number of measures are used which includes, percentage of total number of processes documented (PD); the percentage of employees awareness about the organizational process as well as documentation (AP) and percentage clarity of the undocumented aspects/features of the processes (UF).

3.9 Quality Improvements Techniques

Number of improvement techniques used; organization of number of training programs to educate the staff, in use of various numbers of technique of improvement and total percentage of staff trained may be used as an indicator to know the understanding of techniques of development (Crosby, 1979). The techniques for improvement are grouped in four categories, which are- Management methods (PDCA, DDA- Departmental purpose analysis, cost-benefit analysis, Poka-yoke, Potential problem analysis, Benchmarking, QFD- (Quality function deployment), Pareto analysis, Analytical and systematic methods (critical path analysis (CPA), cause and effect diagram, failure mode and effect analysis, fault tree analysis, Tolerance design and Taguchi method etc.), Idea Generation (idea writing, opportunity analysis, buzz group, brainstorming, lateral thinking) and Data collection and analysis with display (bar chart, „P“ chart, check sheet, flow chart, scatter diagram, histograms etc.). The sub factor i.e. application of number of techniques. (AT), Training in Use of a variety of techniques (TT), and Percentage of Staff trained (ST) helps organization to evaluate the achievements and monitor continuous improvement efforts moving to the right direction. (Specification); percentage of budget spent on identifying customer needs (BC); and average no. of training programs conducted (TC) to know customer needs (Feingenbaum, 1991).

Conclusion

To survive in this intensely competitive market, strategies need to be reinvented by the entrepreneurs for venture management. Strategic partnership and strategic alliances have become compelling for the entrepreneurs to achieve success in the existing enterprises.

Study reports (Sandesara, 1993; Chadha, 1995) shows that in India numbers of SMEs are increasing every year. In spite of this, it is also observed that many SMEs are sick and some are close down. It is felt that, the main problem of those SMEs were the low quality of their product and rise in competition in the market. To overcome this situation, SMEs need to adopt a policy of meeting needs of customer through continuous improvements. It is expected that the policy and practice of TQM would help in achieving this.

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