



## “Analysis of ISO Certified SME's in Marathwada region of Maharashtra”

### KEYWORDS

ISO 9001, ISO 14001, benefits, performance, Upgradation of process, Audits

**Syed Mohsin Ashfaquddin**

**Dr Razaullah Khan**

Department of Management Science, Maharashtra Institute of Technology (India)

Dept of Commerce and Management Science, Maulana Azad College, Dr Rafiq Zakaria Campus (India)

### ABSTRACT

**Purpose:** The purpose of this paper is to analyze implementation of ISO 9001 standards in SME's of Marathwada region.

**Methodology:** The primary data of 64 companies from the region of Marathwada is collected and certain reviews the literature is used. Online journals were used to identify papers focusing on the adoption of the ISO 9001 standards and the benefits derived from implementing them.

**Findings:** The paper analyzes several parameters of ISO 9001 implementation. The analysis suggests ISO helps a lot in Image building for the organization, improved employee efficiency, discipline and positive employee interaction in working, documentation and systemization in working. It is suggested that ISO standards have clear benefits on operational, people and customer results and that the effects on financial performance are inconclusive.

**Limitations:** One limitation of this paper is that the works revolves around only small and medium scale Manufacturing firms of Marathwada region. In addition, other industries like Food processing, service industry etc may be included in future studies. More parameters such as operational, market, quality, financial performance, and customer satisfaction can also be considered in order to expand this search.

**Originality/Value:** The main contribution is that the paper analyses primary data and provides future research proposals with regard to the benefits of the ISO 9001 standards.

### Introduction

ISO (International Organization for Standardization) is the world's largest developer of voluntary International Standards. International Standards give state of the art specifications for products, services and good practice, helping to make industry more efficient and effective. Developed through global consensus, they help to break down barriers to international trade.

The ISO story began in 1946 when delegates from 25 countries met at the Institute of Civil Engineers in London and decided to create a new international organization 'to facilitate the international coordination and unification of industrial standards'. In February 1947 the new organisation, ISO, officially began operations. Since then it has published over 19 500 International Standards covering almost all aspects of technology and manufacturing.

Today it has members from 164 countries and 3 368 technical bodies to take care of standard development. More than 150 people work full time for ISO's Central Secretariat in Geneva, Switzerland. Because 'International Organization for Standardization' would have different acronyms in different languages (IOS in English, OIN in French for *Organisation internationale de normalisation*), our founders decided to give it the short form ISO. ISO is derived from the Greek isos, meaning equal. Whatever the country, whatever the language, the short form of our name is always ISO.

### ISO 9000 - Quality management

The ISO 9000 family addresses various aspects of quality management and contains some of ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved.

There are many standards in the ISO 9000 family, including:

- ISO 9001:2008 - sets out the requirements of a quality management system
- ISO 9000:2005 - covers the basic concepts and language
- ISO 9004:2009 - focuses on how to make a quality management system more efficient and effective
- ISO 19011:2011 - sets out guidance on internal and external audits of quality management systems.

### ISO 9001:2008

ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to (although this is not a requirement). It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008 is implemented by over one million companies and organizations in over 170 countries.

### Quality Management Principles

The standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. Using ISO 9001:2008 helps ensure that customers get consistent, good quality products and services, which in turn brings many business benefits.

### Audits

Checking that the system works is a vital part of ISO 9001:2008. An organization must perform internal audits to check how its quality management system is working. An organization may decide to invite an independent certification body to verify that it is in conformity to the standard, but there is no requirement for this. Alternatively, it might invite its clients to audit the quality system for themselves.

### Significance of Study

Quality management system is of prime importance as there is limitation of resources. To add to the problem these scarce resources has multiple uses. Quality directly influences the satisfaction of customer. Good quality yields customer satisfaction and customer delight where as bad quality results in dissatisfaction. ISO certification is a guideline and assurance of good process quality at the organizational level.

### Hypothesis

- The ISO certification improves the system at organizational level
- The ISO is an enabler of high performance

### Objectives of the Study

1. To analyze the trend of ISO in small and medium enterprises in the region
2. To analyze the performance of small and medium scale organizations before and after ISO certification

3. To study the key areas of improvement due to ISO certification

**Research Methodology**

- The research has been carried out with the help of Primary and Secondary data
- Primary data has been collected with the help of Questionnaire, Interviews and the records of small and medium scale companies
- Secondary data is obtained through books, journal, internet and web portals of the industries

The present research study is based on the primary and secondary data. The primary data is collected with the help of Questionnaire, Interviews and the records of small and medium scale companies. The Secondary data has been obtained through books, journal, internet and web portals of the industries.

**Sample size**

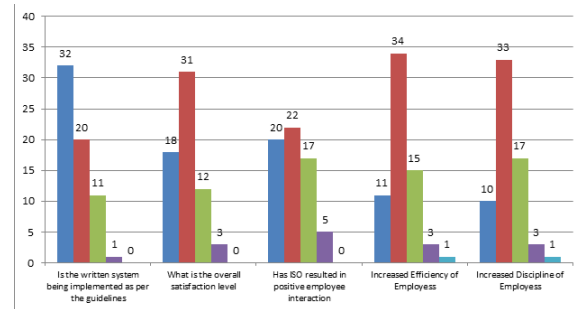
The present study has been carried out covering sample organizations in the region of Marathwada. The size of sample was targeted as 100. But the responses received are 64. Hence a composite size of small and medium size industries is finalized as 64 units.

**Data Analysis**

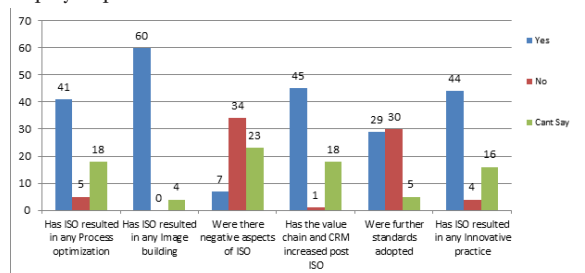
The data collected from the structured questionnaire has been stored in computer database. For the purpose of data analysis SPSS software is used and also MS-Excel utility is applied for some analysis and charting. Out of the 64 organizations selected, around 1/3rd were small scale, 60% medium scale and remaining large scale units.

Table 01: Upgradation of production process, Payback period for ISO, Audits performed during ISO

Parameter	Upgradation of Production Process				Payback period of ISO			Audits during ISO			
	Prior to ISO	As part of ISO	After ISO	No Upgradation done	Under 01 Year	02 to 03 Years	Over 03 Years	01 to 03	04 to 10	More than 10	
Responses	08	34	11	11	47	14	02	01	53	10	01



Graph 01: Implementation of written system, Satisfaction level post ISO, Positive Employee interaction, Efficiency and Discipline of employees post ISO



Graph 02: Process optimization, image building, negative aspects and CRM post ISO, further standards, Innovative practice

**Findings and Conclusions**

- Majority of respondents, 86% were of the view that it took less than one year to implement ISO.
- The payback period of ROI for ISO implementation was under 01 year for 73% organizations and 01 to 02 years for 22%. 5% organizations required more than 02 years.
- About 55% organizations opined an Upgradation of the production processes is done during the ISO Implementation process. 16% have done upgradation prior to ISO and 17% after implementation. No upgradation was done by 12% organizations.
- Huge number of respondents 69% were of the opinion that ISO implementation resulted in innovative practices in their routine activities, especially data keeping and shopfloor management. However 25% respondents were not sure whether ISO resulted in innovation or not. But 6% of the respondent disagreed that ISO does not result in innovative practices.
- As Audits play a major role in ISO implementation all the organizations were required to go for it. 83% of the firms carried out up to three audits, 15% firms carried out more than three but less than 10 audits, while 2% firms went for more than 10 audits.
- All the firms agreed to that they abide by the written system and follow all the guidelines. More than half of the firm agreed that they always follow the written guidelines. 31% sometimes follow and just 0.15% organization rarely follow the written guidelines.
- With respect to positive employee interaction, 92% agreed that ISO was mostly helpful.
- Most of the organizations (46%) took a step ahead in the quality standards, they went for a higher standard of quality. 6.67% organizations did not go for any higher quality standard post ISO implementation. 47% respondents were not sure whether their organization went for higher quality standard or not.
- Regarding image building and process optimization, 93.75% and 62.5% respondents found ISO very helpful in image building and process optimization.
- Majority of organizations (71%) found ISO useful in improvement of value chain and customer relationship management. However 10% respondents were of the view that ISO may have a negative impact as well.
- Huge number of respondents (93%) opined ISO implementation results in improvement of efficiency and discipline of employees.

The ISO certification provided that positive attitude towards quality management systems. Thus most of the firms who successfully adopt ISO standards, also go for further improvements in quality. Some of the most sought after improvements post ISO certification are Continuous Improvement of business process and strong internal audit, Digitization of processes, TQM, quality circle, lean manufacturing, Revision numbers to be given to all type of formats, check sheets or checklists, Kaizen, TPM, 5S, BS OHSAS.

ISO 9001, main benefits are improved efficiency and profitability, improved customer satisfaction, improved relationship with staff and image. Other benefits analyzed for ISO 9001, although to a lesser extent are market share, sales and product quality.

**References**

1. Sharma, Divesh S. (2005). "The association between ISO 9000 certification and financial performance". The International Journal of Accounting 40 (2): 151.
2. Juran, Joseph M. and De Feo, Joseph A., "Juran's Quality Handbook", 6th Edition, 1999, ISBN 978-0-07-162973-7
3. Nash, Robert A. et al. (2003). Pharmaceutical Process Validation: An International Third Edition. Informa Healthcare, p. 860. ISBN 0-8247-0838-5.
4. Ahn, J. Y., S. K. Kim, and K. S. Han. 2003. On the design concepts for crm system. Industrial Management & Data Systems 103 (5): 324-31.
5. Bathie, D., and J. Sarkar. 2002. Total quality marketing (tqm): A symbiosis. Managerial Auditing Journal 17 (5): 241-4.
6. Besterfield, D. H. 2004. Quality control. 7th ed. New York: Prentice-Hall.
7. Bose, R. 2002. Customer relationship management: Key components for it success. Industrial Management & Data Systems 102 (2): 89-97.