

## Total Quality Management Adoption in the Industry

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### Abstract

The basics of TQM is understanding and fulfilling of customer expectations in the best manner possible. Customer satisfaction and continuous improvement are essential ingredients of TQM. However, it is observed that implementation and benefitting from the success of TQM is a time-consuming process. It is a company-wide activity requiring the participation and involvement of all the employees, including the top management. In India, there are several companies that have secured the benchmark TQM awards like the Dr Deming award. There needs to be persistent and continuous efforts on the part of all stakeholders to achieve this TQM pinnacle of excellence. Though there are regular winners of the Deming award from India, it is noticed that not many companies are venturing into the TQM domain. Is it because of the long time duration that it consumes or is it because of the apprehension that TQM is not easily achievable? These are some of the questions that are being addressed in this research paper.

**Keywords:** *Total Quality Management, Adoption*

### Introduction

Quality in products and services is envisaged by every customer. It is imperative for businesses to continuously keep producing quality products and rendering quality services that the consumers will make use of. The decade in the 1980s was a period of remarkable change and growing awareness of quality of consumers, industry etc. Businesses agree that increased attention to quality is vital for their survival. Consumers are more prepared than before to compare, evaluate and choose products critically for total value like quality, price and serviceability. The real challenge today is to ensure that managers do not lose sight of the basic principles on which quality management and performance excellence are based. In Xerox, they say that "Quality is a race without a finish" line". A popular phrase at Toyota Motor Company is "change or die". The global marketplace and domestic and international competition have made organizations around the world realize that their survival depends on high quality. Many countries are mounting national efforts to increase quality awareness.

Quality control techniques were developed in the early 20<sup>th</sup> century, when methods of inspection to improve and maintain quality were gradually separated from production techniques. The significant difference between early and late 20<sup>th</sup> century quality approaches was the development of the concept of "total quality" as applied to every area of an organization, not just the operations functions. In the early 21<sup>st</sup> century, the emphasis has been placed on bringing quality improvement to the "bottom line" results by alignment of quality objectives with organizational goals.

### Dimensions of Quality

The key dimensions of **product** quality are as follows

- a) **Performance:** a product's primary operating characteristics.
- b) **Features:** the "bells and whistles" of a product.
- c) **Reliability:** the probability of a product surviving over a specified period of time under stated conditions of use.
- d) **Conformance:** the degree to which physical and performance characteristics of a product match pre-established standards
- e) **Durability:** the amount of use one gets from a product before it physically deteriorates or until replacement is preferable.
- f) **Serviceability:** the speed, courtesy, and competence of repair work. Well-designed and spacious central gathering area by base lifts to speed access.
- g) **Aesthetics:** how a product looks, feels, sounds, tastes, or smells.

Similarly, some of the key dimensions of **service** quality are:

- a) **Reliability:** the ability to provide what was promised, dependably and accurately.
- b) **Assurance:** the knowledge and courtesy of employees, and their ability to convey trust and confidence.
- c) **Tangibles:** the physical facilities and equipment, and the appearance of personnel. Tangibles include attractive facilities, appropriately dressed employees, and well-designed forms that are easy to read and interpret.
- d) **Empathy:** the degree of caring and individual attention provided to customers. Some examples might be the willingness to schedule deliveries at the customer's convenience, explaining technical jargon in layperson's language, and recognizing regular customers by name.
- e) **Responsiveness:** the willingness to help customers and provide prompt service.

There are numerous examples of organizations that have succeeded subsequent to the adoption of quality efforts. A few examples are shown below

Xerox and its Customers

Xerox corporation is an American MNC dealing with print and digital solutions which made a remarkable turn-around in quality in the 1990's. This is a lesson in management commitment and focus. Xerox did this by developing core principles of quality, which were

- 1) a focus on customer satisfaction;
- 2) striving for continuous improvement; and
- 3) encouraging the full involvement of the workforce by their three objectives of *Leadership through Quality*, which are:
  - Quality improvement is everyone's job.

- Meeting the needs of internal and external customers is essential.
- Management and work processes that focus on continuous improvement and customer requirements become a way of life.

Also, the new Lean Six Sigma endeavor at Xerox differs from earlier initiatives while it still incorporates the "old" Leadership through Quality approach. It places a new emphasis on:

- 1) Customer-focused employees
- 2) Participation and teamwork to attain speed and agility
- 3) Alignment of individual goals and plans with corporate objectives and results
- 4) Work processes that are customer-focused and with results built on quality measurement
- 5) Communication and knowledge sharing for improvement

The lessons that are evident in this experience are that excellence in quality requires excellence in management, that you "can't take your eye off the ball" if you aspire to high levels of quality, and that new competitive challenges require new approaches. By saying that *Quality is a race without a finish line*, a slogan that Xerox management has recently revived, there is a focus on two things:

- a) Quality must not be just a "program" (which fades out in a year or two) and
- b) To embrace the idea of continuous improvement (people must assume that there will always be better ways to do things.)

For Xerox, this includes communication, becoming a learning organization, and continuing to use benchmarking, a concept in which the company was a pioneer. The significance to Xerox or any organization is that if you continue to do things the same way, you will soon be behind the competition, if they are making continuous improvements and you are not.

### The Customer and Business

Wal-Mart, reputed as the best retail company in the United States believes in the philosophy "Every customer has to be treated like your mother, your father, your sister, or your brother".

Noriaki Kano, a Japanese professor, has suggested three classes of customer requirements:

- a.) **Dissatisfiers**—Requirements that are *expected* in a product or service. If these features are not present, the customer is dissatisfied.
- b.) **Satisfiers**—Requirements that customers say they want, but secretly do not expect. Fulfilling these requirements creates satisfaction.
- c.) **Exciters/delighters**—New or innovative features that customers do not expect. The presence of unexpected features leads to high perceptions of quality.

### Leading practices of customer-focused quality by organizations:

- They clearly define key customer groups and markets, considering competitors and other potential customers, and segment their customers accordingly.
- They understand both near-term and longer-term customer needs and expectations (the voice of the customer) and employ systematic practices for listening and learning from customers.
- They understand the linkages between the voice of the customer and design, production, and delivery processes.

- They build relationships with customers through commitments that promote trust and confidence, provide easy accessibility to people and information, set effective service standards, train customer contact employees, and effectively follow-up on products, services, and transactions.
- They have effective complaint management processes by which customers can easily comment, complain, and receive prompt resolution of their concerns.
- They measure customer satisfaction, compare the results relative to competitors, and use the information to evaluate and improve internal processes. Examples of each of these can be found in the text.

### International Quality Awards

There are several international quality awards in vogue, the most prominent among them being the Deming Prize, MBNQA (Malcolm Baldrige National Quality Award) and the EFQM (European Foundation for Quality Management) awards. The Deming Prize predominantly caters to organizations within the Asian continent, the MBNQA for Companies and organizations in and around the USA and the EFQM awards for companies based in Europe.

### Indian corporates and the Deming Prize

Several Indian corporates have found success in this award. The Deming Awards were instituted in 1951 in honour of Dr Edwards Deming, an American pioneer in the field of Quality management who was responsible for the quality transformation activities at Japan, consequent to the world war that ended in the year 1945. Initially, it was open only for Japanese firms. But since the year 1986, it was open to firms outside Japan too. There are three categories of awards in the Deming Criteria. They are the Deming Prize, the Deming Grand Prize and the Deming Prize for individuals. We have secured prizes in all the three categories as detailed below. In the Deming prize category, the first Indian company to secure the prize (formerly known as the Deming application prize) was Sundaram-Clayton Limited, Brakes Division(India) in the year 1998. The details of all the winners up to 2021 are as shown below

#### *List of Indian winners of Deming Prize*

Year	Company Name	Year	Company Name
1998	Sundaram-Clayton Limited, Brakes Division	2008	Tata Steel India Ltd
2001	Sundaram Brake linings Ltd	2010	National Engineering Industries Ltd
2002	TVS Motor Company Ltd	2011	Sanden Vikas Ltd
2003	Mahindra & Mahindra Ltd, Farm Equipment Sector		
	Rane Brake Lining Ltd	2012	SRF Ltd, Chemical Business
	Birla Cellousic, Karach, Unit of Grasim Industries Ltd	2017	Ashok Leyland Ltd, Hosur Unit II
2004	Indo Gulf Fertilisers Ltd	2018	Indus Towers Ltd
	Lucas TVS Ltd		JSW Steel Ltd, Vijayanagar Works
	SRF Ltd, Industrial Synthetics Business		Sundaram fasteners Ltd
	Krishna Maruti Ltd, Seat Division		Rane NSK Steering Systems Pvt Ltd
2005	Rane Engine Valves Ltd	2019	Elgi Equipments Ltd
	Rane TRW Steering Systems Ltd, Steering Gear Division		Larsen & Toubro Ltd, Electrical & Automation

2007	Asahi India Glass Ltd,Auto Glass Division	
	Rane(Madras) Ltd	

It is a matter of pride that, since the year 2000, maximum winners are from India followed by Japan, Thailand and China

The second category is the Deming Grand prize, which gives the award to a company that has secured the Deming Prize and has consistently maintained the quality parameters for three or more years. The winners in this category are as shown below

**List of Indian winners of Deming Grand Prize**

Year	Company Name
2002	Sundaram-Clayton Limited,Brakes Division
2007	Mahindra & Mahindra Ltd, Farm Equipment Sector
2011	Rane TRW Steering Systems Ltd,Steering Gear Division
2012	Tata Steel India Ltd
	Rane(Madras) Ltd
	Lucas TVS Ltd
2013	Rane Brake Lining Ltd
2015	National Engineering Industries Ltd

The third category is the Deming Prize for individuals. There is no winner from India in this category but Mr Venu Srinivasan of the TVS Motor Company has secured another coveted award from the Deming committee which is the **"Deming Distinguished Award for Dissemination and Promotion (Overseas)"**. The message from these instances of Indian corporate success should act as a morale booster for all companies to aim to become the best in this globalized world. These companies will be easily able to export to all corners of the world due to the reputation of quality

**Conclusion**

The success is not restricted only to manufacturing firms. In the software sector also, there is a cherished award called the CMM Level 5 award. This is a pinnacle in software excellence. Many Indian pioneering software companies like TCS, Wipro, Infosys etc have secured this award

TQM ensures total quality in all the aspects of the organization. It is a time consuming process and for large organizations it takes 5 to 8 years to attain the TQM status. This calls for concerted efforts from all the stakeholders including employees,suppliers,managements etc. Starting from training and developing all the people concerned to compilation of standard operating procedures. Sometimes in the course of the TQM journey some managements cannot tolerate the long duration and give up the efforts halfway. It is suggested that inspite of these setbacks or pitfalls the process should continue uninterrupted until success is achieved. Attaining a TQM level will ensure overall success for the organisations in the long run.

There are ample success stories from the Indian corporate sector to be emulated by other companies who have not yet thought about preparing and applying for such awards. As mentioned earlier it is in their interest and also in enabling India to become world leaders in quality and the most preferred destination for Foreign Direct Investment(FDI) etc

**References**

Brown,M G, Hitchcock,D E (1994) Why TQM fails and what to do about it ,Irwin,Burr Ridge,IL

- Hellsten, U., & Klefsjo, B (2000). TQM as a management system consisting of values, techniques and tools. The TQM magazine ,12(4),238-244
- Connie Rokke, Om Prakash Yadav & Brij Singh (2015) Impact of challenges and barriers on the success of TQM : an empirical study .International Journal of Operations and Production Management ;Vol 15, No : 4, pp 407-428
- Yusof, Sha'ri M; Aspinwall, Elaine (2000) QM implementation issuesc, International Journal of Operations and Production Management ;Vol 20, No : 6, 2000 pp 634-655
- James R Evans & W Lindsay, " The Management & Control of Quality", 8th edn, Cengage, 2011
- Dale Besterfield, "Total Quality Management", 5th edn, 2018, Pearson
- Shoji Shiba, "A New American TQM", Center for Quality of Management
- Akio Morita, "Made in Japan", Harper Collins, 1994
- K Sridhara Bhat, "Total Quality Management", Himalaya Publishing , 2010
- S K Mandal, "Total Quality Management", Vikas, 2008
- Robert J Masters, "Overcoming the Barriers to TQM's Success" Quality progress (May, 1996)
- [https://www.juse.or.jp/deming\\_en/award/1281.html](https://www.juse.or.jp/deming_en/award/1281.html)