

APPLICATION MODEL OF ISO QUALITY STANDARDS IN A COMPANY

Dalia Susnienė, Gediminas Sargūnas

Panevėžys University of Applied Sciences, Lithuania

Annotation. Despite the prevailing view that ISO quality standards are necessary, especially for companies operating on the international market, there is also a perception that the organization, when deciding to implement one of the quality systems, may not be able to cope with this task, and the intended investment will not buy back. Based on this, the aim of the research is to provide the application model of ISO quality standards that would allow analyzing and evaluating quality management standards in a company.

Keywords: ISO quality standards; modelling; implementation of quality management system; benefits; certification.

INTRODUCTION

ISO quality standards and their application in business activities are not only a means of achieving a higher quality but also an indispensable tool for resisting other companies offering similar services or products, especially when it comes to international cooperation and competition. Thus, the guarantee of a successful activity is a systematic approach to the processes taking place in an organization and the efficient and consistent application of quality management systems in its performance.

Relevance of the research. Increasing competition and quality goals in the context of the global marketplace, encourages various organizations to improve their business processes and pay more attention to the production, its quality, processes taking place in organizations and the formation of image, both nationally and internationally. With the increasing competition among organizations, the implementation of quality management principles in the activities and their use in everyday business processes becomes very important. Each quality system has both negative and positive features, which respectively determine the application of each in an organization.

Research problem. The ISO quality standards theory is well developed, but it emphasizes and highlights the benefits of this system, and sometimes presents a negative impact. International researches also present the analysis of companies and their activity in the area of ISO 9000 (ISO 9001). It is worth mentioning that in the course of several years, various scientists such as Castillo et al., (2011), Kadash (2012), Golder et al., (2012), Ollila (2012), Sachdeva (2012), Lackovic (2009), Ruževičius, (2010), Ruževičius (2005, 2008, 2010), Kaziliūnas (2006, 2010) Djerdjouri et.al., (2011), etc. assigned their works to the analysis of the quality management system and ISO quality standards. Despite the prevailing view that ISO quality standards are necessary, especially for companies operating on the international market, there is also a perception that the organization, when deciding to implement one of the quality systems, may not be able to cope with this task, and the intended investment will not buy back. Based on this, in practice, it is advisable to provide a model for applying ISO standards that would facilitate the application of standards in the enterprise, would help to disclose the benefit / meaning of its application and allow the assessment of the application of ISO 9000 family standards (in this case, ISO 9001) in its activities, notice the positive or negative sides of the system, and on the basis of the results obtained, to provide a fundamental assessment of the system. Therefore, the aim of the research is to provide the application model of ISO quality standards that would allow analyzing and evaluating quality management standards in a company. Accordingly, it is necessary to analyze academic literature on certification and implementation practice of ISO standards highlighting the benefits of ISO quality management standards.

Research methods employed:

- Analysis of scientific literature. Based on this analysis, ISO quality standards will be defined and their assessment in the scientific context revealed.
- Modelling. This method will compile the information gathered in the theoretical part of the work and present the “Model of application (benefit) of the quality standard ISO 9001 in the enterprise”.

OVERVIEW OF THE IMPLEMENTATION OF ISO QUALITY STANDARDS

According to S. Pekovic (2010), companies can not act independently, as they are dependent on many factors that determine the institutional environment. Companies are forced to include certain structural elements, methods, techniques or procedures that are considered rational tools to realize the organization's goals. It should be noted that some of the requirements for organization could be achieved by implementing a quality system, the economic importance of which has recently grown significantly. In order to ensure the growth of companies and their competitive position, ISO 9000 was assigned to these requirements. Researchers and practitioners (Sturkenboom et al., 2001; Pun, 2002; Sharma and Gadenne 2008; Mehra and Ranganathan, 2008; Teodorescu et al., 2009; Kersten and Koch, 2010) have noticed that if the organization is determined to deploy at least one of the certified management systems, other (ISO 9001: 2015, ISO 14001: 2005 and / or SA 8000: 2008, etc.) will be implemented in the future. The reason for this is that it is convenient to combine these systems, and therefore acts as integral management systems in its company. According to P. W. Morris (2006), based on the review of the ISO 9000 scientific literature, there are two reasons why organizations are willing to be certified. Firstly, the desire to install TQM, in the second place, is to give the organization a competitive edge (a signal to customers about the quality of the organization).

Creation and implementation of a quality management system is a key factor in achieving the quality system's performance, therefore, it is particularly important that it should be consistently implemented within the company, thus providing all the stages of the development and implementation of the management system (see Figure 1).

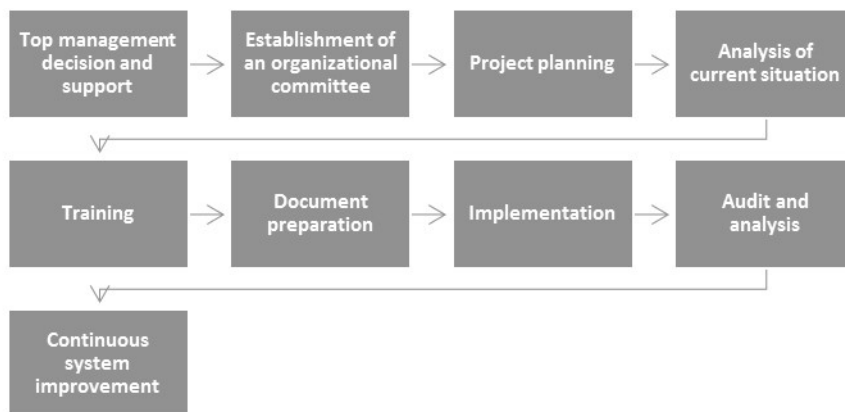


Figure 1. Steps of the management system development and implementation (Vilkė, 2012)

Based on the above facts about ISO 9000, one can conclude that all employees of the organization must have a good understanding of the quality management system, in particular the procedures used to manage the work processes. Regarding the implementation of the system in the enterprise, it is necessary to emphasize the strong commitment of top management, which determines the following factors (see Figure 1) and assures the successful functioning of the system. The ultimate goal is achieved only after all stages of implementation - the use of the standard in the organization.

According to P. W. Morris (2006), aspects of the quality improvement provided by the ISO 9000 certificate are not one-off, since this system is a continuous process of improvement in the organization. When a certificate is issued to an organization, it is checked several times a year, but the audits are less thorough because they are performed by a third party, but if there are some deviations in these checks then the organization is being audited by another audit organization. In this way, the organization has an incentive to follow the ISO 9000 guidelines because an independent third-party auditor is entitled to cancel the certificate issued to the company. In addition, each organization having ISO 9000 certificate has to be extended to it after 3 to 4 years.

Summing up the implementation of the quality management system, it can be argued that this is a long process that requires not only the determination of the organization itself and the great work of completing various documents and internal inspections, but also requires much time, and financial resources. It should be noted that the organization that has decided to implement this system is prepared to cooperate not only with new partners, but also to continue to cooperate with current foreign partners and to seek the

international recognition of its products alongside meeting the needs of customers. All these measures will result in higher turnover and thus higher income.

CERTIFICATION PROCESS IN LITHUANIA

The paradigm of modern management is changing - the changing environment and the changing social structure come first where interest groups, social networks, communities start to prevail. Organizations use different quality management methods to maintain an effective and efficient management of the organization in order to stay in a competitive environment and gain an edge. One of the most commonly used quality management method in Lithuania is the development and implementation of management systems in accordance with international standards (Baronienė, 2007; Ruževičius, 2008).

Analyzing the certification process of Lithuanian companies, it can be noted that it is two-sided, i.e. mandatory and voluntary. It is understood that mandatory certification of an organization is inevitable in order to perform a particular activity. As far as non-mandatory systems are concerned, it can be said that their abundance allows the company itself to choose whether it will additionally certify or not, which quality assurance systems to choose, to analyze the potential advantages and disadvantages of the systems. According to J. Ruževičius (2008), Lithuanian certification system includes products, organization, and employees. It reflects both mandatory and voluntary conformity assessment. Certain types of voluntary certifications can be mentioned: ISO 9001, ISO 14001, OHSAS, etc. The certification system in Lithuania provides much more voluntary certification measures than mandatory ones. One can conclude that in Lithuania, there is no intention to enforce companies to improve their products or services, and the responsibility for them is left to the companies themselves. It should be noted that each company which adopts an additional quality assurance system, gain more opportunities in the market, it is more trusted not only by its partners but also by end users of products or services, which results in greater competitiveness and higher income.

APPLICATION OF QUALITY STANDARDS

ISO 9001 quality standard in Lithuanian companies

Lithuanian companies are no less open to quality management systems such as ISO 9001 than other European Union and other countries, and this is especially evident in recent years. According to the Lithuanian Standardization Department, there were 1624 companies that have implemented the ISO 9001 quality standard nationwide (as of March 1, 2015). This shows that this standard is not only popular but also potentially useful for the companies themselves, their partners and customers. A survey of Lithuanian companies in the field of standardization revealed that most of certified enterprises were from manufacturing field, and only recently the public sector companies or higher education institutions started to apply this standard. Regarding ISO 9001 certificates issued by organizations to Lithuanian companies, it is not often observed that these activities are carried out not only by local organizations, but also by international organizations. It can be concluded that certified Lithuanian companies are properly evaluated not only by local experts but also by international organizations with considerable experience in this field and have made a significant contribution to the development of the ISO 9001 certificate in various countries.

A model for the application of the quality standard

After analysing the studies of various scientists (McDonald et al., 2003; Beckford, 2002, Kaziliūnas, 2006, Lo and Chang, 2007, Čipkutė and Ruževičius, 2007, Rocha et al., 2007; Salomone, 2008; Pabedinskaitė et al., 2009, Lacković et al., 2009, Jimenez-Jimenez and Martinez-Costa, 2009; Fotopoulos et al., 2010, Pekovic, 2010; Ollila, 2012, Kadasah, 2012, etc.) in the context of quality and ISO 9001 quality management, the model of the ISO 9001 application (benefit) for the company can be devised, with the emphasis on both internal and external benefits and criteria. This model discloses how ISO 9001 quality standard capacitates to achieve the core corporate goals such as profit, image, customers and advertising. The realization of these goals is a key indicator that enables an enterprise to be identified as being at a world-class quality level, competitive not only in its own country, but also worldwide.

The application model of ISO 9001 consists of one main dimension (world-class quality level), which is defined by two components, i.e. external benefit criteria and internal benefit criteria. Accordingly, we can evaluate the criteria presented by using indicators assigned to them, which correspond to certain attributes, which are specific to the subject under consideration. The components of the application (benefit) model of the ISO 9001 and their reflective features are presented in Figure 2 and Table 1.



Figure 2. Model of the application (benefit) of the ISO 9001 quality standard in the company

Table 1
Components of the application (benefits) model of the ISO 9001 quality standard in the enterprise and their criteria and attributes

Dimension	Criterion	Indicator	Attribute
World-class quality level	External benefit	Marketing improvement	Image, advertising, greater production value
		Customer satisfaction	Less complaints about quality, the steady or increasing number of customers
		Greater market share	Greater consumption, profit, increased competitiveness
	Internal benefit	Perfection of the organization	Constant quality, efficient management
		Teamwork	Job planning, problem solving, work breakdown
		Remuneration system	Employee motivation, higher employee satisfaction, clear payment system
		Communication	Clear working methods, clear job requirements, fast dissemination of information
		Improvement	Fewer errors (higher efficiency), higher product quality, resistance to competitors

The first criterion is the external benefit that provides the company with a variety of opportunities (improved marketing, and as a consequence greater satisfaction of company's products and more new customers), which later grow to a certain benefit (i.e., higher turnover, which results in higher profits). The second criterion is an internal benefit that is often not directly felt, but contributes significantly to the development of the company, as it ensures both communication, which promotes teamwork, and establishes certain systems of reward for work that are based on the contribution of each person to a certain processes in the organization. All this enables the company to develop and achieve its goals, i.e. Recognition and profit. These criterion indicators are characterized by a variety of attributes that can be used to evaluate each component element of the model.

Analyzing the model, it can be argued that it is unique in the fact that in the investigated scientific literature various authors described the quality, the ISO 9001 quality management standard, but have not presented the combined benefits of this system. In majority of academic studies, the most frequently discussed topics were country certification systems (Ruževičius, 2008), certification procedures, their stages, input and output of ISO 9001 quality management system (Su et al., 2010), TQM (Ruževičius, 2010) or relationship among technology, quality, science and economic (Ruževičius, 2010), etc. The relationships

between the criteria and indicators of this model are expressed by a world-class quality dimension. In order to link everything to the general benefits of the ISO 9001 standard and to achieve a comprehensive assessment, each component must be analyzed individually.

In summing up the quality can be treated in terms used to describe the factors that attract customers and that customers seek when purchasing a particular service or product. It should be noted that all this has led to the emergence and development of new scientific disciplines. Total Quality Management is one of the most used management theories and practices, which theoretical development and practical application is relevant not only today, but will likely address future development opportunities and anticipated future challenges. It is validated that TQM combines many areas of the organization, such as quality assurance infrastructure, quality diversity of products, quality of economic governance and organizations.

CONCLUSIONS

After thorough analysis of academic literature on the application of quality management systems it can be concluded that quality is a fundamental attribute that has value, which increases with the satisfaction of individual or widely understood needs of the customers, and which is evaluated after the use of the final product or service. Quality management is one of the most important elements of global quality, and TQM is one of the widely used management theories and practices the theoretical development and practical application of which are relevant not only today but also will be in the future in addressing the possibilities of further development and providing the solutions for possible future problems.

In the scientific literature, the following are the main advantages of the standards: the increased market opportunities (the company adopting this standard is valued by customers as being more efficient and better organized), lower costs, better reputation with stakeholders, less resource consumption, better satisfaction of customer needs, improved management control and a higher profit margin.

Limitation of this research. In order to test and find out the practical benefits of the devised application model of ISO quality standards in a company, it is important to develop a survey instrument (e.g. a questionnaire) based on the model. The analysis should be based on the assessment of the benefits in various aspects (return, future perspectives, and possible negative factors). The findings will help to evaluate not only the correctness of the model, but also its practical operation.

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Summary

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