

## Understanding Total Quality Management in context: International and Indian Service Industry (A literature review)

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### ABSTRACT

With the accelerated pace of change the organizations are striving towards delivering product and services better than their known competitor. This is essential for their survival and sustainability. In this era of rapid changes, acquisitions and mergers, fast product changes, increasing customer demands, global pressures, information technology, the organizations need to continuously measure and monitor the quality delivered to the end customer. The ever changing demands of customers further makes the organizations working as a complex job. While, the future trends in the manufacturing can be predicted, but for the services it becomes difficult to predict on account of factors like perishability, heterogeneity, and intangibility. In such a scenario TQM becomes important. The orientation towards TQM helps in dealing with not only external pressures (customers, suppliers and distributors/dealers etc) but also with in organization (internal employees).

Further, Today's economies are dominated by service industries; typically Indian GDP has more percentage of services as compared to manufacturing ([www.indianbusiness.nic.in](http://www.indianbusiness.nic.in)). This accelerated rise in this sector is mainly derived from the pressures of liberalizations and privatization. For example, the education, fast foods, retails, telecommunications, transportation and banking sectors have shown higher growths in the past decade

The review of literature highlighted that the studies towards service sector in India are very few. In the developing economies of India, where services contribute a major portion of Indian GDP, the management can't be left on the chance; rather there is a need for its systematic management. In this light the present paper gains importance.

Further, the present paper is proposed to study the drivers of TQM in the context of Indian service industries. The present paper is an attempt to highlight challenges and opportunities in Indian service sector. This paper will benefit researchers and practitioners to suggest the directions for growth and also it will help in identifying the areas of weakness and the ways for improvements.

**Key words:** Total, Quality Management, Services , research agenda.

### INTRODUCTION

With the accelerated pace of change in the 21st Century as a result of technological opportunities, liberalization of world markets, demands for innovation, quality and speed, both manufacturing and service organizations need to readjust and realign their operations to counter all these challenges. This pace of change has increasingly forced organizations to be more outward looking, market oriented and knowledge driven. Useful tool that can help businesses build

strong capabilities, and establish true competitive gaps is total quality management. In this era of vertical integrations, mergers and acquisitions the organizations gain strategic advantage with total quality management (TQM), continuous improvement, business re-engineering.

Today's economies are dominated by service industries; typically Indian GDP has more percentage of services as compared to manufacturing ([www.indianbusiness.nic.in](http://www.indianbusiness.nic.in)). This accelerated rise in this sector is mainly derived from

the pressures of liberalizations and privatization. For example, the education, fast foods, retails, telecommunications, transportation and banking sectors have shown higher growths in the past decade.

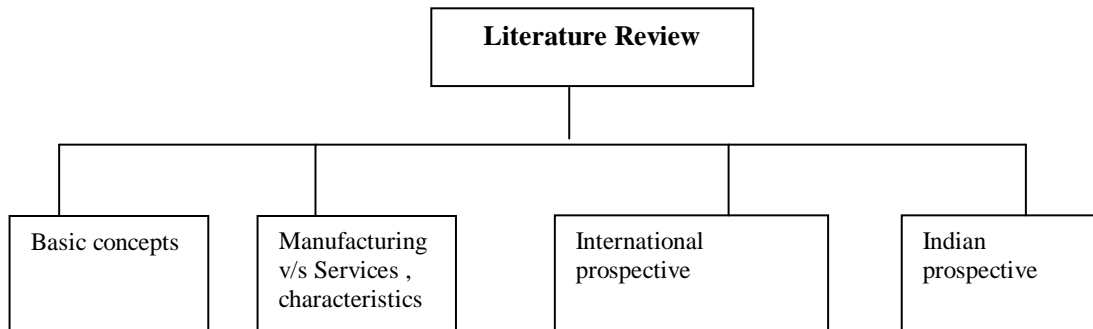
Specifically, the education system in the country saw a revolution with the emergence of a whole new class of education providers, including private institutes, distance education providers, self-financing courses in public institutions, foreign education providers etc. The system of higher education in India has seen an impressive growth since independence. The total enrollment increased from a merely 0.1 Million in 1947 to phenomenal 10.5 Million in 2005-06 ([http://www.reportbuyer.com/public\\_sector/education/education\\_services\\_market\\_india\\_2007.html](http://www.reportbuyer.com/public_sector/education/education_services_market_india_2007.html)). With intense competition in this industry today, "simply meeting or beating past performance will not result in the level of improvement necessary to remain competitive" (Harrington & Harrington, 1996).

Similarly in the banking sector, publicly owned banks handle more than 80% of the banking business and the rest is in the hands of private sector banks. The impacts of globalization and privatization have revolutionized the banking sector in the terms of global reach, transactions over net etc. Globalization has offered a number of advantages to the banking sector in India.

In such a dynamic environment, TQM seems to be one of the powerful techniques to deal with not only challenges of the market but also internal employees and stake holders. In this light the present research is an attempt to study TQM in Indian service environment, with an approach of assessing its linkages with performance.

### Literature Review

The literature for the present problem has been classified as shown in Figure 2.1.



**Fig. 2.1: Classification of literature**

#### a) Basic concept

The concept of Total Quality Management (TQM) was developed by an American, W. Edwards Deming, after World War II for improving the production quality of goods and services. TQM is a holistic system of management.... It is a synthesis of a number of discrete principles of managing into a discipline intended to promote continuous business improvement, so that companies may: become more innovative, by anticipating and creating new market opportunities and devising new products and better ways of producing; increase

efficiency by economizing on costs while also improving product quality; respond more rapidly to change Hill (1991). Researchers, since past advocated for quality management systems and their linkages with performance and productivity (Deming 1986; Anderson et al., 1994). Several studies were conducted to highlight the linkages of TQM with competitiveness, satisfaction, retention and loyalty. While there have been numerous studies pertaining to manufacturing sector, very few studies are seen on the applicability of TQM principles to service sector. Further, rapidly changing business

scenario in India demands for a continuous monitoring and control of environment, under this applicability of TQM principles further gains

importance. Some of the typical changes in the business scenario are presented in Table 1 below.

**Table 1: Typical changes in the business scenario**

	Past	Now
Organization	Hierarchy	Network
Focus	Profits and efficiency	Innovation & customer satisfaction
Structure	Independent	Team work
Worker Expectations	Security	Growth with self satisfaction
Market	Domestic	Global
Advantages	Cost	Time
Culture	Compliance & Tradition	Commitment & Result

Total Quality Management, which was initially developed as strategic option for manufacturing industries, means adopting a philosophy of continuous improvement and of putting the customer first. However, the concept is now being widely and successfully implemented in service industries.

The service sector is difficult to define and to encompass. There are a number of ways to identify the sector, its divisions, its industries, and the types of jobs within them. The general category of the service division includes a wide variety of industries, but can be categorized into primarily consumer-oriented (providing a service directly to a consumer), primarily business-oriented (providing a service directly to another business) or mixed (providing services to both businesses and individual consumers).

The tertiary sector of industry (also known as the service sector or the service industry) is one of the three main industrial categories of a developed economy, the others being the secondary industry (manufacturing), and primary industry (extraction such as mining, agriculture and fishing). Services are defined in conventional economic literature as "intangible goods". According to some economists, the service tends to be wealth consuming, whereas manufacturing is wealth producing. Sir Keith Joseph in his lecture *Monetarism IS Not Enough*, contrasted wealth

producing sectors in an economy such as manufacturing with the service sector, which tends to be a wealth-consuming sector. He contended that an economy declines as its wealth-producing sector begins to shrink.

The tertiary sector of industry involves the provision of services to businesses as well as final consumers. Services may involve the transport, distribution and sale of goods from producer to a consumer as may happen in wholesaling and retailing, or may involve the provision of a service, such as in pest control or entertainment. Goods may be transformed in the process of providing a service, as happens in the restaurant industry. However, the focus is on people interacting with people and serving the customer rather than transforming physical goods. Since the 1960s, there has been a substantial shift from the other two industry sectors to the Tertiary Sector in industrialized countries. The service sector consists of the "soft" parts of the economy such as insurance, government, tourism, banking, retail and education. In soft sector employment, people use time to deploy knowledge assets, collaboration assets, and process-engagement to create productivity (effectiveness), performance improvement potential (potential) and sustainability. Typically the output of this time is content (information), service, attention, advice, experiences, and/or discussion (aka, "intangible goods").

### **b) Manufacturing v/s Services**

TQM in the manufacturing sector is not too different from that in the service sector. The key focus of TQM in the service industry continues to be on man, material and resources as in manufacturing. However in case of services, there is a greater emphasis on management as against manufacturing where production is more crucial to the system. Finally, the application and the impact of TQM in service companies is faster than manufacturing companies as there are no gestation periods involved.

Numerous researchers debated on various issues pertaining to manufacturing and services these include the existence of product and its features. On the other side service is basically intangible. Zeithaml (1985), highlighted some typical characteristics of services these include a) Intangibility, b) perishability c) heterogeneity d) inseparable. Further, the researchers (Parasuraman *et al.*, 1988; Mentzer *et al.*, 2001) highlighted that even the perceptions about the services change over time. This makes the management of services more complex. While there have been studies in the manufacturing sectors, very few have explored services contexts.

The services literature highlights differences in the nature of services versus products, which are believed to create special challenges for services marketers and for consumers buying services. To help understand these differences a number of characteristics that describe the unique nature of services have been proposed. These characteristics were first discussed in the early services marketing literature and are generally summarised as intangibility, inseparability, heterogeneity and perishability (Regan, 1963; Rathmell, 1966; Shostack, 1977; and Zeithaml *et al* 1985).

Although there has been debate on the effectiveness of the four characteristics in distinguishing between products and services (e.g. Regan, 1963; Shostack, 1977; Onkvisit and Shaw, 1991) these are nevertheless widely accepted by scholars and marketers (e.g. Zeithaml, 1981, 1985; Levitt, 1981) and used both as the basis for examining services buyer behavior and developing

services marketing strategies. It is, therefore, important to establish the extent to which these characteristics reflect the perspective of the consumer. A US-based study by Hartman and Lindgren (1993) found that consumers did not use the four characteristics in distinguishing between products and services. However, the narrow geographic focus and coverage of Hartman and Lindgren's study (one mid- Western town) is believed to limit scope for generalization and to provide justification for a replication conducted in a European context.

### **c) International prospective**

With this accelerated pace of change the organizations are striving towards delivering product and services better than their known competitor. This is essential for their survival and sustainability. In this era of rapid changes, acquisitions and mergers, fast product changes, increasing customer demands, global pressures, information technology, the organizations need to continuously measure and monitor the quality delivered to the end customer. The ever changing demands of customers further makes the organizations working as a complex job. While, the future trends in the manufacturing can be predicted, but for the services it becomes difficult to predict on account of factors like perishability, heterogeneity, and intangibility. In such a scenario TQM becomes important. The orientation towards TQM helps in dealing with not only external pressures (customers, suppliers and distributors/dealers etc) but also with in organization (internal employees).

Over the last two decades, many organizations around the world have adopted Total Quality Management (TQM) in some form. For instance companies such as Motorola, Ford, Xerox, Federal Express, Proctor and Gamble and others have adopted corporate strategies with TQM as guiding principle.

The literature suggests that TQM is a management approach for improving organizational performance that encompasses a variety of topics both technical and behavioral. For instance Deming (1986) prescribed TQM in 14 points, which he claimed to be a set of principles to remain competitive in providing products and services.

Table 2: Select suggested measurements of TQM

Author /(year)	Saraph <i>et al.</i> , (1989)	Flynn <i>et al.</i> , (1994)	Powell (1995)	Ahire <i>et al.</i> , (1996)	Black & Porter (1996)	Dow <i>et al.</i> , (1999)	Rahman (2000)
Suggested	Top management Leadership	Top management support	Committed leadership	Top management commitment	Corporate quality culture	Workforce commitment	Leadership
Dimensions	Role of quality department	Quality information	Adoption & communication of TQM	Supplier quality management	Strategic quality management	Shared vision	Information and analysis
	Training	Process management	Closer Customer relationships	Supplier performance	Quality improvement measurement systems	Customer focus	Strategy and planning
	Product/service design	Product design	Closer supplier relationship	Customer focus	People & customer management	Use of teams	Employee empowerment & involvement
	Supply quality management	Workforce management	Benchmarking	SPC usage	Operational quality planning	Personnel training	Employee training & development
	Process management	Supplier involvement	Increased training	Benchmarking	External interface management	Cooperative supplier relations	Customer management
	Quality data & reporting	Customer involvement	Open organization	Internal quality information usage	Suppliers	Use of benchmarking	Customer satisfaction
	Employee relations	Employee empowerment	Employee involvement	Teamwork structures	Use of advanced manufacturing systems	Design quality management	Process control
			Zero-defects mentality	Employee training	Customer satisfaction orientation	Use of JIT principle	
			Flexible manufacturing	Design quality management	Communication of improvement information		
			Process improvement measurement	Employee empowerment			

Anderson (1994) studied these principles and developed a conceptual framework for TQM using seven concepts, which include visionary, leadership, internal and external cooperation, learning process management, continuous improvement, employee fulfillment, and customer satisfaction.

Based on this basic frame work the subject of TQM has been explored by several researchers and as a result they suggested various attributes and frameworks for this. Table 2 presents a select compilation of some of these measurements.

#### **d) Indian prospective**

In the developing economies of India, where services contribute a major portion of Indian GDP, the management can't be left on the chance; rather there is a need for its systematic management.

Service Sector in India today accounts for more than half of India's GDP. According to data for the financial year 2006-2007, the share of services, industry, and agriculture in India's GDP is 55.1 per cent, 26.4 per cent, and 18.5 per cent respectively. The fact that the service sector now accounts for more than half the GDP marks a watershed in the evolution of the Indian economy and takes it closer to the fundamentals of a developed economy.

Services or the "tertiary sector" of the economy covers a wide gamut of activities like trading, banking & finance, infotainment, real estate, transportation, security, management & technical consultancy among several others. The various sectors that combine together to constitute service industry in India are:

- Trade
- Hotels and Restaurants
- Railways
- Other Transport & Storage
- Communication (Post, Telecom)
- Banking
- Insurance
- Dwellings, Real Estate
- Business Services
- Public Administration; Defence
- Personal Services
- Community Services
- Other Services

There was marked acceleration in services sector growth in the eighties and nineties, especially in the nineties. While the share of services in India's GDP increased by 21 per cent points in the 50 years between 1950 and 2000, nearly 40 per cent of that increase was concentrated in the nineties. While almost all service sectors participated in this boom, growth was fastest in communications, banking, hotels and restaurants, community services, trade and business services. One of the reasons for the sudden growth in the services sector in India in the nineties was the liberalization in the regulatory framework that gave rise to innovation and higher exports from the services sector.

The boom in the services sector has been relatively "jobless". The rise in services share in GDP has not accompanied by proportionate increase in the sector's share of national employment. Some economists have also cautioned that service sector growth must be supported by proportionate growth of the industrial sector, otherwise the service sector grown will not be sustainable. In the current economic scenario it looks that the boom in the services sector is here to stay as India is fast emerging as global services hub.

In such a dynamic environment, TQM seems to be one of the powerful techniques to deal with not only challenges of the market but also internal employees and stake holders. In this light the present research is an attempt to study TQM in Indian service environment, with an approach of assessing its linkages with performance.

The progress of the TQM movement in India has been very satisfactory. Most Indian companies in the cluster have taken lesser time in adapting to change than I had expected. If these cluster companies continue the TQM effort for a few more years, they will become eligible to secure international recognition of the kind brought by the Deming Prize and others. However, the movement needs to expand its scope to include a wider number of industries and sectors, to have any real impact. Not too many companies in the subcontinent are on the goal-pursuing path.

Although the speed of change and learning is on the higher side in Indian companies, the



Europeans are much stronger when it comes to operations. Some of the more glaring difference is with respect to attitudes. Where most Japanese companies have started thinking in terms of taking responsibility and looking for corrective measures when things go wrong, shirking responsibility is very common place in case of Indian companies. We are attempting to change the "I am not responsible" attitude to "I am responsible and I have to do something about it," attitude, in the case of the TQM cluster companies in India.

#### Outcome of literature

The literature review is carried out by studying various journals and books.

The review of literature highlighted that the studies towards service sector in India are very few. In the developing economies of India, where services contribute a major portion of Indian GDP, the management can't be left on the chance; rather there is a need for its systematic management. In this light the present paper gains importance.

#### CONCLUSION

The present study is proposed to study the drivers of performance in the context of select service industries and establish the linkage with TQM practices. The adoption of TQM practices into service industries continues to be slow and controversial among the some community. Some community view TQM as a new management fad that does not have universal application, while others see it as a major paradigm shift.

TQM proponents believe that TQM creates more effective and efficient business processes, with improvements undertaken on a continuous basis by all employees in an organization. However, the culture of an organization and restraining forces in the change process can act as barriers to the implementation of TQM and this would be no different in service industries. Furthermore, Indian service industries are more accustomed to the traditional Quality

This paper will help in further understanding of the subject along with initial identification of dimensions.

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