



A Study of Benefits for Selected Organization in Marathwada Region by Iso 9001 Implementation and Certification

KEYWORDS

ISO 9001, Quality Management System , benefits, performance, literature review

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ABSTRACT *Purpose:* The purpose of this paper is to determine the benefits derived from implementing the ISO 9001 standards. *Methodology/Approach:* The primary data of 15 companies from the region of Marathwada is collected and certain reviews of the literature done. 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 identifies there are several benefits of ISO 9001 implementation. The analysis suggests out of the 24 common benefits, ISO helps a lot in Image building for the organization, improved employee efficiency, harmony 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/implications:* 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.

1 Introduction

A quality management system (QMS) is a set of policies, processes and procedures required for planning and execution (production/development/service) in the core business area of an organization. It encompasses the areas that can impact the organization's ability to meet customer requirements. ISO 9001:2008 is an example of a Quality Management System. Some people generically refer to the group of documents as a QMS, but specifically it refers to the entire system - the documents just describe it. A QMS is nothing more than good business sense.

A QMS integrates the various internal processes within the organization and intends to provide a [process approach](#) for project execution. A Process Based QMS enables the organizations to identify, measure, control and improve the various core business processes that will ultimately lead to improved business performance.

A complete ISO 9001 Quality Management System must address all the requirements of ISO 9001, and more specifically must meet the ISO 9001 Documentation Requirements.

The Concept of Quality Management

- A Quality Management System in its basic concept is quite simple. It seeks to: Recognize the external quality related requirements specified in Licenses to Trade, guidelines, specified customer requirements, and the chosen management system standard
- Ensure that all [requirements](#) have been documented within the management system in the appropriate location in terms of defined specific system requirements
- Confirm that employees receive [applicable training](#) in the quality system requirements
- Outline performance processes, where applicable, to the quality system requirements
- Produce records or evidence that system require-

ments have been met

- Measure, monitor and report the extent of compliance with these performance procedures
- Continually monitor and analyze changes to the requirements and confirm that all changes are reflected in changes to the specific requirements when necessary
- [Execute the audit](#) and analyze the system processes and correct them when necessary
- Include processes that will help continually improve the quality system.

Quality Management Systems (QMS) are business practices that may benefit companies. As several empirical studies show, implementing QM effectively influences firm performance positively (Powell, 1995; Samson & Terziowski, 1999; Huang & Chen, 2002; Kaynak 2003; Parast, Adams & Jones, 2011; Shahin & Dabestani, 2011). Firms that implement QMS focus on providing more value for their customers and improving the efficiency of processes. Continuous improvement of processes and product quality leads to increased revenues (through product reliability) and reduced costs (through process efficiency). In turn, customer satisfaction leads to increased revenues because it enables the firm to gain a market advantage (Kaynak, 2003; York & Miree, 2004). Similarly, it affects firm performance positively (Klassen & McLaughlin, 1996; King & Lenox, 2002; Al-Tuwaijri, Christensen & Hughes, 2004; Moneva & Ortas, 2010). This positive effect results from the positive impact on firm costs and differentiation levels.

In this context, Quality management system (QMS) have enjoyed enormous success over the last several years in the sphere of Quality Management (ISO 9001). The first QMS appeared within the context of quality management, and more specifically, in the sphere of quality assurance, which according to the definition in the ISO 8402 standard, *is the set of all those planned and systematic actions applied within the framework of a Quality System,*

to provide adequate confidence that a product or service will satisfy given requirements for quality (ISO,1994). By the end of 2010 at least 1,109,905 ISO 9001 certificates had been granted in a total of 178 countries worldwide, which nearly tripled the number of certificates at the end of 2000 (ISO, 2011). After the success of the ISO 9000 standards, there followed the ISO 14000 family of standards on environmental issues. Over the last years, ISO 14001 certification has experienced a great international growth (Marimón, Casadesús & Heras, 2010). Suffice it to say that, if by the end of 1999 14,106 certificates had been issued worldwide, by the end of 2010 the number of ISO 14001 certificates was 250.972 (ISO, 2011).

ISO 9001 standards do not refer to the compliance with a given goal or result. In other words, they are not performance standards measuring the quality of a firm's products or services or a firm's results; rather, they are standards setting out the need to systematize and formalize a large number of corporate processes within a set of procedures, and to document such implementation. It must also be remembered that the implementation of this type of standard is a voluntary one, although in some sectors it has *de facto* become an obligatory measure, given the coercive influence of customers (Braun, 2005; Mendel, 2006).

Given this "non-performance" orientation of standards, a large number of studies have analyzed the benefits that may be obtained through ISO 9001 certification and implementation. In addition, some scholars have carried out literature reviews on these standards separately. Therefore it is interesting to analyze these standards, due to the fact that these standards have many similarities in terms of their structure and dissemination processes. However, to the best of our knowledge there are no literature reviews about empirical studies analyzing the benefits arising from the ISO standards in Marathwada region. The purpose of this paper is to determine the benefits derived from implementing the ISO 9001 standards. Based on this primary data collected by questionnaire survey and literature review the paper suggests future research proposals related to the measurement of post certification analysis.

2. Methodology

The methodology of the paper begins with literature review. After review the research gap was highlighted. The study then applied questionnaire method for data collection. A sample of 15 organizations has been selected randomly. The paper performs a literature review in order to identify empirical studies related to ISO 9001 and its benefits. Thus, an online search of various journals such as the ScienceDirect, ABI/Inform and Emerald databases was conducted. In the field of ISO 9001, a search was made for works that related the expressions "ISO 9000", or "ISO 9001" and "performance" or "benefits" or "profitability" in the title or the abstract of the paper. The list of references given in the papers found in the electronic search was also reviewed.

Following the same criterion, the benefits of ISO 9001 standard, the most common ones are identified. Then, the paper examines the similarities and differences between the two groups of benefits and makes proposals for future research.

In order to analyze these benefits arising from the ISO 9001 standard, some authors examine its effects through

a list of benefits, whereas others base themselves on, or even propose, a classification of such benefits. Such is the case of Lee (1998), who classifies benefits into benefits gained with respect to internal operations (better team spirit, less staff conflict, reduced wastage, increased efficiency, shorter lead time), benefits gained with respect to customer relations (improved sales through new customers, longer contracts with existing customers, less control from existing customers, fewer complaints from existing customers), and benefits gained with respect to subcontractor relations (subcontractors to become certified, better relations with subcontractors, more stringent control over subcontractors).

Nield and Kozak (1999) show that the benefits of the standard may be the following: operational benefits (improved operating systems, enhanced operating practices), marketing benefits (improved customer satisfaction, gained competitive edge, nation-wide recognition), human resources benefits (gained more committed work force, reduction in staff turnover).

Casadesús and Giménez (2000) show that these benefits are people results (work satisfaction, suggestions system, health/safety, turnover, absenteeism), operation results (errors and defects; order processing; reliability; costs; on-time-delivery; cost savings; lead time; stock rotation), customer results (customer satisfaction; complaints; repeat purchases) and financial results (market share; sales; return on sales; return on assets).

Casadesús, Jiménez and Heras (2001) classified benefits as internal benefits and external benefits. Internal benefits are the following: work satisfaction, safety at work, suggestions system, absence from work, salaries of workers, safety and reliability, on-time delivery, order processing, number of errors, stock rotation, quality costs, cost savings. As external benefits they find the following: customer satisfaction, number of complaints, number of repeat purchases, market share, sales per employee, return on assets, return on sales.

Casadesús and Karapetrovic (2005) find that these benefits may be related to financial results (increased sales, returns on investment, market share, and sales per employee), operational results (reduced logistic costs, improved supplier relationship, increased inventory turnover, fewer non-conformities, compliance with delivery dates, and shorter lead time) and customer-related results (loyalty purchases, customer satisfaction, and fewer complaints).

Similarly, other scholars use two general groups of benefits related to operational performance and financial performance (Naveh & Marcus, 2004; Briscoe, Fawcett & Todd, 2005). For example, for operational performance Naveh and Marcus (2004) show defect rate, cost of quality, productivity, on-time delivery and customer satisfaction, while Briscoe et al. (2005) list defect rate as a percent of production, cost of quality, productivity, and on-time delivery. For financial performance both studies show market share, sales, and export growth.

Based on this review, in general terms, the ISO 9001 standard creates benefits related to customer satisfaction (for instance, fewer complaints and improved customer satisfaction) (e.g., Casadesús & Karapetrovic, 2005; Singh, 2008), improvement in staff management issues (for instance, more training for employees) (e.g., Gupta, 2000; Renuka & Venkateshwara, 2006) and improved ef-

iciency, documentation and clear knowledge of tasks by employees (e.g., Chow-Chua, Goh & Wan, 2003; Magd, 2008). These results indicate that most firms experience improvement in these issues, due to the fact that the ISO 9001 standard allows them to reduce mistakes and rework, save on costs and improve the management of the firm. Many firms also attain these benefits because ISO 9001 allows for an improvement of the documentation and work procedures, and a greater clarity of work. Other benefits obtained by many firms are an improved image and an improved service or product quality, because the fact that they possess a certificate enhances their image in the eyes of their customers. In turn, the greater control exercised upon their internal processes allows them to improve the quality of the product or service.

Similarly, several studies provide evidence of certified firms outperforming non-certified firms (Heras, Dick & Casadesús, 2002; Corbett, Montes-Sancho & Kirsck, 2005; Sharma, 2005). This improvement is attributed largely to improvement in internal business processes. In this context, other studies also show that ISO 9001 certification is not associated with significant financial performance in the longer term, or that there is no significant difference between the impacts of quality management on financial performance for firms with and without ISO 9001 certification (Häversjö, 2000; Singels, Ruël & van de Water, 2001, Tsekouras, Dimara & Skuras, 2002).

These ideas indicate that, although there are firms that do succeed in improving their financial results (for instance, their market share and their sales, because the quality certificate opens the door to certain customers), there are many others that do not manage to attain any improvement. Therefore, as the studies show, there is not such an unquestionable relationship between the standard and the financial results.

Consequently, the impact of ISO 9001 on firm performance was more mixed compared with the impact of QM on firm performance, which was much more unanimous (Martínez-Costa Martínez-Lorente & Choi, 2008). Therefore, the clearest benefits are those influencing the internal performance or operational results, customer results and people results, while the effects on financial results are inconclusive.

3. Benefits of the ISO 9001 standard

Many scholars have analyzed the benefits of the ISO 9001 standard in several performance dimensions (e.g. operational benefits, customer results, etc.). In this context, below list shows some of these advantages derived by the various organizations in Marathwada region, they are classified into the following 24 benefits:

1. Upgradation of the production processes.
2. Innovative practice in the organization.
3. Number of Audits performed during the ISO implementation.
4. Reasons for ISO System implementation.
5. Noticeable areas of improvement.
6. Benefits or losses in the planning and implementation phase.
7. Environmental consciousness created during the implementation of ISO.
8. Implementation of written system as per the guidelines.
9. Overall satisfaction level.
10. Positive employee interaction.

11. Process optimization in the organization.
12. Non-Tangible benefits for the organization.
13. Image building for the organization.
14. Increase in the efficiency of employees.
15. Sharing of best practices.
16. Professionalism at working.
17. Customer satisfaction.
18. Morale of employees.
19. Discipline of employees.
20. Customer Relationship Management.
21. Harmony in working
22. Number of Trainings after ISO implementation.
23. Further improvements required post ISO implementation.
24. Adoption of other standards (like SUV/TUV, T.S) post ISO implementation.

The present work identifies these 24 benefits as they are collected by the questionnaire method.

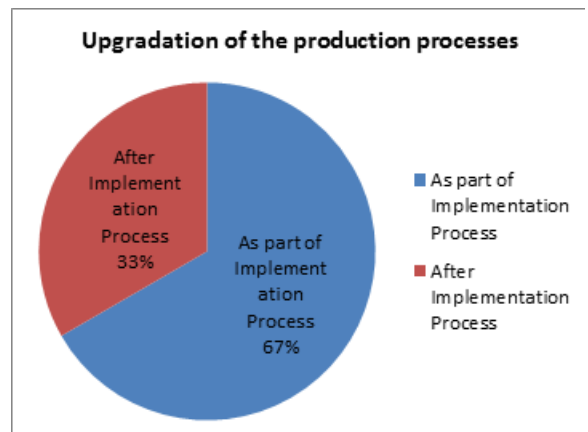
The most frequently identified benefits analyzed by researchers are Image building, innovative practice, improved efficiency, professionalism in working, improved customer satisfaction and improvements in relations with employees. These are followed by profitability and improved systematization. Other benefits attained by many firms, as analyzed, are an improvement in employee efficiency, professionalism and discipline in working.

4. Data Analysis

The data collected by administering questionnaire has been analysed in the following paragraphs.

Upgradation of the production processes.

About one-third organizations opined an Upgradation of the production processes is done after the ISO Implementation process.

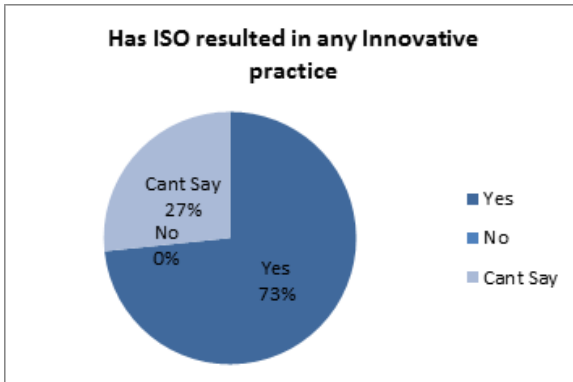


Did you find it necessary to upgrade the production processes?	
As part of the Implementation	10
After the Implementation	05
No upgradation in Process	00

Has ISO resulted in any Innovative practice?	
Yes	11

No	00
Cant Say	04

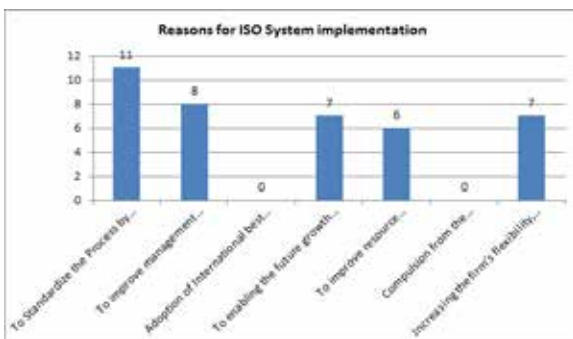
Innovative practice in the organization.



Huge number of respondents 73% were of the opinion that ISO implementation resulted in innovative practices in their routine activities, especially data keeping and shop-floor management. However 27% respondents were not sure whether ISO resulted in innovation or not. But none of the respondent disagreed that ISO does not result in innovative practices.

Number of Audits performed during the ISO implementation.

As Audits play a major role in ISO implementation all the organizations were required to go for it. 73.33% of the firms carried out up to three audits, 20% firms carried out more than three but less than 10 audits, while 6.66% firms went for more than 10 audits.



Reasons for ISO System implementation.

1-To standardise the process by introducing QMS aspects - Eleven out of 15 respondents (73.33%) were of the opinion that by introduction of Quality Management aspects they were able to standardise various processes. A standard operating procedure was drafted and the document was used as a guideline to carry out the operations. Before the implementation of QMS, the processes were not standardised which resulted in variations based on personal approach. However post ISO implementation; there was uniformity in the processes.

2- To improve Management control on business process - Eight out of 15 respondents (53.33%) opined that ISO implementation would improve Management control over various business processes. As a part of ISO implementation, a step by step procedure was designed for various business processes. Then these processes were implement-

ed as per guidelines in the documents. During evaluation the gaps were found. Then these gaps were overcome as per guidelines in the documents. This helped in greater control over the processes.

3- Adaption of international best practices in business processes - The selected, small and medium scale companies of Marathwada were of the opinion that ISO system will not result in adoption of international best practices in business processes. They at least thought it was not the primary reason for ISO implementation.

4- To enabling the future growth in work efficiency - Seven out of 15 (46.67%) respondents were hopeful that adoption of ISO implementation will enable the future growth and work efficiency for their organization. They were of the view that once standards are set and guidelines are made on how to achieve those standards the efficiency of the employees will increase. As the process to achieve the standard is written, it can be referred time and again. This reduces the communication gap and results in clarity of thought. The job description and scope of work are understood by the employees. This enables work efficiency there by leading to productivity improvements.

5- To improve resource utilisation within the organisation - It is rightly said in the industry, do it right the first time. Because if the process is not done right; then it requires repair or rework. This results in loss of time, material, machining hours, electricity, money, and other resources of that organization. Thus six out of fifteen (40%) respondents felt that ISO implementation may bring down the repair and rework if the written system is followed. This will help in improving the resource utilisation within the organisation.

6- Compulsion from the customers/regulating bodies - Many customers, who are original equipment manufacturers, especially in automobile sector have adopted higher quality standards such as TS. These standards require their vendors to be ISO certified. There are some regulating bodies which deal with quality of the end product; they make it compulsory for small and medium scale firms to adhere to ISO standards. However the respondents were of the view that this Compulsion from customer/regulating body was not the major reason for adopting ISO standards. The main reasons were, to standardise the process, improve Management control on business, enable future growth, increase firm's flexibility etc. Due to these reasons ISO was implemented and it automatically fulfils the compliance of Compulsion too.

7- Increasing firm's flexibility, acceptability and adaptability to respond to new market opportunities - Seven out of fifteen (46.67%) respondents agreed that ISO implementation results in increasing firm's flexibility, acceptability and adaptability to respond to new market opportunities.

Noticeable areas of improvement



1 Shopfloor improvements and visual controls - Three out of fifteen (20%) respondents were of the opinion that ISO implementation results in shopfloor improvements and visual controls. Written process specifies the place of inventory such as raw material, tools machinery etc before after and during the process. This helps in reduced wastage of time in searching for inventory. Statistical process control charts like X-Chart, R-Chart, C-Chart etc are widely used and recommended by ISO system. This results in having a track of work in progress by simply looking at the graphical presentation. Thus visual controls improve.

2 Quality control, Process control, SOP's, MIS - Two out of fifteen (13.33%) responded that ISO implementation assists in quality control and process control. As the system is documented the operating procedure is same for all the workers. The written system is considered to be a standard operating procedure (SOP), every worker is required to follow this system only. SOP results in uniformity of processes. Thus individual's style of working does not affect the quality control or process control. Every process is recorded in the relevant charts so the real time information is available at the finger tips. This ultimately helps the organization in managing the information system. Most of the organizations have integrated the ISO system in their ERP software as well.

3 Data Keeping and Stocks - Five out of fifteen (33.33%) of the respondents notices that their data keeping and stock keeping has been improved due to ISO implementation.

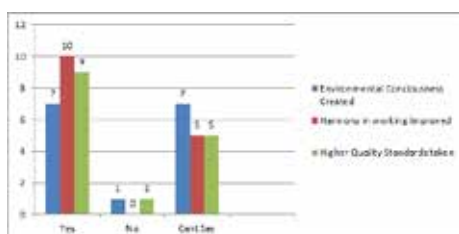
4 Information flow - Three out of fifteen (20%) respondents were of the opinion that ISO implementation resulted in improvement of information flow. As the MIS of organization improved it reduced the communication gap that used to happen prior to the ISO implementation. As a part of the system, information is recorded at every stage, corrective actions are taken in case of non-compliance. Thus information flow improved across the organization.

5 Innovations -Two out of fifteen (13.33%) responded that ISO implementation helped them with innovation. Most of the innovations were meagre improvements in recording of facts or communicating these facts. Some of the innovations were related to cleanliness of shopfloor.

Benefits or losses in the planning and implementation phase.

The firms who implemented ISO 9001 were of the view that it was beneficial in the planning and implementation phase. Some of the benefits enjoyed by these organizations were, Improvement in understanding of People, common document for multiple processes, Employee interaction, improved production process, increased efficiency. However the firms thought the entire process of planning and implementation was time consuming.

Environmental consciousness, Harmony in working, Higher Quality standards taken after ISO implementation.



Heading	Yes	No	Can't Say
Environmental consciousness created	07	01	07
Harmony in working	10	00	05
Higher Quality standards taken after ISO implementation	09	01	05

Out of the fifteen organizations 47% agreed that environmental consciousness was created and equal number of respondents were not sure whether the environmental consciousness was created or not, 6% were of the opinion that no environmental consciousness was created during ISO implementation.

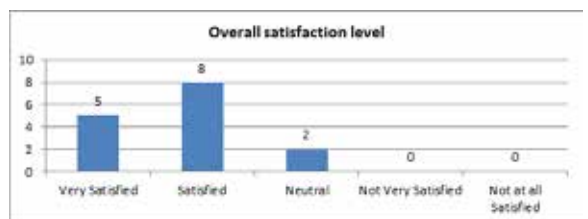
A huge number of respondents, 10 out of fifteen (67%) responded positively that ISO implementation help them in improving harmony of working in the organization. Where as 33% were not sure whether it resulted in harmony in working or not, no organization responded in negative.

Nine out of fifteen (60%) organization 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. Five out of fifteen respondents (33.33%) were not sure whether their organization went for higher quality standard or not.

Implementation of written system as per the guidelines.

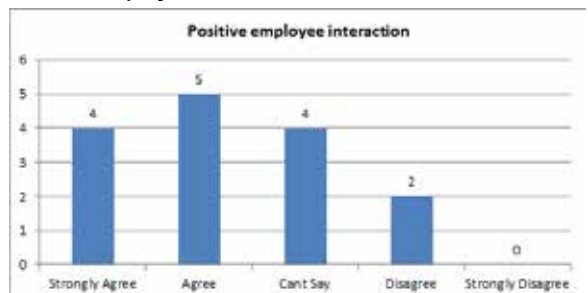
All the firms agreed to that they abide by the written system and follow all the guidelines. 27% strongly agreed to be following the system, while 46.66% agreed to it. There were 27% who were of neutral opinion.

Overall satisfaction level.



13 out of fifteen (86.67%) of the organization were satisfied with the ISO implementations. 13% were neutral and no organization was dissatisfied due to implementation of ISO system.

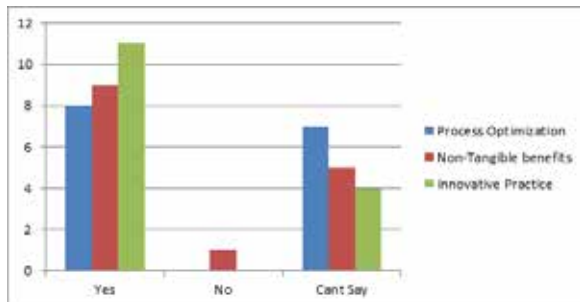
Positive employee interaction.



Due to ISO implementation job description is clearly defined for each individual. This results in positive employee interactions and reduced communication gaps if any. Four out of fifteen (26.67%) respondents strongly agreed that employee interaction improved. Five of fifteen (33.33%)

agreed where as four (26.67) were neutral. Two respondents (13.37%) were of the opinion that ISO did not impact positively on employee interaction.

Non-Tangible benefits for the organization.



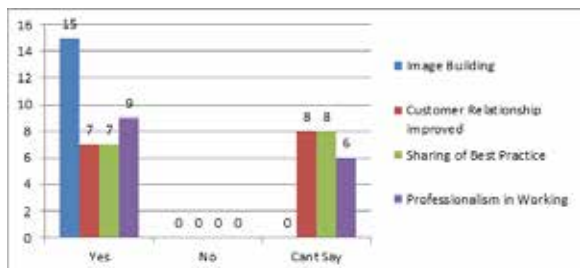
Heading	Yes	No	Can't Say
Process Optimization	08	00	07
Non-Tangible benefits	09	01	05
Innovative Practices	11	00	04

Out of the fifteen organizations 53.33% agreed that process optimization was achieved and 46.67% respondents were not sure whether the process optimization was achieved or not due to ISO implementation.

A large number of respondents, 09 out of fifteen (60%) responded positively that ISO implementation resulted in non-tangible benefits for the organization. Where as 33% were not sure whether it resulted in non-tangible benefits or not, one (6.67%) organization responded in negative.

Eleven out of fifteen (73.33%) organization agreed that they acquired innovative practices due to ISO implementation. 26.67% organizations were not sure whether their organization adopted any innovative practice or not.

Image building for the organization.



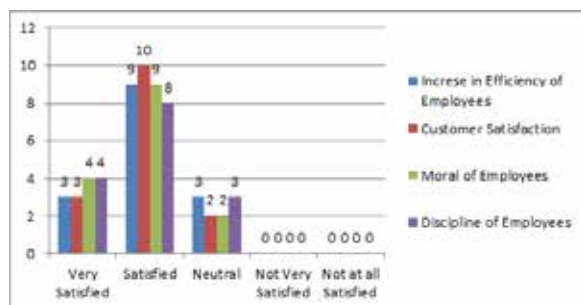
Heading	Yes	No	Can't Say
Image Building	15	00	00
Customer relationship improved	07	00	08
Sharing of best Practices	07	00	08
Professionalism in working	09	00	06

Fifteen out of fifteen organizations (100%) agreed that ISO implementation helped them in Image building or image enhancing amongst various stakeholders especially customers.

A good number of respondents, 07 out of fifteen (46.67%) responded positively that ISO implementation resulted in improvement of Customer relationship and sharing of best practices for the organization. Whereas 53.33% were not sure whether it resulted in any improvement of Customer relationship and sharing of best practices, none of the organization responded in negative.

Nine out of fifteen (60%) organization agreed that they acquired professionalism in working due to ISO implementation. 40% organizations were not sure whether their organization benefitted in acquiring professionalism in working through ISO or not, none of the organization responded in negative.

Increase in the efficiency of employees, Customer satisfaction Morale and Discipline of employees.

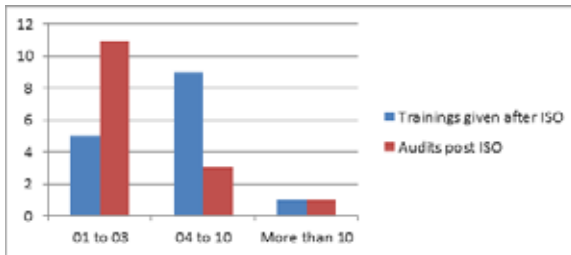


Heading	Very Satisfied	Satisfied	Neutral	Not very satisfied	Not at all satisfied
Increase in efficiency of employees	03	09	03	00	00
Customer satisfaction	03	10	02	00	00
Moral of employees	04	09	02	00	00
Discipline of employees	04	08	03	00	00

There were 03 out of fifteen (20%) responded who expressed their satisfaction with the increase in efficiency of employees and customer satisfaction due to ISO implementation by the organization. Whereas 60% and 66.67% were satisfied with the increase in efficiency of employees and customer satisfaction respectively. None of the organization expressed with dissatisfaction. However 03 and 02 respondents were of neutral view for the above two criteria's respectively.

Four out of fifteen (26.67%) organization were very satisfied with the Moral of employees and the discipline in their working due to ISO implementation. 60% and 53.33% organizations were satisfied with the Moral of employees and the discipline in their working respectively. None of the organization responded in negative. However 02 and 03 respondents were of neutral view for the above two criteria's respectively.

Number of Trainings after ISO implementation.



All the organizations agreed that as a part of ISO implementation trainings were provided to the employees. Five out of fifteen (33.33%) required training in the range of 01 to 03 while 60% required trainings in the range of 04 to 10. Where as one firm (6.67%) required more than 10 trainings.

Audits play a very important role in adoption of any quality standard, ISO is no exception. Thus organizations carried out audits post ISO implementation. Eleven out of fifteen (73.33%) required audits in the range of 01 to 03 while 20% required audits in the range of 04 to 10. Where as one firm (6.67%) required more than 10 audit post ISO implementation.

Further improvements required post ISO implementation.

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 OH-SAS.

5. Discussion and conclusions

The paper identifies that there are several benefits of ISO 9001 implementation. The analysis suggests that out of the 24 common benefits, ISO helps a lot in Image building for the organization, improved employee efficiency, harmony in working, documentation and systemization in working. It is found that ISO standards have clear benefits on operational, people and customer results and that the effects on financial performance are inconclusive.

Either prior to or post ISO implementation, all the selected organizations upgraded their production processes to scale up the quality of products and services. ISO has helped a large number of organizations in smaller innovations related to shopfloor and inventory management. There were a lot of audits performed prior to the system implementation. This results in the awareness of where the organization stands in the aspects of quality. It also opens up a lot of scope for improvements, as the auditors point out the mistakes and errors in the procedure adopted.

There are various reasons for organization to choose ISO implementation. It ranges from standardizing the processes to adoption of international best practices, enabling future growth to compulsion from the regulating bodies. Almost all the organizations noticed improvements in various areas post ISO implementation.

'If you fail to plan, you plan to fail' so planning plays a cru-

cial role in success of any business organization. ISO implementation also requires a lot of meticulous planning. However firms do think that the process of planning and implementation of ISO standards is a time consuming affair.

Sixty to sixty five per cent organizations that have been studied follow the written system as per the guidelines. Twenty five to thirty per cent were of neutral opinion. This results in overall satisfaction for the organization.

There are many non-tangible benefits of ISO implementation such as improved harmony in working, image building of products and services offered by the firm. ISO also resulted in positive employee interaction. The morale of employees went high, customer satisfaction improved, improvements in efficiency and discipline of employees was also observed.

Audits provide the feedback of ISO implementation and trainings reduces the gap between set standards and actual performance. These things put together bring out the better quality of products and services. Thus implementation of ISO system results in quality assurance and many other benefits as discussed above.

Scope for future research

One of the limitations of this paper is that the work 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 financial performance, operational, market, quality, and customer satisfaction can also be considered in order to expand this search.

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