LEADERSHIP COMMITMENT AND PERFORMANCE OF QMS IN CONCRETE PRODUCTS MANUFACTURING COMPANIES IN KENYA

Kennedy Chomba Maina

Post Graduate Student, Management University of Africa, Kenya

Prof. Emmanuel Awuor

Associate Professor of Leadership and Management Sciences, Management University of Africa, Kenya

International Academic Journal of Innovation, Leadership and Entrepreneurship (IAJILE) | ISSN 2518-2382

Received: 15th October 2020

Published: 2nd November 2020

Full Length Research

Available Online at: http://www.iajournals.org/articles/iajile_v2_i3_80_92.pdf

Citation: Maina, K. C. & Awuor, E. (2020). Leadership commitment and performance of QMS in concrete products manufacturing companies in Kenya. *International Academic Journal of Innovation, Leadership and Entrepreneurship, 2*(3), 80-92

ABSTRACT

Background: The implementation of quality management systems is a strategic intent of any organization. A strong culture of quality is one in which a QMS that integrates people, processes, and tools helps the organization to achieve innovation and success. When leadership supports a QMS that helps employees to thrive, opens lines of communication, and incorporates data-driven decision-making, organizations in many industries will be able to overcome their unique challenges and provide greater customer outcomes and satisfaction. **Study Objective:** The objective of this study was to relationship between leadership commitment and performance of QMS in concrete products manufacturing companies in Kenya. The study was anchored on Deming's theory of quality management. **Methodology:** The study used descriptive research design. Stratified random sampling technique was used to obtain data from the respondents. The researcher used structured questionnaires to collect data. The project covered a population of 415 top and middle level managers. Stratified random sampling method was used where 126 respondents representing 30% of the entire target population formed the sample size of the study. Data was collected using structured questionnaires. The findings were presented using graphs, pie charts and table diagrams respectively. **Findings:** The results of the study indicated that there exists a strong relationship between leadership commitment and performance of quality management systems. Leadership should be committed in planning, appointing relevant authorities and responsibilities for maintain the QMS, determining the context of the organization, monitoring and measurement of the performance of QMS, internal audits, management review and ensuring the accountability of the results of the QMS. **Conclusion and Recommendation:** The researcher concluded that there exists a relationship between leadership commitment and performance of the QMS. Top management must thus retain responsibility for the performance of the QMS. Leadership has to be involved in determining the context of the organization, establishing the quality policy, planning, setting the quality objectives, provide resources required, appointing and supporting persons the competent persons among other roles.

Key Words: *leadership commitment, performance, quality management systems*

INTRODUCTION

The implementation of quality management systems is a strategic intent of any organization. Globally, the international Organization for standardization (ISO). The success of implemented quality management systems depends on various factors. According to ISO 9001:2015, the seven principle of quality management systems are Customer focus, leadership, and engagement of people, process approach, improvement, evidence-based decision making and relationship management. Leaders are the top level of management. They establish unity of purpose and direction of the organization. They should create and

maintain the internal environment in which people can become fully involved in achieving the organization's objectives (ISO 9001, 2015).

People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit. ISO 9001 requires training to ensure employees have the tools they need to do their job and contribute to the success of the organization's management system. A strong culture of quality is one in which a QMS that integrates people, processes, and tools helps the organization to achieve innovation and success. When leadership supports a QMS that helps employees to thrive, opens lines of communication, and incorporates data-driven decision-making, organizations in many industries will be able to overcome their unique challenges and provide greater customer outcomes and satisfaction.

Quality Management System (QMS) has become an accepted technique to ensure performance and survival in the modern economies. Gado (2012), Ustuner and Coskun (2004), in order to facilitate and influence the quality issues globally, the International Organization for Standardization (ISO) was first published in 1987 and was subsequently revised in 1994, 2000, 2008 and 2015 to fit in an organization. Adoption of QMS represents the basic precondition of a firm's success and entrance into the global market (Hoyle, 2009). Public universities are obliged to comply with regulatory requirements for transparency in governance and financial management, as well as accountability to the stakeholders and the public (Makawiti 2011, Gaither and Maassen 1998, Ford, 2006). From these studies it is clear that the studies have not explored Quality Management System adoption in public universities, and none of the studies have concentrated on the effectiveness and efficiency as elements of performance and Quality Management System adoption in Kenyan Universities. Further contradictions in this past studies reveal that it remains unknown of the Quality Management System relationship with performance in service institutions especially public higher education institutions in Kenya. Therefore, this study seeks to establish the relationship between Quality Management System adoption and organization Performance of public universities in Kenya. The study adopted structural contingency theory since it not only highlights the significance of effective and appropriate alignment between people, organizational structure but organization culture and the necessary changes that foster a drastic step toward the desired future state with better usefulness.

STATEMENT OF THE PROBLEM

The rising collapse buildings and other infrastructure has necessitated a lot of concern in Kenya. In 2017, just two weeks after inspection by the president, Sigiri bridge collapsed before it was completed injuring 27 people at the site. In 2018, Kenya witnessed three buildings collapsing at Huruma and Ruaraka Estates leaving many dead and others injured. Various committees were formed by the president to probe on the cause of increase collapse of buildings. In 2019, law enforcement agencies were directed to hasten investigations into the collapsed buildings with a view of taking punitive legal action against those whose actions and inactions led to the collapse of the six storey building in Tasia Estate. This study

is based on assumption that other than the faults with the contractors at the site, the quality of materials used in construction was of low quality. The implementation of quality management systems is thus fundamental to ensure that the company follows the best practices which conform to the legal and statutory requirements. Companies however, face several challenges while implementing quality management systems. These range from technical capacity, financial capacity, and competency many others. The industry has now been encroached by small unscrupulous manufacturers of Concrete products due to the high demand particularly in Nairobi. These manufacturers have not implemented any quality control systems in their firms except visual inspection. The quality of these products can thus not be justified. The fact that other industries have a tendency of passing goods under deviation has also affected the quality of infrastructure in Kenya. Other companies that have implemented these quality management systems are still faced by challenges of product rework, over processing, overproduction which has caused a rise in the cost of production. Implementers have found it challenging to implement and maintain Quality Management Systems in concrete products manufacturing companies. Finding the information, person, method or time to implement the system that is suitable for an organization can be difficult. People that strive for perfection often focus very strongly on the theory, rather than putting the theory into practice in an attempt to design the perfect QMS. Many companies create far too many documents, often resulting in a scenario where the sheer volume is so overwhelming that it starts hampering the functionality of the QMS. Employees get lost in the documentation and there is a very real danger that they lose interest in the Quality Management System, resulting in the system not delivering the required results. Organizations often try to include as much detail as possible in their documentation. There is however a price to pay in terms of time and resources needed. Scarcity of resources has also contributed to the failure of implemented quality management systems. The researcher studied the factors that affect performance of quality management systems in concrete products manufacturing companies. The research project was based on the assumptions that the challenges are due to the inadequacy of quality management systems implemented in concrete products manufacturing companies in Kenya due to lapse in leadership.

GENERAL OBJECTIVE

The objective of the research study was to determine the relationship between leadership commitment and performance of QMS in concrete products manufacturing companies in Kenya.

THEORETICAL LITERATURE REVIEW

Deming's Theory

The ideology of W. Edwards Deming has been outlined as follows: "Dr. W. Edwards Deming taught that by adopting appropriate principles of management, organizations can increase quality and simultaneously reduce costs (by reducing waste, rework, staff attrition, and litigation while increasing customer loyalty). The key is to practice continual improvement

and think of manufacturing as a system, not as bits and pieces." Dr. W. Edward Deming is considered as the creator of quality revolution in Japan. His discoveries are statistical and provide influential comprehensions of outstanding quality management; in his book named Out of the crisisare outlined the Deming's 14 points on quality management. These can be highly converse to the traditional rules of management. Deming links management with the effectiveness of implementing a quality management system. He proposed the Plan-Do-Check-Act (PDCA) Cycle and the fourteen points of management, which today are still utilized. He suggested that attaining high levels of quality is almost entirely dependent on the management responsible for the producing the merchandise (Deming, 1986). Deming identified a specific field quality improvement, called "System of Profound Knowledge". The phrase 'profound' means the deep perceptiveness that science offers to make transformations effective in developments in a diversity of settings, whereas 'system' means a stress on the collaboration of the factors rather than on the factors themselves. According to Deming, (1993, p50) "A system is a network of interdependent components that work together trying to fulfill the aim of the system". The research study draws from leadership theories, and quality management practical theories. Theories of quality management practices form the basis of this research study, particularly Anderson et al.'s (1995) theory that traced Deming's (1982) management method development (Rungtusanatham, Forza, Filippini, & Anderson, (1998); Fisher, Barfield, & Mehta, (2005); Chowdhury, Paul, & Das, (2007). However, it is ambiguous what particular leadership theories are most efficient in institutes pursuing implementation of quality management practices.

The implementation of quality management systems in concrete products manufacturing companies is carried out in steps. These include planning during inception meetings where top management are notified about the decision to implement the QMS. Gap analysis follows where the organization assesses the existing management system and gaps present. After gap analysis the organization then conducts awareness training throughout the organization. Documentation review is also carried out as per the organizations requirements and those of the management system. Internal audits are carried out to monitor and measure performance of the quality management systems. The results of the internal audits are important in improving the management system based on findings. The organization can then choose to seek certification with accredited institutions to demonstrate to other stakeholders that a management system is in place. This builds confidence with the organizations products and services.

Systems Theory

This theory is one of the most prominent in management. An organization is a system. The system is either open or closed. Most organizations exist as an open system. An open system organization interacts with the environment through inputs, through puts and outputs. Organizations interacts with the environment for several essential resources; customers who pay for products or services, suppliers who provide inputs, employees who provide labor, management who invest and government that regulates the organizations activities. An organization must determine the needs and expectation of interested parties (ISO 9001,

2015). The open-systems approach was first applied by Katz and Kahn, who adapted general systems theory to organization behavior. This approach identifies organizational behavior by mapping the repeated cycles of input, throughput output and feedback between an organization and its external environment either as information or in the form of resources. The systems then process the input internally, which is called throughout, and release outputs into the environment in an attempt to restore equilibrium of the environment. The system then seeks feedback to determine if the output was effective in restoring equilibrium. Closed systems have the advantage of being efficient because there are clear procedures that are not affected by outside influences. The best way to understand closed systems is to see how they are used in organizations. In a closed system, interactions only happen within the specific system, which means closed systems are shut off from the outside environment, and every interaction is transmitted inside that closed system. Workers in closed systems within an organization don't communicate with other departments about their activities, nor do they receive input from other departments.

Joseph Juran's Theory

Juran described TQM as a widespread management method targeting at satisfying the customer, as he is one of the most influential factors affecting the quality. Juran describes three quality management procedures: quality planning, quality control and quality improvement, which are well known as the "Juran Trilogy". According to Brown (2005), these processes offer a rational model for comprehending the entire quality management. Sila and Ebrahimpour (2003) state that Deming and Juran both assert quality management notions are universally applicable. The Juran Trilogy is an improvement cycle that is meant to reduce the cost of poor quality by planning quality into the product/process. In the planning stage, it is critical to define who the customers are and find out their needs to define the requirements for the product, process, service or systems and develop it. Additionally, any plans that might need to be transferred to operators or other key stakeholders should be done during the planning phase. Planning activities should be done with a multidisciplinary team, with all key stakeholders represented. Juran also argues that during the control phase, an organization needs to monitor, measure, and set a goal for your performance. Getting feedback by measuring actual performance helps an organization to act on the gap between current performance and set goal. Juran also highlights the four different "strategies" to improvement that could be applied in quality improvement; repair, refinement, renovation and reinvention.

EMPIRICAL LITERATURE REVIEW

Kaziliunas, (2010) analysed the effect of strategic factors like top management, motivational factors, , financial factors, continuous improvement factors and internal auditing factors on the implementation of ISO 9001 Quality management systems. The researcher found out that all these factors have a positive significance on the implementation of QMS. The implementation of quality management is a strategic intent by the management of any organization which intend produce products and services that meet and exceed customer

needs and expectations. Paul & Das (2007) studied development of quality management practices and leadership theories share the mutual purposes of enhancing organizational performance and improving the work experience of organizational individuals. However, it is evident from literature review that leadership is a fundamental component in successful quality management in institutes, as all excellence models comprise Top management as an enabling driver. Leadership includes long-term commitment to innovation and creativity. According to some scholars such as Laohavichien et al., (2009), human resources management is a strategic issue that needs managerial competence. They also believe that knowledge is a significant organizational resource, and Top management plays a vital role in facilitating the attainment of that knowledge. Consequently, as Idris and Ali assert (2008) leaders must have the capacity to recognize framed vision by management quality components to transform the organization into utilizing quality managerial practices.

RESEARCH METHODOLOGY

The study adopted a descriptive research design. This was useful in determining the correct position or situation regarding the managers' perception on determinants of performance of quality management systems in concrete products manufacturing companies in Kenya. The target population for this study was 75 Top management, 343 middle management staff of concrete products manufacturing companies in Kenya from various departments. This number was derived from the human resource management department. Stratified random sampling was used during data collection. The researcher focused on the senior and middle management. A sample is a group of people, objects or items that are taken from a larger population for measurement (Kothari, 2010). The best representative sample is one which is between 10% and 30% of the population (Mugenda, 2003). The researcher used questionnaires because they enable one to obtain a large quantity of data inexpensively from a wide range of participants spread extensively in a geographic space. Questionnaires also give enough time to the respondents to think about the questions and to give well thought answers (Kothari, 2008). The researcher used a research assistant to collect data. Before data administration, the respondent's consent was sought. After the respondents' acceptance to participate in the study, research instruments were provided to them. The questionnaires were collected after the respondents finished filling them. The tabulated data was then analyzed quantitatively using various percentages. Presentation of data was done in form of pie charts and bar graphs.

RESULTS AND FINDINGS

The researcher sought to find out the relationship between leadership commitment and performance of Quality management systems in concrete products manufacturing companies in Kenya. Respondents were requested to rate leadership styles on a scale of 1 to 5 where 5 represented Strongly Agree and 1 Strongly Disagree. Findings revealed that a majority (112) of the respondents either agreed or strongly agreed that leadership commitment in determining context of the organization affects the performance of quality management

systems in manufacturing organizations. Six respondents were indifferent about the research question while 3 respondents disagreed with the research questions. The percentage distribution of their responses. 91.05% of the respondents were in agreement that leadership commitment in determining context of the organization affects the performance of quality management systems in manufacturing organizations. This therefore implies that virtually all the respondents agreed that top management provides leadership and is committed in quality management indicating that their guidance is very essential in quality management. The small percentage that disagreed and felt indifferent can be attributed to either failure to understand the questions or other underlying issues hence can be ignored compared to the ones that agreed.

Table 1: Assignment of Relevant Authorities and Responsibilities by Top Management

Response	Frequency	Percentage
Strongly Agree	73	59.35
Agree	27	21.95
Neutral	10	8.13
Disagree	5	4.07
Strongly Disagree	2	1.63
Undefined	6	4.88
Total	**123**	**100**

From Table 1, it is evident that 100 respondents representing 81.03% of the respondents agreed that there is a relationship between Assignment of relevant authorities and responsibilities by top management affects the performance of the QMS. 6 respondents representing 4.88% of the respondents did not respond to the question while 10 respondents representing 8.13 of the respondents were indifferent. 7 respondents representing a percent 5.09% disagreed the existence of a relationship between Assignment of relevant authorities and responsibilities by top management affects the performance of the QMS. Further research is thus necessary to find out why the variance in the respondents' opinion.

Table 2: Participation of Leadership in Monitoring and Measurement of Performance

Response	Frequency	Percentage
Strongly Agree	81	65.85
Agree	14	11.38
Neutral	3	2.44
Disagree	3	2.44
Strongly Disagree	10	8.13
Undefined	12	9.76
Total	**123**	**100.00**

Table 2 shows the results of the responses on relationship between leadership participation in performance measurement and the performance of the QMS. Ninety-five respondents representing 77.24% of the respondents agreed, 3 respondents represent 2.44% of the respondents were indifferent while 12 respondents did not respond to the research question.

Thirteen respondents representing 10.57% of the respondents disagreed that participation of leadership in monitoring and measuring of performance affects the performance of the QMS. Further research on this discrepancy is thus recommended.

Table 3: Leadership Commitment in Management Review

Response	Frequency	Percentage
Strongly Agree	102	82.93
Agree	16	13.01
Neutral	0	0.00
Disagree	0	0.00
Strongly Disagree	0	0.00
Undefined	5	4.07
Total	**123**	**100.00**

Table 3 illustrates the results of the respondents to the relationship between leadership commitment in management review and the performance of QMS. 118 respondents representing 95.93% of the respondents agreed that there exists a relationship between leadership commitment and the performance of QMS. Five respondents did not however indicate their response to the research question.

Table 4: Commitment of Leadership in Internal Audits

Response	Frequency	Percentage
Strongly Agree	102	82.93
Agree	16	13.01
Neutral	0	0.00
Disagree	0	0.00
Strongly Disagree	0	0.00
Undefined	5	4.07
Total	**123**	**100.00**

Table 4 illustrates the finding on the effect of leadership commitment in internal audits on performance of the QMS. The results were similar to those of the Commitment of leadership in internal audits affects the performance of the QMS in Table 3.

Table 5: Establishment, Implementation and Communication of the Quality Policy in an Organization

Response	Frequency	Percentage
Strongly Agree	64	52.03
Agree	35	28.46
Neutral	13	10.57
Disagree	0	0.00
Strongly Disagree	5	4.07
Undefined	6	4.88
Total	**123**	**100.00**

When the researcher analyzed the responses on relationship between establishment, implementation and communication of the quality policy in an organization by top management and the performance of the QMS, 99 respondents representing 80.49% of the respondents agreed with the research question while 5 respondents representing 4.07 strongly disagreed with the research question. Six respondents representing 4.88% of the respondents did not indicated any response while 13 respondents representing 10.57% were indifferent to the research question as illustrated by Table 5 above. Further research is thus advisable to find out the reason for such discrepancy.

Table 6: Leadership Commitment in Risk Based Thinking

Response	Frequency	Percentage
Strongly Agree	113	91.87
Agree	6	4.88
Neutral	1	0.81
Disagree	1	0.81
Strongly Disagree	2	1.63
Undefined	4	3.25
Total	**123**	**100.00**

Table 6 illustrates the results of the analysis of the relationship between leadership commitment in risk-based thinking and the performance of the QMS. 119 respondents representing 96.75% of the respondents agreed question while 3 respondent representing 2.44% of the respondents disagreed with the research. One respondent was neutral to the research question while 4 respondents did not respond to the research question.

Table 7: Leadership Commitment in Planning

Response	Frequency	Percentage
Strongly Agree	116	94.31
Agree	3	2.44
Neutral	2	1.63
Disagree	0	0.00
Strongly Disagree	0	0.00
Undefined	2	1.63
Total	**123**	**100.00**

Table 7 presents the results of analysis of the effect of leadership commitment in planning and the performance of the QMS. 119 representing 96.75% of the respondents agreed that leadership commitment in planning affects the performance of the QMS. Two respondents were neutral while 2 others did not indicate their response to the question.

SUMMARY OF FINDINGS

From the study findings, the biggest percentage of the respondents agreed that leadership commitment affects the performance of quality management systems. 91.05% of the

respondents were in agreement that leadership commitment in determining context of the organization affects the performance of quality management systems in manufacturing organizations. 81.03% of the respondents agreed that assignment of relevant authorities and responsibilities by top management affects the performance of the QMS. 77.24% of the respondents agreed that participation of leadership in monitoring and measuring of performance affects the performance of the QMS. 95.93% of the respondents agreed that there exists a relationship between leadership commitment and the performance of QMS. 95.93% of the respondents agreed that commitment of leadership in internal audits affects the performance of QMS. 80.49% of the respondents agreed that establishment, implementation and communication of the quality policy in an organization by top management affects the performance of the QMS. 96.75% of the respondents agreed that leadership commitment in risk based thinking affects the performance of the QMS. 96.75% of the respondents agreed that leadership commitment in planning affects the performance of the QMS. When there is a committed leadership, they will go a long way to ensure that the organization's objectives of implementing a quality management systems are achieved; employees will have a clear sense of direction while they are establishing, implementing, maintaining and improving the quality management systems. Despite appointing the relevant authorities for the managing the QMS, accountability remains with the leadership of the organization (ISO 9001, 2015). Top management should demonstrate leadership and commitment with respect to quality management by ensuring that the quality policy and quality objectives are established for the quality management systems and are compatible with the strategic direction of the organization.

CONCLUSION

Based on the research findings, the study concluded that there exists a relationship between leadership commitment and performance of the QMS.

RECOMMENDATIONS

Top management must thus retain responsibility for the performance of the QMS. Leadership has to be involved in determining the context of the organization, establishing the quality policy, planning, setting the quality objectives, provide resources required, appointing and supporting persons the competent persons among other roles.

REFERENCES

Ahire S. L., W. M. (1996). Quality management in TQM versus non TQM firms: . *International Journal of Quality & Reliability Management*, 8-27.

Ahire, S. &. (1998). The role of Top management commitment in quality management : Am empirical analysis of auto parts industry.

Albadran, A. (2014). Review of ISO 9000 effective implementation in various organizational structures. *Industrial Sciences, 1*(7), 1-14.

Amanda, A. (2004). *Total Quality Management.* New Delhi: Pretence Hall of India.

Augustyn, M. &. (2000). ISO 9000 and performance of small tourism enterprises: a focus of Weston Cider Company. *Managing Service Quality*, 374-388.

Bahri S., H. D. (2012). Implementation of Total Quality Management and its effect on Organization performance of manufacturing industries through Organization Culture In South Sulawesi, Indonesia. *Journal of Business and Management*, 10-24.

Bauer J. E., D. G. (2002). *The Quality Improvement Handbook.* US.

Biolos, J. (2002). Six Sigma meets the Service Economy.

Buch, K. a. (2002). Sustaining a quality initiative. *Strategic Direction, 18*(4), 15-17.

Cebeci, U. a. (2002). An approach to the evaluation of quality performance of the companies in Turkey. *Managerial Auditing Journal, 17*(1/2), 92-100.

Chattopadhyay, S. P. (2001). Improving the speed of ISO 14000 implementation: a framework for increasing productivity. *Managerial Auditing Journal, 5*(1), 851-878.

Chi, C. &. (2009). Employee satisfaction, Customer satisfaction and financial performance. *International Journal of Financial performance*, 245-253.

Clement, K., & Michael, M. (2010). *Factors that lead to a successful TQM implementation: a Case Study on the Zambian Tourism Industry*. HyvinkääLaurea University of Applied Sciences.

Dale, B. G., Van Der Wiele, T., & Van Iwaarden, J. (2007). *Managing quality*. John Wiley & Sons.

Dayton, N. (2001). Total quality management critical success factors, a comparison : UK versusthe USA. *Total Quality Management, 12*(3), 293-298.

Dimara, E. e. (2004). Strategic orientation and financial performance of the firms implementing ISO 9000. *International Journal of Quality & Reliability Management, 21*(1).

Escalante, E. J. (1999). Quality and productivity improvement: a study of variation and defects in manufacturing. *Quality Engineering, 11*(3), 427-442.

Georgiev, S. &. (2015). Motivational factors for the adoption of ISO 9001Standards in Eastern Europe: the case study of Bulgaria. *Industrial Engineering and Management, 8*(3), 1020-1050.

Gill, J. (2009). Quality follows quality: add quality to the business and quality will multiply the profits. The TQM Journal.

Gotzamani, K. D. (2002). True motives behind ISO 9000 Certification. *International Journal of Quality & Reliability Management*, 151-169.

Hoyle, D. (n.d.). *ISO 9000 Quality System Handbook, Using the Standards as a framework for Business Improvement.* Butterworth-Heinemann.

Ilango, M. &. (2017). An approach to appraise the factors affecting implementation of quality management systems in construction project- ISM approach. *International Research Journal of Engineering and Technology, 4*(4), 2389-1392.

International Organization for Standardization. (2015). *ISO 9000:2015 Quality Management and Quality Assurance - Vocabulary.* ISO.

Jarar, Y. a. (2000). Best practice transfer for future competitiveness: a study of best practices. *Total Quality Management, 11*(4/5/6), 734-740.

Jayasundrara, A. a. (2014). Enablers and barriers of implementing ISO 9001 Quality Management Systems in the service sector in Srilanka. *Proceedings of the Peradeniya University, 18.* Sri Lanka.

Kazilunius, A. (2010). Success factors for quality management systems certification benefits. *2*(8), 30-38.

Kuo, T. C. (2009). Employees' perspective on the effectiveness of ISO 9000 certication: a total quality management framework. *Total Quality Management*.

Levett, J. M. (2005). Implementing an ISO 9001 Quality Management System in multispecialty clinic. *Physiscian Executive, 31*(6), 46-51.

Lundamark, E. &. (2006). Effects of quality management according to ISO 9000: a Sweedish of the transit to ISO 9000:2000 quality standards in small software firms. *Total Quality Management and Business Excellence, 17*(8), 1021-1042.

Mc Adam, R. &. (2002). The impact of ISO 9000:2000 Quality standards in small software firms. *Managing Service Quality, 12*(5), 336-345.

Nand, A. V. (2005). *Quality Management System Handbook for product development Companies.* Boca Raton, FL: CRC Press.

Pavlic, I. &. (2008). Implementation of Integrated Management Systems in hotel industry of the dubrvnic riviera. *An Enterprise Odyssey: Tourism- Governance and EnterpreneurshipCatvat* (pp. 1874-1882). Faculty of Economics and Business.

Standardization, I. O. (2005). *Quality Management Systems.*

Wahid Ab, R. &. (2009). Critical success factors and problems in ISO 9000 Maintenance. *International Journal of Quality Management, 26*(9), 881-893.

Yusof, S. R. M., & Aspinwall, E. (1999). Critical success factors for total quality management implementation in small and medium enterprises. *Total Quality Management, 10*(4-5), 803-809.