



## Quality Management System

**Dr. D.DEVARAJAN**

M.Com, M.Phil, PGDCA, PGDPM Ph.D, Associate Professor, Dept of Commerce, PSG College of Arts and Science, Coimbatore

**Ms.M.SUBHACINI**

M.Com Research Scholar, Dept of Commerce, PSG College of Arts and Science, Coimbatore.

**ABSTRACT**

Quality Management System (QMS) make a positive contribution towards the competitiveness of organizations. However, evidence also suggests that organizations find their implementation difficult, and in many cases they are unsuccessful. This paper presents a conceptual framework that systematically guides organizations through a five-stage process to effectively implement and/or improve their QMSs and core business processes. The framework can be modified or amended to be adapted to the needs of specific industries and organisations. The main issues associated with the implementation of QMSs and summarises some of the frameworks and models that have been suggested for this purpose. This paper's main contribution consists of the proposal of an alternative and novel approach for the implementation/improvement of QMS and business processes.

**KEYWORDS**

**INTRODUCTION**

Quality is not a new invention in mankind's history. Although quality has been a buzz word in academic journals since 1980s, the origin of quality dates back to ancient Egyptian history. Over the years, decades and centuries there have been numerous ways to see and pursue quality. Quality movement has evolved from the master-apprentice level crafting to standardized quality system where all the processes and outcomes are measured, documented and analysed. In 1987 the International Organization for Standardization published its first quality management standards. That year marked the foundation of the first common standard for quality management and it provided guidelines what the quality management systems should contain.

Quality management systems have been developing in a rapid pace over the last century. Technological innovations in quality management systems have changed the business world and organizations have been forced to adapt to current theories the history of quality to identify time periods and disruptive innovations in quality management are threw out the three dominating quality management systems and try to predict the future of quality management. The effect of disruptive technological innovation and how the manufacturing in the United States failed to adapt to the new innovations are taken into connection a look at foresight methods and how the future technological innovations will affect the environment and society.

**ISO 9001**

An international standard that defines requirements for establishing a quality management system to control and manage your processes to better serve your customer.

**Other documents in ISO 9000 family:**

- ISO 9000;2005 fundamentals and vocabulary
- ISO 9001:2008 Quality Management systems – Requirements
- ISO 9004:2009 Managing for the sustained success of an organization
- ISO 19011;2011 Guidelines for auditing management systems
- ISO 10014:2006 Guidelines for realizing financial and economic benefits
- ISO 10003:2007 Customer satisfaction – guidelines for dis-

pute resolution external to organizations

- ISO is the International Organization for Standardization. ISO has a membership of some 160\* national standards bodies from countries large and small, industrialized, developing and in transition, in all regions of the world.
- ISO's portfolio of over 18600\* standards provides business, government and society with practical tools for all three dimensions of sustainable development : economic, environmental and social.
- ISO standards make a positive contribution to the world we live in. They facilitate trade, spread knowledge, disseminate innovative advances in technology, and share good management and conformity assessment practices.
- An ISO International Standard represents a global consensus on the state of the art in the subject of that standard.

**BENEFITS OF ISO 9001**

- Improvement in the way an organization does business.
- Satisfied customers by meeting their requirements.
- Increased market share.
- Compete globally.
- Minimize waste, scrap and rework
- Increase customer confidence.
- Improve the bottom line of the business.

**SIX SIGMA**

In 1995 the American company General Electric and its CEO Jack Welch develop their version of quality management system called Six Sigma. Six Sigma is based on statistical measurement and data analysis. The three main target areas in Six Sigma are: Reducing defects, Reducing cycle time and Improving customer satisfaction One might call Six Sigma just a combination of TQM and Statistical Process Control. Six Sigma starts first and foremost from the customer. The idea is to use statistical measures to analyse the process or product .there have been many process improvement models over the years six Sigma relies on the slightly similar idea.

**GOOD REASONS FOR IMPLEMENTING A QMS**

ISO 9001, 9002, and 9003 Quality System Standards will be undergoing a major change in the year 2000. At the highest level, the Standards will now focus strongly on customer satisfaction, process management, and continual improvement.

Another big change is the elimination of ISO 9002 and ISO 9003 from the Standard set. In 2000, there will only be the ISO 9001.

#### The new Standard set consists of

ISO 9000:2000 - Quality Management Systems - Fundamentals and vocabulary

ISO 9001:2000 - Quality Management Systems – Requirements

ISO 9004:2000 - Quality Management Systems - Guidance for performance improvement

The 1987 and 1994 revisions of the Standard contained 20 separate elements with very little connection between them. The new Standard will be converted from 20 discrete elements to a clause structure consistent with other international Standards like ISO 14001. The four main clauses in the new Standard are Management Responsibility, Resource Management, Process Management and Measurement, Analysis and Improvement.

The new Standard requires that companies have procedures that show the evidence of reviewing

customer requirements, quality objectives set at the process level, monitoring processes to determine if the objectives are being met, continually improving processes and assessing customer satisfaction.

#### WORLD-WIDE ACCEPTANCE

The family of standards ISO 9000 is applied over most of the world in a wide variety of activities. ISO 9000 has become the most used reference for QMS. Lately it has been implemented in some areas related with Geographic Information, as topographic instruments, hardware and software production and delivery.

#### FUTURE OF QMS

Based on the current quality management systems and the available history, one can only present an obscure estimate of the future of quality management systems. The main three quality management systems (ISO 9000, Six Sigma and Lean) will most likely keep developing in a sustaining way. As history of ISO 9000 quality management standards has shown, more industries will get their specific standards and managing the quality will be more homogeneous. Both Six Sigma and Lean manufacturing have been developed in the same way. One of the emerging trends is to merge the different quality management systems in order to achieve the benefits from the each system (standardization from ISO, reducing the variation from Six Sigma and eliminating the waste in the processes from Lean manufacturing). The experts agree that new industries will be covered by the quality movement in the future. Health care is one of the newest additions and arguably the most important industry at the moment. Numerous of countries are struggling with the rising health care costs. It has been mentioned that the quality management in government might be the next point of interest. The other major development in the society has been the structural change. Before the Industrial Revolution, farmers and producers exchanged

goods and services. The Industrial Revolution changed the way the world did business.

#### CONCLUSION

Quality movement started as early as in the ancient Egyptian era and it has evolved ever since. The most profound idea behind quality management is that it always reflects the surrounding society and environment. Changes in those factors develop the business world as well as quality management. From the beginning of the 20th century experts can identify seven different technological innovations in quality management. The seven monumental innovations of quality management have been disruptive since organizations who failed to adopt the new technology suffered. One of the most remarkable examples is the manufacturing in the United States of

America in the 1970s and 1980s. The leading nation in production failed to foresight the future trends the new customers desired. Instead of responding to the treat the Japanese manufacturing sector imposed, the America manufacturing sector continued to concentrate on the quantity instead of quality. While ISO 9000, Six Sigma and Lean manufacturing are the current dominating quality management systems, it remains to be seen how the quality management will evolve and develop in the future. The sustaining development will continue to occur but the next disruptive innovation is still in unforeseeable future. As the world continues to shift towards service-based societies, it can be predicted that the role of information technology will continue to increase. Next generation of society will also have its own quality management systems since the environment and society always dictates the usage of quality management systems.

#### REFERENCES

1. Edvardsson, B., Gustafsson, A., 1999. The Nordic School of Quality Management. Studentlitteratur.
2. Evans, J. R., Lindsay, W. M., 2008. Managing for Quality and Performance Excellence. Mason, Ohio: Thomson Business and Economics.
3. Holpp, L., Pande, P., 2002. What is Six Sigma? McGraw-Hill.
4. Shaffie, S., Shahbazi, S., 2012. Lean Six Sigma. McGraw-Hill.
5. International Organization for Standardization (2005). EN ISO 9000:2005 (E), Quality Management Systems – Fundamentals and Vocabulary. Brussels: CEN Management Centre.

#### WEBSITES

- [www.google.com](http://www.google.com)
- [www.ebsco.com](http://www.ebsco.com)
- [www.iso.org](http://www.iso.org)
- [www.sodhganga.com](http://www.sodhganga.com)