

PROBLEMS WHILE IMPLEMENTING QUALITY MANAGEMENT SYSTEMS FOR A SUSTAINABLE DEVELOPMENT OF ORGANIZATIONS

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Abstract

To have more benefits from the ISO 9000 quality system, organizations may take into consideration that design and implementation of an organization's quality management system is influenced by its strategy, size and structure, its organizational environment, changes in the environment, and risks related to the environment. Literature indicates that organizations often lack flexibility designing and implementing quality management systems and demonstrate low use of employees skills and knowledge. The paper analyzes different patterns of implementing quality management systems in different organizations and examines performance outcomes related to it. Research shows that organizations with different quality management system implementation patterns have significantly different performance outcomes. A mature quality management system should consider success factors for quality management system implementation benefits from the early phases of their planning and designing processes. By requiring that all processes and procedures be documented, the ISO 9000 standard is undoubtedly commonly related to control orientation and explicit knowledge orientation in organizations. There is an interesting relationship between the reasons for the ISO 9001 quality management systems implementation and the corresponding performance outcomes. It is very important to modify maintenance of a quality management system during the post-certification period. Quality auditors are in a powerful position to increase the value of quality management systems.

Keywords: quality management systems, ISO standards, quality management, knowledge management

Introduction

The objectives of the ISO 9000:2000 standards are a systematic pursuit of processes improvement in order to attain continual improvement, error prevention and other adverse outcomes, and reduction of variation of organizational waste. Quality management systems based on international standards benefit manufacturers, service providers, users, consumers and regulators, support sustainable development, provide confidence and facilitate access to world markets, so their popularity is relevant today. By looking at the number of ISO 9001 certificates per

1 000 inhabitants one can see that Italy is the leader (1.70), followed by Spain (1.11) and Australia (0.84), UK (0.76), Germany (0.48), Japan (0.42), France (0.40) (Sampaio et. al., 2009).

Quality management systems according to the ISO 9001 standards have gained recognition in Lithuania too. Numbers of ISO 9001 certification have substantially increased in past few years. By the end of August 2012 ISO 9001 issued 1.218 certifications across a wide range of organizations in the manufacturing, service and government sectors. The number of ISO 9001 certificates per 1 000 inhabitants in Lithuania reached 0.34. Companies which are interested in ISO certification more usually receive not only ISO 9001 but also ISO 14001 certificates. However, there is still a comparatively big number of companies which are not ISO 9001 certified in Lithuania (Mikulis and Ruževičius, 2009).

Lithuanian businesses and organizations of all kinds have been rapidly changing over the recent years. Organizations and companies become increasingly dependent on each other and foreign partners for business, prosperity and socio-economic changes and environmental responsibility. To remain effective and relevant, standardization and standard processes need to meet the changing expectations of industry, regulatory authorities, society and multiple stakeholders. There is an essential necessity for using international standards in these changing conditions.

Despite numerous success of ISO 9000, considerable criticism of certification exists, as it is not a risk-free undertaking. ISO 9000 certification does not guarantee improved performance due to high explicit and implicit costs associated with its implementation (Van der Wiele *et al.*, 2005). Lately, various studies have confirmed that ISO 9000 certification is too expensive, time consuming, resource-consuming, formalized and impersonal and that implementation costs are greater than benefits derived (Bhuiyan and Alam, 2005; Casadesus and Karapetrovic, 2005).

Concerning the service sector, Dick et al. (2002) concluded that ISO 9001 quality system

implementation makes a strong difference in the way quality is perceived and measured. Studies do not generally address that after organizations implement quality management systems (Ab Wahid and Corner, 2009)

The purpose of this paper is to analyze different patterns of implementation and maintenance of quality management systems in organizations which can to help in planning and implementation of quality management systems according to 9000 standards most successfully.

Current research is based on the method of qualitative analysis and literature of quality management practice review.

1. Impact of an organizational structure and management orientation

Implementation of a quality management system and its subsequent certification is a voluntary process supported by the organization's own strategy, motivation, policy and goals. To have more benefits from ISO 9000 certification, organizations may take into consideration that design and implementation of an organization's quality management system is influenced by the organization's strategy, its size and structure, organizational environment and its changes as well as risks associated with that environment (EN ISO 9001:2008, 2008). In this connection it can be stated that although ISO 9000 has become a common knowledge in organizations and the standard is widely adopted in different industries and sectors, it can be a source for competitive advantage because ISO certified organizations can implement the standard in very different ways.

Some studies analyze the relationship between the values and requirements that underpin the ISO 9000 standard and important strategic and organizational dimensions. Control or creativity orientation is an important dimension that underpins many strategic management choices of organizations (Ghani *et al.*, 2002). Control-oriented organizations are synonymous with bureaucracy, are centralized, have extensive departmentalization, high formalization and mainly downward communication, they use a process-oriented strategy, while operational excellence is mainly marked by a highly disciplined and structured way of doing business. The ways of solving and sensing problems can be reduced to a set of explicit systems and instructions. By requiring that all processes and procedures be documented, the ISO 9000 standard is undoubtedly commonly associated with control-oriented organizations (Molina *et al.*, 2004). The standard enhances control of the management system by documentation and formalization (manuals, procedures, instructions, protocols, etc.) and systematization (hierarchical,

orderliness, sequentially interacting processes) (Anwar and Jabnoun, 2006). Organizations of this type derive benefits from ISO 9000 certification very easily.

On the opposite side of the strategic spectrum are creativity-oriented organizations. This model organizations use cross-hierarchical, flexible and functional teams, have low formalization, lateral, upward and downward communication systems, and almost continually search for market opportunities and accordingly institutes or needs to institute highly flexible structures and practices (Donaldson, 2001). Normative values of institutionalization, documentation and systematization embedded in the ISO 9000 standard will militate against the need for structural fluidity to stimulate creativity and innovation (Mallak *et al.*, 1997). Organizations of this type introduce some difficulties in implementing quality management systems according to the ISO 9001 standard.

Abdullah and Ahmad (2009) analyzed the fit between organizational structures, management orientation, knowledge orientation, and the values of the ISO 9000 standard. They postulated that the more mechanistic and explicit knowledge based organizations will enjoy ISO certification, the more organic and tacit knowledge organizations will experience tensions arising from a lack of fit. Hence, conceptually, the standard will work best in more mechanistic and routine knowledge based settings. Creativity-oriented strategies will find the standard quite dysfunctional, while control and operation-based strategies are likely to benefit most from certification. Same organizations face two conflicting imperatives. The structure tends to be more mechanistic like in public universities but knowledge is more tacit. The standard will cause processes to be agreed, defined, structured, approved, monitored and yet the quality of education will not be fully assessed, as many tacit elements are not subject to easy explication. The standard tends to fit in and also intensify the mechanistic nature of these organizations but also seeks to explicate processes. Teaching processes have been structured and standardized much to the chagrin of educationists and pedagogies in universities. Universities have been slowly suffering from a growing incompatibility of the standard and the tacit knowledge of this sector (Abdullah and Ahmad, 2009; Hazman and Sarina, 2008).

It is clear that quality has emerged as a strategic competitive tool for an organization's success in the manufacturing, service and government areas (Ruževićius and Kasperavičius, 2008). In today's business environment, organizations cannot afford to ignore strategic implications of quality for their

competitive position. Lee *et al.* (2009) analyzed the implementation and performance outcomes of ISO 9000 in service organizations and showed that managers in organizations should realize that ISO 9000 is capable of generating a competitive advantage only if top management is fully committed to the program implementation from a strategic perspective. The most important factor is the way certification is perceived by top/senior management, as this is classified as the most influential factor for implementing the standard. If certification is perceived in a negative way, top management will not implement the standard, and on the other hand, if the standard is perceived positively, top management will provide their full support to ISO 9000 certification. This is evident from the fact that top management acts as a driver of the implementation of quality management systems by providing needed resources and the key to continuous improvement through the creation of values, goals, and systems to satisfy customer expectations and improve organization performance (Chin and Choi, 2003).

Some authors classify organizations into three categories of strategic orientation, namely, cost leadership, market differentiation and focus strategy, and conclude that strategic orientation is a moderating factor that influences the relationship between registration to a quality scheme such as the ISO 9000 and the organization's financial performance (Dimara *et al.*, 2004).

The latest version of ISO 9000 indicates that the standard is constituted of eight principles (ISO 9000:2005). Thus, it is possible that "certified organizations may not implement these principles in similar extents and may exhibit varying patterns of implementation by paying extra attention to some principles that are in the line with their corporate strategies" (Lee *et al.*, 2009: 647). Therefore, organisation managers should carefully design the ISO 9000 implementation strategy. With a well-developed ISO 9000 strategy, implementation of the standard can be better aligned with the environment of an organization so as to accomplish competitive advantages and optimal performance.

In order to achieve the true value associated with quality system implementation, it should be made consistent with the organization's strategic directions. Also, identified barriers should be reduced or eliminated in order to have effective implementation which in turn will result in the expected outcome over time. Also, enhancing the level of true value of the standard and effective implementation, it is strongly recommended that organizations need to focus on receiving training by professional organizations/institutions on the true meaning of the standard and the new changes and how these changes can affect the organization (Magd, 2008).

2. Impact of knowledge orientation

ISO 9000 has become a favored system for many organizations embarking on quality management. ISO 9000:2000 is an information-sharing tool that an organization can use to gain knowledge needed to enhance quality and performance. It also provides a ready framework for ordering and structuring an organization's knowledge. Successful implementation of a quality management system requires appropriate program formulation (Addey, 2001; Chen and Tsou, 2003). The program related to quality management system implementation should consider from the early stages of its lifecycle the right activities, in the right order and with the right resource involvement. In this context, Lin and Wu (2005) identified the most important activities within ISO 9001:2000 processes which can facilitate knowledge flow and proposed a knowledge creating model for ISO 9001:2000 that an organization can use to gain knowledge needed to enhance quality and performance. It also provides a ready framework for ordering and structuring an organization's knowledge.

Nonaka and Takeuchi (1998) conceptualized that knowledge in organizations can be identified as tacit or explicit. Knowledge classification into tacit or explicit offers a simple and widely explanation. Tacit knowledge refers to experience, intuition, judgment and heuristics that one develops over time which is embodied in the knower. Tacit knowledge cannot be easily transferred or externalized. It takes place through a long process of deep learning, apprenticeship, socialization and mentoring. Explicit knowledge, on the other hand, refers to knowledge that is recognized and embodied in various organizational routines, i.e. manuals, procedures, instructions, standards, protocols, etc. This type of knowledge can be easily acquired and transferred. As the role of knowledge and the learning organization has grown, the tacitness and explicitness of knowledge in the organization will become the key strategic consideration in shaping a competitive strategy (Abdullah and Ahmad (2009). For quality management programs and quality models more useful and more popular explicit knowledge is.

The ISO 9001:2008 standard explicitly requires that all processes and procedures be established, documented, implemented and maintained. In fact, the standard and its requirements have become the new source of legitimating organizational routines (Walgenbach, 2001; Anwar and Jabnoun, 2006). A quality manual symbolized an institutionalized system of control of processes by which customers' requirements are met (Mike, 2004). Many studies state that quality assurance, ISO 9000 certification including, tends to result in greater formalization and explication (Beck and Walgenbach, 2003; Naveh

and Erez, 2004). Explication refers to preference for embedding knowledge of performing a specific task in instructions, procedures and manuals. These documents become the main embodiment of technical knowledge needed to maintain and improve a quality management system. In fact, explication is consistent with an organizational need to capture as much knowledge possessed by the workers to the organization's memory and routines (Molina et al., 2004). Explication enables knowledge transferability and ensures know-how routines embedded in actions and practices of carrying out day-to-day the quality management system by the way of training programs (Lin and Wu, 2006). In fact, in a high tacit knowledge organization, certification processes are inherently more difficult as much of the system cannot be described or effectively documented. Without explicit documentation, the system is deemed to weaken and compliance and auditing have been increasingly challenging for auditors.

The impact of the standard on organizational performance is greatest in organizations, which mainly utilize explicit knowledge, and in weakest organizations, which mainly utilize tacit knowledge (Abdullah and Ahmad, 2009).

Literature analysis shows that for quality improvement programs, especially those that associated with ISO 9000 standards, requirements are more useful than explicit knowledge. Very important for successful implementation of quality programs are learning management leadership, employee involvement, objective setting and planning, infrastructure, development and improvement of the learning process, measurement of learning performance (DeTienne et al., 2004; Hariharan and Cellular, 2005). Internal customers are the final arbiters of how well organizations implement quality programs. Organizations may focus on systematic communication with internal customers and act quickly to their requirements. Success of an organization's quality program increasingly depends on its leadership. Leaders may act as role models through ethical behaviour and personal involvement in planning, communication and coaching (Lo and Chin, 2009, p. 457). An ongoing quality system program implementation strategy development involves performance goals and action plans that reflect importance of quality improvement activities. It is necessary to understand a necessity of participation of line managers in planning and designing training. Without this participation, training is technique-oriented rather than problem- and result-oriented. Establishment of the learning infrastructure provides foundation and support to alignment of goals to satisfy internal customers' needs and expectations and

implementation of program goals at all organizational levels. Continuous development and improvement of the learning process help organizations to communicate customers' requirements, monitor actual knowledge management performance, and make adjustment in prioritizing and reallocating resources.

Very important for successful implementation of a quality system is a performance measurement process. A well-structured performance measurement process provides linkage between strategies and actions. Links are established by performance goals developed to encourage employee behavior to meet the organization's objectives and facilitate and induce quality learning by incorporating goal setting feedback as the essential component of the system.

Typically, employees receiving quality training are from different functional areas of the organization and thus have different vested interests and learning objectives. That is, the training audience is typically heterogeneous as opposed to homogeneous. Therefore, in such situation, training must be tailored to accommodate the unique needs of various elements of the training audience, and to correctly ascertain whether employees of a particular segment (or role) learned what they need to know to directly apply in their specific job (Nanda, 2009).

3. Relationship between organizations' certification motivations and the corresponding results

The majority of organizations implement the ISO 9001:2008 quality system for several reasons. Firstly, it can be seen as a means of improving internal processes and product or service quality. Secondly, it can be driven by the adopting organization as a means or a route of increasing a local or a foreign market share where ISO certification has value. Thirdly, it may be driven by customers' request to conform to their internal quality control and supplier quality assurance system (White et. al. 2009). Organizations that view certification as an opportunity to improve internal processes and systems, rather than simply to hang a certificate on the wall, will get broader positive results from the ISO 9000 quality management systems (Lopis and Tari, 2003). Swedish investigators Lundmark and Westelius (2006) revealed that the strongest, most obvious and most valued effects of the ISO 9000 quality management systems are clearer and more apparent work procedures and responsibilities. The most apparent problem is bureaucracy, which can lead to reduced flexibility.

The benefits from the ISO 9001 quality system can be classified into external and internal categories. The former are related to improvements in terms of marketing and promotional aspects, customer

satisfaction and market share, while the internal benefits are related to organizational improvements, the reward system, team work, measurement of performance and communication, and continuous improvement (Douglas *et al.*, 2003; Gotzamani and Tsiotras, 2002).

As an external motivation factor, ISO 9001 certification is frequently used mostly as a marketing tool (Poksinska *et al.*, 2006). Some companies admit that without ISO 9000 certification they would not have achieved a significant number of contracts (Douglas *et al.*, 2003). Based on survey results, Bhuiyan and Alam (2004) concluded that as for US companies, one of the most important underlying reasons for becoming certified is existence of commercial relationships with the European markets. Customer pressure is also one of the major motivations to achieve ISO 9000 certification mentioned by companies (Martinez-Costa and Martinez-Lorente, 2003). A strong relationship between companies' certification motivations and the corresponding results was revealed. When firms simply react to external pressures for getting certified, they may consider ISO 9000 certification as their prime goal in itself, adopt a minimalist approach to achieving it and thus achieve limited internal performance improvement (Quazi and Jakobs, 2004). Rodriguez-Escobar *et al.* (2006) analyzed dissatisfaction with ISO 9000 in small companies. For small companies, certification is only a guarantee that the company is using a quality management system according to the list of requisites and procedures. However, the benefits attributed to ISO 9000 often are overstated, so that companies tend to generate high expectations that are difficult to realize completely. Biazzo (2005) suggests that there must be evolution towards the so-called performance/management audit model in order to increase the ability to unveil conformity and thus increase the value of certification. The evolution of the logic of audit takes on particular importance in the context of small and medium-sized enterprises since these companies tend to implement formal quality systems only when there is a significant external pressure to do so, and when they do, their approach to implementation of the ISO 9001 standards tends to be minimal.

Fotopoulos and Psomas (2010) investigated ISO 9001:2000 implementation in the Greek food sector and showed that the major reasons for certification, unlike benefits, firstly concern the internal business environment and then the external, and no particular difficulties were observed during standards implementation. From all findings of the study the authors concluded that strong internal motivation or willingness to improve the company's quality helps to establish a quality management system

that leads to external benefits, such as improvement of the company's position in the market as well as to internal benefits. Ruževičius *et al.* (2004) obtained similar results. Their research revealed that implementation of a quality management system mostly results in the benefits of intangible nature that are internal for the given company. The key finding is that although the main reasons for starting quality system implementation are expectations of external advantages, implementation results mostly in increase of internal benefits such as improvements of the definition of responsibilities and obligations of employees, decrease of non-conformism, better communication among the employees, and increased efficiency.

White *et al.* (2009) examined the rationale for establishing a quality management system by obtaining ISO 9001:2000 certifications in non-profit small to medium enterprises in the UK and showed that through correct development of a quality management system a company was able to generate bottom-line savings and business performance enhancement. The study identified the process of preparation for certification and showed that when a quality management system is developed as part of coherent initiative, lasting performance improvements are achieved.

4. Influence of maintenance of the quality system after its implementation

This period is important if the organization wants to continuously improve and reap long term benefits from having a quality management system in place (Nanda, 2009). There is evidence in literature that the ISO 9001 perceived benefits of quality management systems decrease over time (Casadesus and Karapetrovic, 2005). They stated that there was no evidence to state that certified organizations progressively experience more beneficial outcomes from ISO 9001 certification. In fact, results indicated that quite the opposite organizations appeared to experience declining benefits over time. Those investigations show how important correct maintenance of the quality management system during the post-certification period is. During this period, emphasis is placed on activities such as management reviews, corrective and preventive actions, internal and external audits, collection and analysis of data, measurement of performance, and continuous improvement. Ab Wahid and Corner (2009) investigated critical success factors and problems with ISO 9000 quality management systems maintenance in a service organization. Results showed that people in top management, other employees, the reward system, team work, continuous improvement, understanding of ISO 9000 itself, and measurement of performance and communication are all critical

success factors for ISO 9000 maintenance and for successful outcomes of the quality management system. Continuous improvement of processes, people and systems are also very important factors for sustainability of the quality management system. It is useful to apply other methods and tools to achieve required quality. Miguel and Dias (2009) proposed the framework for combining the ISO 9001 requirements with quality function deployment. White et al. (2009) suggested using process mapping for process analysis and development in not-for-profit organizations.

Quality auditors are in a powerful position to increase the value of the quality system. In general, questions that any auditor asks when auditing are conditioned by the plan they have and the strategy taken to discover answers. There are a number of generally used approaches to conducting an internal and external audit of the quality system and each can be characterized by:

- the way the audit has been planned (that affects what the auditor is looking for and the order in which the audit is performed);
- the way the checklist is produced (that affects what the auditor is looking for and the questions the auditor will ask);
- the way the auditor conducts the audit (that affects the speed at which evidence is collected and significance determined);
- the way the auditor makes conclusions (that affects the validity of the results).

As each audit conducting organization has its own techniques there are no definite methods. The main reason for conducting audits is to obtain factual input for management decisions but the vast majority of audits only produce data for granting a certificate, improving documentation or enforcing conformity. Most auditors are exposed to conformity auditing where the sole objective is to establish whether a specific requirement has been met. They invariably do not provide data for making managerial decisions concerned with staff development, technology, growth, products and processes because these decisions are based on the current performance and often all audits reveal the current conformity, not the current performance. Element-based auditing provides evidence that the organization has interpreted the elements of the standard into procedures and that procedures have been followed but not that the intended results have been achieved. Department-based auditing provides some evidence that the organization has interpreted the standard into departmental responsibilities and procedures have been followed but not that the planned results have been achieved. Task-based auditing provides evidence that specific tasks have been accomplished but not that the planned results have been achieved.

A more effective is processes-based auditing. The auditor seeks to establish the results the organization desires to achieve, determines that these results take into account customers' and interested parties' needs and then examines the way the processes are managed to achieve these results and to improve performance. Doing so, the auditor touches every requirement in the ISO 9001:2008 standard. If evidence reveals that the organization is satisfying customers' and other interested parties' needs and is applying the eight quality management principles in the way it runs its activities there will be no sound basis for reporting non-conformities.

Assessments are generally restricted to the scope of the management system and the auditor only interfaces with the company's managers and accessible staff, covered by the system. Auditors do not really communicate or interact with any of the organization's customers, shareholders and founders or other providers of finance, partners, trade associations, regulatory bodies and host governments, the local community or other affected by the business. So how can they really understand the auditee's performance if they are denied direct access to the organization's stakeholders?

The objective of some organizations is to achieve ISO 9001:2000 certification as a marketing tool and not as a management tool, no matter whether they conform to the standard or not. In this case, it is clear that the certified quality management system requires feedback from final users in order to operate correctly. It is very useful for auditors go outside of the usual scope of assessment and obtain qualitative feedback from the organization's key external stakeholders (Peterson, 2005). It is necessary to prepare customer satisfaction questionnaires for information and to speak to some real customers.

The "verification" methodology consists of four stages:

1. Is policy in place?
2. Is the system in place to implement policy?
3. Do records show that the system is working in practice?
4. When asked, do stakeholders agree that the system is working and reliable?

Traditional quality management system auditing usually goes as far as to the third point but it is the last step that can really add value to the organization. Naturally there are practical difficulties: for example, in identifying stakeholders the auditor can contact during a limited assignment those who are willing to help by providing feedback but there is nothing that cannot be overcome. It is very useful for analysis and evaluation of the present situation to identify areas for improvement.

Conclusions

There is a relationship between the values and requirements that underpin the ISO 9001 standard and the organizational structure and management orientation. Control-oriented organizations get benefits from the ISO 9001 quality system more easily than creativity-oriented organizations. The impact of the standard on organizational performance is greatest in organizations, which mainly utilize explicit knowledge and is the weakest in organizations, which mainly utilize tacit knowledge.

There is an interesting relationship between the reasons of ISO 9001 quality management system implementation and the corresponding performance outcomes. According to literature, organizations maximize their benefits if they achieve ISO 9001 quality system implementation based on internal motivation. Organizations that pursue ISO 9001 quality management system implementation willingly and positively across a broad spread of objectives are more likely to report improved organization performance than those organizations that are pursuing ISO 9000 certification in a reactionary mode due to customer pressure.

Successful implementation of a quality management system according 9000 standards requires appropriate program formulation. The ISO 9001:2008 standard explicitly requires that all processes and procedures be established, documented, implemented and maintained. For this purpose explicit knowledge is very useful. Explicit knowledge refers to knowledge that is recognized and embodied in various organizational routines, i.e. manuals, procedures, instructions, standards, protocols, etc. This type of knowledge can be easily acquired and transferred. For quality management programs and quality models more useful and more popular explicit knowledge is.

Correct maintenance of the quality management system during the post-certification period is very important. During this period, emphasis is placed on activities such as management reviews, corrective and preventive actions, internal and external audits, collection and analysis of data, measurement of performance, and continuous improvement.

References

1. Ab Wahid, R., Corner, J. (2009), Critical success factors and problems in ISO 9000 maintenance, *International Journal of Quality and Reliability Management*, 26(9), 881-893.
2. Abdullah, H.S., Ahmad, J. (2009). The fit between organizational structure, management orientation, knowledge orientation, and the values of ISO 9000 standard, *International Journal of Quality and Reliability Management*, 26(8), 744-760.
3. Addey, J. (2001). Quality management system design: a visionary approach. *Total Quality Management & Business Excellence*, 12 (7/8), 849-854.
4. Anwar, S.A., Jabnoun, N. (2006), The development of a contingency model relating national culture to total quality management, *International Journal of Management*, 23(2), 272-280.
5. Bhuiyan, N., Alam, N. (2004), ISO 9000:2000 implementation- the North American experience, *International Journal of Quality and Reliability Management*, 53(1), 10-17.
6. Beck, N., Walgenbach, L. (2003). ISO 9000 and formalization: how organizational contingencies affect organisational response to institutional force. *Schmalenbach Business Review*, 55(4), 294-320.
7. Bhuiyan, N., Alam, N. (2005), An investigation into issues related to the latest version of ISO 9000, *Total Quality Management*, 16 (2), 199-213.
8. Biazzo S. (2005). The new ISO 9001 and the problem of ceremonial conformity: How have audits methods evolved? *Total Quality Management & Business Excellence*, 16(3), 381-399.
9. Casadesus, M., Karapetrovic, S. (2005), An empirical study of the benefits and costs of ISO 9000 compared to ISO 90001/2/3:1994, *Total Quality Management*, 16(1), 105-120.
10. Chen, J.M., Tsou, J.C. (2003). An optimal design for process quality improvement: modelling and application. *Production Planning and Control*, 14(7), 603-612.
11. Chin, S.K., Choi, W.T. (2003), Construction in Hong Kong: success factors for ISO 9000 implementation, *Journal of Construction Engineering and Management*, November/December, 599-609.
12. DeTienne, K.B.; Dyer, G.; Hoopes, C.; Harris, S. (2004). Toward a model of effective knowledge management and directions for future research: culture, leadership and CKOs. *Journal of Leadership and Organizational Studies*, 10(4), 26-43.
13. Dick, G., Gallimore, K.; Brown, J. (2002). Does ISO 9000 accreditation make a profound difference to the way service quality is perceived and measured? *Managing Service Quality*, 12 (1), 30-42.
14. Dimara, E., Sakuras, D.; Tsecouras, K.; Goutsos, S. (2004). Strategic orientation and financial performance of firms implementing ISO 9000. *International Journal of Quality and Reliability Management*, 21(1), 72-89.
15. Donaldson, L. (2001), *The Contingency Theory of Organizations*, Sage Publications: Thousand Oaks, CA.
16. Douglas, A., Coleman, S., Oddy, R. (2003), The case for ISO 9000, *The Total Quality Management Magazine*, 15(5), 316-324.
17. EN ISO 9001:2008 E, 2008, Quality management systems – Requirements, CEN management centre: rue de Stassart, 36, Brussels.
18. Fotopoulos, Ch. V., Psomas, E. L. (2010), ISO 9001:2000 implementation in the Greek food sector, *TQM Journal*, 22(2), 129-142.

19. Ghani, K.A., Jayabalan,V., Sugumar, M. (2002), Impact of advanced manufacturing technology on organizational structure, *Journal of High Technology Management Research*, 13(2), 159-175.
20. Gotzamani, K., Tsiotras, G. (2002). The true motives behind ISO 9000 certification: their effect on the overall certification benefits and long term contribution towards TQM. *International Journal of Quality and Reliability Management*, 19(2), 151-169.
21. Hariharan, A., Cellular, B. (2005). Critical success factors for knowledge management. *KM Review*, 8(2), 16-19.
22. Hazman, S.A., Sarina, O. (2008), Public universities governance: the missing parameters, *Governance and Leadership in Higher Education*, National Science University Publishers, Penang, pp.17-24.
23. Lee, P. K. C., To, V. M., Yu, B. T.W. (2009). The implementation and performance outcomes of ISO 9000 in service organizations: an empirical taxonomy, *International Journal of Quality and Reliability Management*, Vol.26, No.7, pp.646-662. x
24. Lin C., Wu, C. (2005), A knowledge creation model for ISO 9001:2000, *Total Quality Management & Business Excellence*, 26(7), 646-662.
25. Lin, C., Wu, C. (2006), Case study of knowledge creation contributed by ISO 9001:2000, *International Journal of Technology Management*, 16(5), 657-670.
26. Lo, K.C., Chin, K.S. (2009). User-satisfaction-based knowledge management performance measurement. *International Journal of Quality and Reliability Management*, 26(5), 449-468.
27. Lopis, J., Tari, J. (2003), The importance of internal aspects in quality improvement, *International Journal of Quality and Reliability Management*, 20(3), 304-324.
28. Lundmark E., Westelius A. (2006). Effects of quality management according to ISO 9000: A Swedish study of the transit to ISO 9000:2000. *Total Quality Management & Business Excellence*, 17(8), 1021-1042.
29. Magd, H.A.E. (2008), ISO 9001:200 in the Egyptian manufacturing sector: perceptions and perspectives, *International Journal of Quality and Reliability Management*, 25(2), 173-200.
30. Mallak, L.A., Bringleston, L.S., Lith, D.M. (1997), A cultural study of ISO 9000 certification, *International Journal of Quality and Reliability Management*, 14(4), 328-348.
31. Martinez-Costa, M., Martinez-Lorente, A. (2003), Effects of ISO 9000 certification on firms performance: a vision from the market, *TQM and Business Excellence*, 14(10), 1179-1191.
32. Miguel, P. A., Dias, J. C. S. (2009). A proposed framework for combining ISO 9001 quality system and quality function deployment, *TQM Journal*, 21(6), 589-606.
33. Mike, B. (2004). Get staff involved in quality initiatives. *Quality Progress*, 37(2), 62-68.
34. Mikulis, J., Ruževičius, J. (2009). Management systems and competitiveness of a country - Lithuanian context. In *Current Issues on Business and Law*, Vol. 3 (pp. 26-46). Vilnius: VTKV.
35. Molina, L. M., Montes, F. J. L., Fuentes, D.M.F. (2004), TQM and ISO 9000 effects on knowledge transferability and knowledge transfer, *Total Quality Management*, 15(7), 1001-1115.
36. Naveh, E., Erez, M. (2004). Innovation and attention to detail in the quality improvement paradigm. *Management Science*, 50(7), 1576-1596.
37. Nonaka, I., Takuechi, H. (1998). "The knowledge Creating Company", in Mabey C., Salaman G., Storey J. (Eds), *Strategic Human Resource Management, A Reader*, Sage, London, p. 102.
38. Nanda, V. (2009), Quality management system handbook for product development companies, *CRC Press, Boca Raton, FL*.
39. Paterson, F. (2005) Pay closer attention to needs of audit clients. *ISO Management Systems*, 6(1), 5-9.
40. Poksinska B., Dahlgard J. J., Eklund J. A. E. (2006). From Compliance to Value-Added Auditing-Experiences from Swedish ISO 9001:2000 certified Organizations. *Total Quality Management & Business Excellence*, 17(7), 879-892.
41. Quazi, H., Jakobs, R. (2004), Impact of ISO 9000 certification on training and development activities, *International Journal of Quality and Reliability Management*, 21(5), 497-517.
42. Rodriguez – Escobar J. A., Gonzalez – Benito J., Martinez – Lorente A. R. (2006). An analysis of degree of small companies' dissatisfaction with ISO 9000 certification, *Total Quality Management & Business Excellence*, 17(4), 507-521.
43. Ruzevicius, J. Adomaitiene, R., Sirvidaite, J. (2004), Motivation and efficiency of quality management systems implementation: a study of Lithuanian organizations, *Total Quality Management & Business Excellence*, 15(2), 173-189.
44. Ruževičius, J., Kasperavičius, J. (2008). The Lithuanian police activities quality improvement. In *Current Issues on Business and Law*, Vol. 2 (pp. 119-136). Vilnius: TTVAM. x
45. Simpaio, P., Saraiva, P., Guimaraes Rodrigues, A. (2009), ISO 9001 certification research: questions, answers and approaches, *International Journal of Quality and Reliability Management*, 26(1), 35-58.
46. Van der Wiele T., Van Iwaarden J. (2005). Perceptions about the ISO 9000:2000 Quality System Standard Revision and Its Value: Dutch Experience, *International Journal of Quality and Reliability Management*, 22(2), 101-119.
47. Walgenbach, P. (2001). The production of distrust by means producing trust. *Organizational Studies*, 22(4), 693-714.
48. White, G.R.T., Samson, P., Rowland-Jones, R., Thomas, A.J. (2009), The implementation of a quality management system in the not-for-profit sector, *TQM Journal*, 22(2), 101-119.

Kokybės vadybos sistemų diegimo organizacijose problemos

Santrauka

Atitinkančios tarptautinius ISO 9000 standartus kokybės vadybos sistemos padeda organizacijoms įgyti pasitikėjimą tarp vartotojų, partnerių ir rinkos dalyvių, todėl jų populiarumas pasaulyje nuolat didėja. Tarptautiniai kokybės vadybos sistemų standartai ISO 9000 vis plačiau taikomi ir Lietuvoje. Iki 2012 m. rugpjūčio mėn. pabaigos pagal ISO 9001:2008 standartą privačiame ir viešajame sektoriuose buvo sertifikuota 1218 organizacijų. Nepaisant ISO 9000 standartų populiarumo, pasitaiko nemažai atvejų, kai kokybės vadybos sistemos diegimas ir sertifikavimas neatneša organizacijai laukiamos naudos. Literatūros analizė rodo, kad organizacijos projektuodamos ir diegdamos kokybės vadybos sistemas dažnai stokoja lankstumo, ne iki galo išnaudojamos darbuotojų žinios ir įgūdžiai.

Straipsnyje analizuojami įvairūs veiksniai, į kuriuos verta atsižvelgti planuojant ir įgyvendinant kokybės vadybos sistemą. Pirmiausia reikia aiškiai suprasti, kad kokybės vadybos sistemos diegimas organizacijoje itin priklauso nuo organizacijos veiklos pobūdžio, jos dydžio, strategijos, organizacinės struktūros ir aplinkos. Visus šiuos veiksnius būtina įvertinti jau pirmuose kokybės vadybos sistemos projektavimo ir įgyvendinimo etapuose. ISO 9001:2008 standartas reikalauja, kad visi organizacijos procesai ir procedūros būtų aiškiai dokumentuotos ir jų tiksliai laikomasi. Šie standarto reikalavimai lengvai įgyvendinami į kontrolę ir tiksliausias žinias orientuotose organizacijose. Lankstesnės struktūros, į kūrybiškumą ir bendrąsias žinias orientuotos organizacijos turi parodyti nemažą lankstumą, įgyvendindamos šiuos standarto reikalavimus.

Siekiant sėkmingai įdiegti kokybės vadybos sistemą, būtina parengti atitinkamą organizacijos darbuotojų apmo-

kymo programą ir tinkamai valdyti apmokymų procesą. Apmokymai turi būti vedami tuo laiku, kai žinios numatomos panaudoti praktikoje, apmokymai turi būti specialiai pritaikyti įvairiems organizacijos darbuotojų segmentams. Labai naudinga žinių vertinimo ir grįžtamojo ryšio sistema. Būtina įvertinti ir strateginius veiksnius, susijusius su organizacijos veiklos pobūdžiu. Ypač atidžiai šiuos veiksnius turi įvertinti organizacijos, pasižyminčios savo veiklos lankstumu ir kūrybiškumu.

Pastebimas aiškus ryšis tarp kokybės sistemos diegimo motyvuojančių veiksnių ir gaunamų rezultatų. Geresni rezultatai gaunami, kai kokybės sistema diegiama remiantis vidiniais motyvuojančiais veiksniais, o ne dėl išorės spaudimo ar siekio panaudoti kokybės sistemą kaip rinkodaros priemonę. Svarbu toliau tobulinti kokybės vadybos sistemą ją įdiegus ar gavus ISO 9000 sertifikata.

Straipsnyje pateikiami nuolatinio procesų ir sistemos gerinimo sėkmės veiksniai, padedantys nuolat gauti gerus rezultatus įdiegus ISO 9000 kokybės vadybos sistemą. Šiuo laikotarpiu ypatingą dėmesį reikia skirti duomenų rinkimui ir jų analizei, koregavimo ir prevenciniams veiksams, vidaus ir išorės auditams, tinkamam vadovybinių analizių procesui. Nemažą įtaką kokybės sistemų teikiamai naudai turi tinkamai atliekami auditai. Auditai turi parodyti ne tik atitiktį standarto reikalavimams, bet ir atskleisti tikrąją padėtį, parodyti silpnąsias vietas ir gerinimo galimybes. Siekiant atskleisti tikrąją padėtį, patartina auditoriams tiesiogiai bendrauti su pagrindiniais organizacijos produktų vartotojais.

Pagrindiniai žodžiai: kokybės vadybos sistemos, ISO 9000 standartai, sertifikavimas, žinių vadyba.

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