

# IMPACT AND EFFECTIVENESS OF ISO 9001:2008 CERTIFICATIONS ON HIGHER TECHNICAL EDUCATIONAL INSTITUTE IN INDIA

**Prof. Mrunal Nitin Belsare**

TMV PhD Scholar Cell No : 9689913231  
belsaremrunal@yahoo.co.in

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Abstract

Competitive environment compelled the organizations to focus more on to customer satisfaction through the quality of services and products. The scenario of higher technical institutes in India has been changed. There are many government as well as private institutes available which provides higher education to the students. The students perusing higher education have a great choice to select the col-

lege for post graduation. Further, it has been also observed that the many institutes fail to fill up all the seats available. Many seats remain vacant. It shows that there is a big challenge for these institutes to establish themselves in the market. ISO 9001: 2008 is one of the tool of Total Quality Management, for ensuring the quality of education and training offered by the educational institutes. Some of the higher technical educational institutes in India implemented ISO, and many of them have claimed that there is a significant improvement in quality of service after the implementation of

ISO. The study was undertaken, to investigate the impact and the effectiveness of ISO 9001:2008 certification in quality of higher technical institutes in India.

This paper seeks to find out the impact and effectiveness of ISO 9001:2008 certifications on higher technical educational institutes in India. The research paper focuses on the benefits derived by the institute, by the students of the institute, faculty and staff of the institute, and the industry, due to ISO 9001:2008 certification.

Keywords: ISO Certification, Total Quality Management, Higher Technical Educational Institute, Quality

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#### I Introduction

In the present era of globalization & liberalization, quality of product or service has become critical factor for the success of any organization. The major components of quality are considered as product quality, process quality and human resource quality of the organization. A process based Quality Management System enables

any organization to identify, measure, control and to improve various business processes. It leads to improve the performance of the business. QMS helps to integrate all the internal processes of the business and intends to provide process based approach to execute any project. But many times it is wrongly interpreted that quality management system refers to compliance of group of documents, on the contrary QMS refers to the entire business system. Maintaining the documentation is just a part of it. ISO 9001 is the world's most widely recognized Quality Management System (QMS). It belongs to the ISO 9000 family of QMS standards (along with ISO 9004), and helps organizations to meet the expectations and needs of their customers, amongst other benefits. A complete ISO 9000 Quality Management system needs to address all the requirement of ISO 9001.

ISO

(<https://www.iso.org/news/2004/01/Ref889.html>) has published specific guidelines for organizations in the education sector wishing to benefit from the implementation of ISO 9001:2000, the latest, improved version of ISO's quality management system standards that have been adopted by more than half a million users in all sectors worldwide.

While ISO 9000 users already include educational establishments of all types, the guidelines will facilitate implementation by the sector of ISO 9001:2000. The guidelines are intend-

ed for organizations at all levels, providing all types of education, including: elementary, medium and higher; special and adult education; distance and e-learning.

Why ISO? - First, the motivation for implementing ISO 9001 can influence its effect on financial performance.

Organizations may wish to obtain certification for external reasons such as pressure from customers, markets or governments, or for internal reasons such as improving productivity and efficiency. Those targeting short-term external benefits could expect to gain mainly external benefits, while those aiming at real quality improvement could expect to achieve higher overall benefits.

Second, the degree to which ISO 9001 principles are adopted internally is dependent on the motivation of the organization, and is thought to be critical to successful implementation. Organizations with external motivation tended to implement measures prescribed by the standard as a quick fix to quality problems, while those with internal motivation are more likely to use the standard and the underlying principles in day-to-day decision making to really improve quality. Internalization of ISO 9001 principles is considered necessary in achieving the most significant performance benefits from the QMS standard. The ISO 9001 standard gives a set of generic requirements for implementing a quality management system (QMS) independently on the

organization's activities. However, the education sector has its specificity that makes it different from manufacturing and other services sector activities. Therefore, the ISO 9001 requirements need to be interpreted in the educational field. The International Organization for Standardization (ISO) is aware of this problem; it has published the IWA 2 (2007): Quality Management System-Guidelines for the Application of ISO 9001:2000 in Education and the ISO 9001:2008 Handbook for Educational Organizations-What to Do: Advice from IWA 2 Working Group. To define the requirements of QMS, in 1987, ISO published ISO 9001, ISO 9002, ISO 9003 standards. These standards were subsequently revised in 1994, 2000 and 2008 and 2015 (West, Hunt, Croft, & Jarvis, 2012). In the early 1990's educational institutions from Europe started implementing ISO standards. Then educational institutes from United States and Asia started implementing it. But while implementing ISO, these institutes encountered many problems, because this standard was designed and developed for manufacturing industry. The requirements and the vocabulary used in the ISO standard were not suitable for service industry or for educational institutes. The major problem faced by the educational institutes was the interpretation of the standard. In 2000, ISO revised and combined ISO standards 9001, 9002, and 9003 into one standard, ISO 9001. The resulting

standard provided a set of generic requirements for a QMS applicable to any type of organization, regardless of activity, size, or if it is public or private. New requirements were added, the structure of the standard was changed, and the vocabulary adapted to make it applicable to all sectors, including education. The revised ISO 9001:2000 standard contained eight clauses. The first three were introductory in nature, while the last five contained generic requirements for any organization to implement a QMS, manage its processes, and meet customer requirements. Despite the revisions in the 2000 version, difficulties remained in applying and interpreting this standard in the educational field (Karapetrovic, 2001). This was probably because the ISO 9001 requirements were more generic in the 2000 version when compared to the 1994 set of standards (Karapetrovic, 2001). To deal with these issues, Karapetrovic (2001) looked at the key terms of ISO 9001:2000, interpreted them for engineering education and research, and gave a seven-step approach to implementation.

## II Scope of the study

The scope of the study is restricted to the higher technical educational institutes in India. It does not consider the educational institutes running undergraduate programmes or any other programmes which does not fall in the category of higher technical educational institutes. .

## III Research Objectives

The main objective of the study was to investigate the impact and the effectiveness of ISO 9001:2008 certification on higher technical educational institutes in India. The specific objectives of the study were

- ϕ To investigate the motives of ISO 9001:2008 certification.
- ϕ To study the impact and effectiveness of ISO 9001:2008 on quality performance.
- ϕ To find out the benefits received by the different stakeholders like students, faculty, educational institutes and industry.

Main features of ISO certification in Higher Technical Education Institute- In case of higher technical educational institutes there is a big pressure on the management, because of changing global environment and the trade liberalization, as they have to meet the need of industry with better skilled and quality workforce. The higher technical educational institutes will like to get ISO 9001:2008 certified or/ and quality assurance and accreditation through UGC. Now a day's ISO certification, accreditation from recognized organization is necessary for the higher technical educational institutes because of the cut throat competition in the education market, for acquiring brand image in the minds of the public, for getting the stamp of the quality etc. The standard ISO 9001 is based on management by processes. As processes are cross-functional within institutions, this means that at the time of certification, it is very

important to establish the scope of the quality system to be certified. Various approaches to quality systems are found in the of higher education institutions.

#### IV Review of Literature

Research on impact & effectiveness of ISO series on higher technical institutes shows mixed results. Several (MOLA, 2007) factors influence the decision to implement the ISO standard in higher technical educational institutes. These factors are - aims and objectives of improving the quality of education, strategy of the university/ management in quality issues needs to improve the work system of the institute, prestige of ISO 9001:2008, user's requirements and expectations, requirements of government bodies like Ministry of education, implementation of ISO in other higher technical educational institutes. The impact & effects of ISO 9001 certification on educational institutes are positive. (Huarng, 1999). The ISO improves the quality of process (Adanur, 1995). There are also internal and external benefits from ISO 9000:2000 from various economic sectors in different countries (Van der Wiele, 2004). ISO 9001 usually leads to process improvement, increased participation and increased customer satisfaction (Lagrosen, 2005). There are mixed conclusions reported by other researchers. (Gotzamani, 2006) state that although the ISO 9000

(1994) standard's implementation helps companies to achieve an initial improvement in their quality performance; it cannot guarantee that this improvement will continue after certification. Naveh and Erez (2004) state that ISO:9002 has a positive effect on attention to detail and the consequent productivity level, but a negative effect on innovation. Sampaio et al. (2009) did a literature study of approximately 100 articles on ISO 9000. While making no distinction between the 1994 or 2000 version, they state that there is an interesting relationship between ISO 9001 motivations and the corresponding benefits. According to the literature, companies maximize their benefits if they achieve ISO 9001 certification based on internal motivations. An apparent erosion of ISO 9001 perceived benefits over time, after registration occurs, does seem to occur and deserves further exploration. Lack of top management involvement is considered to be the main obstacle faced by companies during ISO 9001 implementation and certification (Everard A. van Kemenade, 2011). ISO 9000 norms are not the best imaginable quality standards for education and training. Ideally, they should be complemented by content-related criteria. What remains unresolved as yet is the question of the cost-effectiveness of the certification process and the maintenance of the quality system. (Berghe).

There (Prof. (Dr.) Hemant Kothari,

December 2011) are two main differences between TQM and the ISO 9000 series. First, the ISO 9000 certification focuses on one aspect of quality, consistency in the production of a product or service, and does not address the nature of quality which is customer driven. Second, going for ISO 9000 certification is a good way of measuring a firm's progress, but it really should be considered as the beginning of a continuous process rather than a goal to achieve.

According to NITHIN B , a final year mechanical student, in his research paper , to develop the Quality system, it normally takes about 12 to 18 months depending on the complexity of the existing systems and the size of the organization. It is important not to accelerate the time period of completion as the benefits might be reduced. Next is the implementation of the documented system. It is critical that appropriate training/education should be provided to the staff in terms of awareness, audit skills, etc to ensure effective implementation After the implementation, it needs to be audited for compliance, review, improve and then updated.

Universities (Stojanovic, 2015) have two primary missions: to be a place that delivers knowledge and teaches the student how to tackle real-life professional problems, and to deliver graduates who are suitable for the modern industry. With these missions in mind, the student is the raw material that is turned into a product, and

the real customer is the society into which the product is delivered. Shifting the customer focus to the students can lead to a majority of students seeking to obtain a degree in the easiest possible way, thereby seeking to obtain the minimum level required rather than the optimum level.

According to Rafael Manory ([https://www.researchgate.net/post/Do\\_the\\_benefits\\_of\\_ISO\\_9001\\_certification\\_among\\_colleges\\_and\\_universities\\_outweigh\\_its\\_limitations](https://www.researchgate.net/post/Do_the_benefits_of_ISO_9001_certification_among_colleges_and_universities_outweigh_its_limitations)), there is a simple rule that can guarantee quality: if all the people in the system strive for quality in selection of staff and students, the result will be a system that produces high-quality outcomes.

According to Gulderen Yanikkaya demirel from Yeditepe University , ISO 9001 does not cover all aspects of education, but where educational accreditation is not available, to be accredited by ISO 9001, would help the schools (and personnel at all levels) to have a better understanding of the service they are providing.

According to S G Deshmukh from Institute of Technology Delhi , For educational institutes, ISO 9000 helps in a big way by understanding the institutional processes and procedures. Champak Bhattacharyya , in his research article "Educational Institution and ISO 9001-2008 Certification-Correlate" states that , ISO 9001-2008 Certification also necessary for all educational institution in India so that where ever one takes

admission the level of knowledge being received by student is same. This correlation is most important to build up unified India. (Chandandeep Singh) The survey reveals that the most important motive of the institutions is documentation of the systems of the institute. The encouraging factor is that institutions are being benefited from ISO 9000 certification.

V Benefits of ISO 9001:2008 certification to the Higher Technical Educational Institutes -

1. The implementation of ISO 9001:2008 increases the image of the educational institute as it is a symbol of Quality Management System. It helps to improve the brand image of the educational institute.
2. ISO certification increases the level of market demand of the product i.e. student for the educational institute.
3. ISO Certification strengthens quality management system of the educational institute.
4. Well defined quality policy and quality manual for all stake holders of the educational institutes like students , faculty , staff, recruiters etc.
5. Identifies the different processes to ensure documentation of all procedures, compliance with quality standard, monitoring of process parameters which results into improved documentation of processes. These processes will be efficient and time saving.
6. Consistency in the quality procedures which ensures standardization

of processes in the organization.

7. Improves the customer satisfaction & reduction in the customer complaints.
8. Provides senior management with an efficient management process
9. Sets out areas of responsibility across the organization
10. Communicates a positive message to employees and customers i.e. students.
11. It helps to highlight the deficiencies in the organization.
12. It provides continuous assessment and improvement.
13. The introduction of new or additional quality control mechanisms in higher education.
14. A shift in emphasis in schools, from a focus on the quality of the teacher toward the performance of the institution as a whole.
15. It also helps to Get the edge over the other School with an internationally Recognition.

VI Benefits of ISO 9001:2008 certification to the Students of the Higher Technical Educational Institutes -

1. Better quality education will be provided to the students. .
2. Students passing out from such ISO certified industry will have better demand in the industry. It will also assure better job profile, salary package, position in the industry.
3. It will help to increase the confidence of the students and they will be capable of taking the market challenges.

VII Benefits of ISO 9001:2008 certi-

fications to the faculty and staff of the Higher Technical Educational Institutes-

1. Increase in employee morale and motivation.
2. Creates quality awareness in the among the employees of the organization
3. It helps to improve the relations among the employees & boosts the team work in the organization.
4. Improves the performance & the quality of the job of the employees because of the guidelines given in ISO processes.
5. Clearly defined authorities and responsibilities improves the performance of the employees. Clarity about the task to be performed , makes them confident about their job.
6. Helps to improve the relationship with the students.
7. Improved teaching pedagogy , will improve the process of knowledge sharing of the faculty members.
8. Employees will focus more on to the business objectives of the organization.

VIII Benefits of ISO 9001:2008 certifications to the industry -

1. Industry will be able to place better quality students, as they will posses more practical and latest knowledge.
2. As these students will be more capable of executing their task, industry will have to spend fewer amounts on training and development of these students.
3. Company will be able to give

more challenging task to these young employees.

4. Better performance by these students placed through campus , will improve the overall performance of the organization.

#### IX Findings

Day by day ISO 9000 certified institutions and departments are increasing , but many practitioners in the education and training world wonder , whether ISO certification is the best way to improve the quality of the education & the training. There is still controversy in terms of suitability and applicability of ISO in teaching learning process. Only few institutions have registered for ISO Certification and people from the educational institutions wonder that adopting ISO 9001:2008 certification improve the total quality of the Institution? Critics of ISO says , it does not necessarily result in to quality outcomes. On the other hand ISO supporters claims that , it promotes internal effectiveness and improvement.

The (António Jorge Gamboa, 2012)findings suggest the need, on the one hand, for schools to be more proactive in showing the benefits of quality concepts and the certification to stakeholders, and, on the other hand, for international and national quality bodies to make more efforts to produce, divulge and maintain ISO 9000 interpretation guides tailored to the specific needs of educational insti-



tutions.

#### X Recommendations

1. The awareness of ISO 9001:2008 should not be restricted to any grade or specific group of employees. Rather it should be made available to all the employees of the educational institute.
2. ISO 9001:2008 is the beginning of implementing QMS in the organization. It should be supported with other QMS tools like Kizen , 5S ETC.
3. For the effective implementation of ISO 9001:2008 , in the higher educational institutes , the clauses of this certification should be clearly explained to the Human Resource department of the institute , as primarily they are going to implement the QMS in the organization.

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