

Empirical Evidence of ISO 9000:2008 Certification Practices on Operational Performance of Kenya Seed Company

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ABSTRACT

Kenya Seed Company has adopted organizational practices in line with ISO 9000:2008. The study analyzed the effect of ISO 9000:2008 certification practices of leadership, continual process improvement, people involvement, customer focus and mutual beneficial supplier relationship on operational performance of Kenya Seed Company, Kenya. The objective of the study was to determine the effect of these practices on operational performance. Anchored on stakeholder's management theory, the study used descriptive research design, stratified random sampling, a target population of 132 and a sample size of 99 respondents. Data was collected using a questionnaire whose validity and reliability were determined. It was analyzed using descriptive and inferential statistics and presented using frequency distribution tables. The ISO 9000:2008 practices had effects to a great extent and contributed to 65.6% of the variation in operational performance. The coefficients of y-intercept and these variables were significantly different from 0 because their p values were less than 0.05.

The hypothesis “there is no significant relationship between ISO 9000:2008 certification practices and operational performance” was rejected. The mutual beneficial supplier relationship showed a negative gradient. There is the need for the company to assess the company’s engagement with suppliers.

Keywords — Total quality management, ISO 9000:2008 certification practices, operational performance, Kenya Seed, Company, descriptive research design, Kenya, Africa

INTRODUCTION

There is still much debate on ISO certification on organizational performance. A Literature review revealed that ISO 9000 certification on performance remains theoretical and contradictory (Lewis, Pun & Lalla, 2006; Benner & Tushman, 2001). ISO certification is positively associated with the organizational performance as argued by Escanciano, Fernandez and Vasquez (2001); Terziovski et al., (2003); Briscoe, Fawcett and Todd (2005); Naveh and Marcus (2005); Corbett, Sancho and Kirsch (2005); Nanda (2005); Sadikoglu & Olcay (2014). Scholars who share contrary view include, Feng, Martinez, Gusmaroli, Wang, Zhou, Chen, Yu, Iglesias Pedraz and Kircher (2008). Those who link ISO certification and expenses regarding reorganization of firm’s process include Dick (2000).

Cesare, Essa, Saveria and Giovanni (2011) argue that leaders establish unity of purpose and direction of the organization. Dimitriadis (2000) points out that, through involvement in organizational activities, employees are encouraged to perform functions such as information processing, problem-solving and decision-making. Muteti (2014) affirms that continuous improvement is a key driving force behind most effective and efficient organizations and jump-start of critical processes. He further argues that without active involvement of everyone in the organization, and provision of the required resources and support from top management, improved performance in any organization cannot be successful. Anderson and Sohal (1999) assert that customer focus enhances financial performance of organizations. Suppliers who are committed to quality are vital in ensuring that customer satisfaction is a priority up and down the chain of distribution. Laosirihongthong, Teh, and Adebajo (2013) carried out a study in ASEAN countries of Indonesia, Malaysia, Philippines, Thailand, and Vietnam. The findings indicated that leadership of the organizations is likely

to concentrate on their external (customers and suppliers) rather than internal (employees) partners.

According to Terlaak and King (2001), the arguments by researchers have been unsuccessful in establishing an underlying association between documentation and progress in operational performance. Most previous studies undertaken on ISO certification and Total Quality Management have focused on the implementation and challenges of ISO Certification in organizations. Other researchers have investigated the concept of standardization of quality (ISO 9000 certification) in relation to the implementation of TQM. Studies which directly or indirectly link ISO certification to performance include researches carried out by Arumugam, Ooi and Fong (2008). Bichanga and Warwinu (2013) did a study on the effectiveness of ISO 9001:2008 certifications on service delivery of public universities in Kenya. The findings indicated that ISO certification influence streamlining of processes (enrollment processes, payment services, registration, allocation of rooms, medical services, timetable and examination results). This, in turn, will affect service delivery, co- curricular activities, teaching facilities and flexibility to dynamic market demands in that order.

Types of research which investigated ISO Certification and Total Quality Management about to the performance of businesses have yielded inconsistent and contradictory results. Sadikoglu and Olcay (2014) found out that ISO 9000 certified companies which pursue a cost leadership strategy will ultimately improve the internal and external quality of organizational products, reduce waste and duplication of effort. The studies which do not associate ISO certification with performance include those done by Sun (2000), Naveh and Marcus (2004), Han, Chen and Ebrahimpour (2007). Singels, Ruël, and Van de Water (2001) found no link between ISO 9000 and organizational performance among Australian and Dutch firms. Wayhan, Kirche and Khumawala (2002) discovered that ISO 9000 had no effect on financial performance.

Our intention was to link ISO 9000:2008 and organizational performance. Kenya Seed Company was chosen because the institution is entrusted with the production of quality seeds and little research has been conducted there. The ISO 9000:2008 practices were the focus of the study because they are considered management practices at Kenya seed company Limited. Information concerning the effect of these practices is useful. The Hypothesis was tested, at $\alpha = 0.05$ level of significance, to determine if there is no significant relationship between ISO 9000:2008 certification practices and organizational performance. The purpose of the test was to determine whether increases or decreases in one variable or

factor significantly lead to increases or decreases in the other variables or factors. Leadership, continual process improvement, people involvement, customer focus and mutual beneficial supplier relationship are ISO 9000:2008 certification practices which are linked to the stakeholders' management theory.

FRAMEWORK

The stakeholder management theory was advanced by Edward Freeman in 1984. The theory states that attributes of power, urgency and legitimacy constitute the claims of stakeholders. The first two serve the moral and legal interest of genuine stakeholders which managers must pay attention to. According to Andriof, Waddock, Husted and Rahman (2002), the theory promotes the value of the outcomes of decisions made by the stakeholders, establish their expectations, protecting them from being deprived and subsequently, deliver higher returns to shareholders.

The theory, therefore, presents methods for identifying and managing stakeholders. Clarkson (1995) points out that an organization fails if it continuously dissatisfies key stakeholders. The opposite leads to reduced costs and affects performance. The impact of major stakeholders is felt in firms' performance and decision-making. The theory acknowledges the role of every stakeholder in enabling organizations to meet its goals. Leaders, customer, suppliers and people, interact and the mutual relationship is beneficial to an organization. Stakeholder theory implies that an organization should be more accountable and transparent. It is because there is a need for new, responsive and interactive relationships with stakeholders. They have to be identified through their genuine interests in the firm rather than the firm's interest in them. Therefore, establishing obligations to them enable firms to achieve success. The research has important theoretical implications. The practical outcome of investigating ISO 9000:2008 certification practices relate to timely delivery, inventory, employee turnover rates, reliability and quality of products and or services.

OBJECTIVES OF THE STUDY

The study aimed to: 1) Find out the effect of leadership on operational performance; 2) Determine the effect of continual process improvement on operational performance; 3) Investigate the effect of people involvement on operational performance; 4) Determine the effect of customer focus on

operational performance; and 5) Determine the effect of mutual beneficial supplier relationship on operational performance.

METHODOLOGY

The study used descriptive research design because it made it necessary for us to provide answers to objectives and information related to ISO certification practices as argued by Kothari (2006), Mugenda and Mugenda (2003) and Cooper and Schindler (2003). Stratified and simple random sampling techniques were used because of being appropriate for the study. The score of Cronbach's alpha was used to determine the reliability of research instrument. A commonly accepted alpha (α) value which is between 0.6 - 0.7 indicates acceptable reliability and above 0.8 shows good reliability as argued by Cronbach and Richard (2004).

Regression model was used to establish the relationship between the dependent and independent variables. Regression model was considered appropriate for the study because of its ability to test the nature of the influence of independent variables on a dependent variable.

The model was; $Y = a + bx_1 + bx_2 + bx_3 + bx_4 + bx_5$

Where

Y= Operational performance

X_1 = Leadership

X_2 = Continual Process Improvement

X_3 = People involvement

X_4 = Customer Focus

X_5 = Mutual Beneficial Supplier Relationship

Multiple regression analysis with the aid of statistical package for social science (SPSS version 20) was used. The hypotheses "there is no significant relationship between ISO 9000:2008 certification practices and operational performance" was tested at $\alpha = 0.05$ level of significance. The study used researchers' designed tables to present data.

Research Site

Kenya Seed Company Limited is located in Transzoia County, Kenya. The County covers an area of 2,495.5 square kilometres, 1,900 meters above sea level, with 818,757 people (2009 census). It borders the Republic of Uganda to

the west, Bungoma and Kakamega countries to the south, West Pokot, Elgeyo Marakwet and Uasin Gishu Counties to the southeast. Its latitude is 0° 52' and 10 18' north of the equator and the longitude is 34° 38" and 35° 23' east of the Greenwich Meridian. The headquarters of Kenya seed company is Kitale Town which is 1.02° north and 35° 00' east

Participants

The target population of the study comprised of 132 employees of Kenya Seed Company drawn from the top, middle and low levels of management. A sample size of 99 was randomly selected using simple random sampling.

RESULTS AND DISCUSSION

Table 1. Reliability analysis using SPSS version 20

Variable	Reliability Statistics	
	Cronbach's Alpha	No of Items
Leadership	0.771	9
Continual Process Improvement	0.878	9
People involvement	0.819	9
Customer Focus	0.728	7
Mutual Beneficial Supplier Relationship	0.832	7
Average	0.806	8

Source: Research Data (2015)

The analysis displayed alpha scores of 0.771, 0.878, 0.819, 0.728 and 0.832 for leadership, continual process improvement, people involvement, customer focus and mutual beneficial supplier relationship respectively, whose average is 0.806. The research instrument was reliable for use in data collection.

Table 2: Extent to which leadership influences level of productivity

Extent	Frequency	Percent	Mean	Median	Mode	Std. Deviation
Little extent	4	4.7	3.92	4.00	4.00	0.67
Moderate extent	11	12.7				
Great extent	59	68.6				
Very great extent	12	14				
Total	86	100	3.92	4.00	4.00	0.67

Source: Research Data (2015)

To some great extent, leadership has a great influence on productivity rate. Hence, the operational performance of Kenya Seed Company. Further findings indicated that leaders have developed plans which support on-time delivery of goods to customers. Additionally, leaders monitor quality systems and procedures as well as reviewing quality management system at planned intervals of time. It is meant to enhance quality, the rate of production, ensure continuity, adequacy and effectiveness of production. We found out that top management of the company makes sure that quality policies are communicated well to the recipients. This creates a culture of commitment. We used measures of central tendency to ease summary of data and dispersion to estimate the degree of variability regarding the leadership variable. The results of the analysis indicate that; $N = 86$, $M = 3.92$, $SD = 0.67$. The mean of 3.92 indicates that leadership influences the level of productivity. This is confirmed by small standard deviation of 0.67, which implies that leadership style didn't vary quite significantly.

Table 3. Extent to which continuous process improvement influence level of defects

Extent	Frequency	Percent	Mean	Median	Mode	Std. Deviation
Moderate extent	2	2.3	4.05	4.00	4.00	0.3
Great extent	78	90.7				
Very great extent	6	7.0				
Total	86	100	4.05	4.00	4.00	0.3

Source: Research Data (2015)

Continuous process improvement influences company's operational performance to some great extent. We found out that the company is flexible enough to react quickly to opportunities. Periodical training of employees improves their productivity leading to improve on-time delivery. The company has set time limits regarding delivery of products leading to customer satisfaction. We also found out that continuous improvement process provided an opportunity for the company to develop new quality products. Measures of central tendency enabled us to summarize data and dispersion to determine the degree of variability of continuous process improvement on the level of defects. The results of the analysis indicate that; $N = 86$, $M = 4.05$, $SD = 0.3$. The mean of 4.05 is an indicator that continuous process improvement influence level of defects. The small standard deviation shows that there is little fluctuation in processing hence few fault products.

Table 4. Extent to which employee involvement influence on-time-delivery

Extent	Frequency	Percent	Mean	Median	Mode	Std. Deviation
Moderate extent	21	24.4	3.97	4.00	4.00	0.68
Great extent	47	54.7				
Very great extent	18	20.9				
Total	86	100	3.97	4.00	4.00	0.68

Source: Research Data (2015)

Involvement of people influences on-time delivery and subsequently, operational performance. It will lead to the understanding of roles, responsibility, improved innovation & creativity, motivation, lower defects and commitment towards enhancing organizations productivity in terms of quality of production and customer satisfaction. The company values participation of stakeholders and involvement of clients facilitates sharing of knowledge and experiences. Measures of central tendency enabled us to summarize data and dispersion to determine the degree of variability of employee involvement on-time delivery. The results of the analysis indicate that; N = 86, M= 3.97, SD=0.68. The mean of 3.97, signals that when employees are involved, on time delivery of products and services improves significantly. The small standard deviation shows that participation leads positive relationship.

Table 5. Extent to which customer focus influence customer satisfaction

Extent	Frequency	Percent	Mean	Median	Mode	Std. Deviation
Moderate extent	10	11.6	4.01	4.00	4.00	0.5
Great extent	65	75.6				
Very great extent	11	12.8				
Total	86	100	4.01	4.00	4.00	0.5

Source: Research Data (2015)

Customer focus influences operational performance of the Kenya Seed Company to a great extent. The findings indicated that the company used customer complaints as inputs to improve the company's processes. This implies that the principle of customer focus and aligning of activities to meet the needs of customers influence operational performance. The findings indicated that a focus on the customer without realigning organization's services and activities isn't enough. In the analysis; N = 86, M= 3.97, SD=0.68. The mean of 4.01 and

a standard deviation of 0.37 show that there is no significant variation between customer focus and customer satisfaction.

Table 6: Extent to which mutual beneficial supplier relationship influences the cost of quality

Extent	Frequency	Percent	Mean	Median	Mode	Std. Deviation
Moderate extent	1	1.2	4.13	4.00	4.00	0.37
Great extent	73	84.8				
Very great extent	12	14				
Total	86	100	4.13	4.00	4.00	0.37

Source: Research Data (2015)

Mutual beneficial supplier relationship influences cost of quality to a great extent leads to value creation, flexibility and quick joint response to changing market or customer needs and expectations. Suppliers are actively involved in process of development of new products and company's quality training. The company normally selects suppliers on the basis of their performance in quality inputs and service delivery rather than price. ISO certification has ensured that suppliers deliver products and services which meet standards of the company. The analysis indicate that; N = 86, M= 4.13, SD=0.37. These results indicated that cost of quality does not vary highly from the mean. Mutual beneficial supplier relationship influences the cost of quality.

Table 7. Extent to which performance indicators measure operational performance

Operational performance measures	Greatly decreased	Decreasing	Constant	Improved	Greatly improved
Timely delivery	0(0%)	0(0%)	9(10.5%)	50(58.1%)	27(31.4%)
Reliability of products/ services	0(0%)	0(0%)	4(4.7%)	64(74.4%)	18(20.9%)
Quality of products/ services	0(0%)	0(0%)	13(15.1%)	27(31.4%)	46(53.5%)
Inventory turnover	0(0%)	0(0%)	15(17.4%)	14(16.3%)	57(66.3%)
Employees' organizational commitment	0(0%)	0(0%)	16(18.6%)	43(50.0%)	27(31.4%)

Employees' turnover rate	0(0%)	3(3.5%)	11(12.8%)	38(44.2%)	34(39.5%)
Latest technological innovations in new product	0(0%)	0(0%)	21(24.4%)	53(61.6%)	12(14.0%)
Number of successful new product/service introductions	0(0%)	0(0%)	38(44.2%)	38(44.2%)	10(11.6%)
Speed of new product development	0(0%)	0(0%)	25(29.1%)	61(70.9%)	0(0%)
Customer satisfaction	0(0%)	2(2.3%)	31(36.0%)	42(48.8%)	11(12.8%)
Customer complaints	44 (51.2%)	17(19.8%)	24(27.9 %)	1(1.2%)	0(0%)
Profits of the company	0(0%)	0(0%)	14(16.3%)	69(80.2%)	3(3.5%)
Sales of the company	0(0%)	0(0%)	17(19.8%)	54(62.8%)	15(17.4%)

Source: Research Data (2015)

Inventory turnover, quality of products/services, timely delivery, and employees' turnover rate has greatly improved. Reliability of products/services, employees' organizational commitment, sales of the company and technological innovations in new product have registered great improvement. Profits of the company, customer satisfaction, quick development and introduction of new products indicated an upward trend. Customer complaints had greatly reduced.

Table 8. Regression analysis (coefficient of determination) of ISO 9000: 2008 certification practices on operational performance using SPSS Version 20

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	0.810	0.656	0.635	0.17118

Predictors: (Constant), Mutual Beneficial Supplier Relationship, Continual Process Improvement, Leadership, Customer Focus, People involvement

Source: Research Data (2015)

Coefficient of determination (R^2) is 0.656; therefore, about 65.6% of the variation in operational performance of Kenya Seed Company is explained by leadership, continual process improvement, people involvement, customer focus and mutual beneficial supplier relationship. About 34.4% of the variation is explained by other factors not covered by the study.

Table 9. Regression analysis (coefficients) of ISO 9000: 2008 certification practices on operational performance using SPSS Version 20

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	2.012	0.394		5.108	0.000			
Leadership	0.170	0.081	0.230	2.087	0.040	0.638	0.227	0.137
Continual Process Improvement	0.341	0.091	0.280	3.744	0.000	0.475	0.386	0.245
People involvement	0.234	0.108	0.355	2.166	0.033	0.418	0.235	0.142
Customer Focus	0.249	0.121	0.307	2.062	0.042	0.289	0.225	0.135
Mutual Beneficial Supplier Relationship	-0.531	0.077	-0.689	-6.859	0.000	-0.202	-0.609	-0.450

Dependent Variable: Operational Performance

Source: Research Data (2015)

Using an alpha of 0.05, the coefficient (t-statistics) of leadership is 2.087. This is significantly different from 0 because its p-value (0.040) is less than 0.05. The coefficient (t-statistics) of continuous process improvement (3.744) is significantly different from 0 because its p value of 0.000 is less than 0.05. The coefficient (t-statistics) of people involvement (2.166) is significantly different from 0 because its p value of 0.033 is less than 0.05. The coefficient (t-statistics) of customer focus (2.062) is significantly different from 0 because its p value of 0.042 is less than 0.05. The coefficient (t-statistics) of mutual beneficial supplier relationship (-6.859) is significantly different from 0 because its p value of 0.000 is less than 0.05. Likewise, the intercept (2.012) is significantly different from 0 at alpha level 0.05 because its p value (0.000) is less than 0.05.

The hypothesis “there is no significant relationship between SO 9000: 2008 certification practices on operational performance” was rejected.

CONCLUSION

ISO 9000:2008 certification practices enhance leaders’ commitment to development of plans, communication of quality policies, and guiding teams in

adhering to these policies. The principle of leadership leads to on-time delivery of goods to costumers, enhance company's level of productivity, quality and effectiveness. Moreover, ISO 9000 Certification makes leaders to discharge their roles effectively supporting effecient processes to achieve organization's objectives. Therefore, leadership influences operational performance. Continuous process improvement enhances company's flexibility to react to turbulent operating environment hence higher performance. Employee involvement leads to increased commitment, better understanding of roles, knowledge sharing, problem solving, innovativeness, creativity and subsequently increased operational performance. Customer focus determine alignment of activities, operations to meet customer needs and faster response to market opportunities. It also creates a platform whereby the customer can give their feedback on quality and delivery. Mutual beneficial supplier relationship has led to timely delivery of goods by suppliers to the target customers. The company selects suppliers based on quality and delivery rather than simply price. It has resulted into creation of value, optimization of costs and resources and response to customer needs & expectations.

LITERATURE CITED

- Anderson, M., & Sohal ,A.S (1999). A study of the relationship between quality management practices and performance in small businesses, *International Journal of Quality & Reliability Management*, Vol. 16 Iss: 9, pp.859 – 877
- Anderson, S. W., Daly, J. D., & Johnson, M. F. (1999). Why Firms Seek ISO 9000Certification: Regulatory Compliance or Competitive Advantage? *Production and Operations Management*, 8(1), 28-43.
- Arumugam, V., Ooi, K. B., & Fong, T. C. (2008). TQM practices and quality management performance: An investigation of their relationship using data from ISO 9001: 2000 firms in Malaysia. *The TQM Journal*, 20(6), 636-650.
- Benner, M. J., & Tushman, M. L. (2001). Exploitation, exploration and process management: The Productivity Dilemma Revisited. *Academy of Management Review*, 2(3), 238- 256.
- Bichanga and Warwinu (2013) Effectiveness of ISO 9001:2008 Certification On Service Delivery Of Public Universities In Kenya

- Briscoe, J. A., Fawcett, S. E., & Todd, R. H. (2005). The implementation and impact of ISO 9000 among small manufacturing enterprises. *Journal of Small Business Management*, 43(3), 309.
- Cesare, A. F., Essa, L. C., Saveria, E. C., & Giovanni, M. (2011). Why Do Companies Choose To Be ISO 9000 Certified and what is the Relationship between Certification and Innovation? An Empirical Analysis for Luxembourg.
- Corbett, C. J., Montes-Sancho, M. J., & Kirsch, D. A. (2005). The financial impact of ISO 9000 certification in the United States: An empirical analysis. *Management science*, 51(7), 1046-1059.
- Cooper, D. R., & Schindler, P. S. (2003). *Business Research Methods* (8th edn.). New York: McGraw-Hill.
- Cronbach, L., & Richard, K. (2004). Coefficient alpha and the internal structure of tests. *Psychometrics*, 16(3), 297-334.
- Dick, G. P. M. (2000) "ISO 9000 certification benefits, reality or myth?", The TQM Magazine, Vol. 12 Iss: 6, pp.365 - 371
- Dimitriadis, Z. S. (2000). Total involvement in quality management. *Team Performance Management: An International Journal*, 6(7/8), 117-122.
- Dow, D., Samson, D., & Ford, S. (1999). Exploding the myth: do all quality management practices contribute to superior quality performance? *Production and Operations Management*, 8(1), 1–27.
- Escanciano, C., Fernandez, E., & Vasquez, C. (2001). Influence of ISO 9000 certification on the progress of Spanish industry towards TQM, *International Journal of Quality & Reliability Management*, 18(5), 481-494.
- Feng, S., Martinez, C., Gusmaroli, G., Wang, Y., Zhou, F., Chen, L., Yu, L., Iglesias Pedraz, J. M., & Kircher, S. (2008). Coordinated regulation of Arabidopsis thaliana development by light and gibberellins. *Nature*, 451(5), 475–479.

- Han, S. B., Chen, S. K., & Ebrahimpour, M. (2007). The impact of ISO 9000 on TQM and business performance. *The Journal of Business and Economic Studies*, 13(2), 1.
- Kong, S. M. (2010). Causal Effects of Registration Efforts on Business Performance of ISO 9001-Certified Companies in the Malaysian Construction Industry using Sem (Doctoral dissertation, open university Malaysia).
- Kothari, C. R. (2006). *Research Methods: Methods and Techniques* (3rd Ed.). New Delhi: New age international publishers.
- Laosirihongthong, T., Teh, P. L., & Adebajo, D. (2013). Revisiting quality management and performance. *Industrial Management & Data Systems*, 113(7), 990-1006.
- Lewis, W. G., Pun, K. F., & Lalla, T. R. (2006). Empirical Investigation of the Hard and Soft Criteria of TQM in ISO 9001 Certified Small and Medium-Sized Enterprises. *International Journal of Quality & Reliability Management*, 23(8), 11-27.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods; Quantitative & Qualitative approaches*. Nairobi: Acts Press.
- Muteti, A. (2014). Continuous Improvement and Operational Performance of Small and Medium sized Manufacturing Firms in Kenya (MBA Thesis, University of Nairobi, Kenya).
- Naveh, E., & Marcus, A. (2005). Achieving competitive advantage through implementing a replicable management standard: Installing and using ISO 9000. *Journal of Operations Management*, 24(1), 1-26.
- Naveh, E., & Marcus, A. A. (2004). When does the ISO 9000 quality assurance standard lead to performance improvement? Assimilation and going beyond. *Engineering Management, IEEE Transactions on*, 51(3), 352-363.
- Ngige, C. N. (2006). Influence of Brand equity Assets on Consumer Purchase Choices: The Case of Breastfeeding Pillows in Nairobi (MBA Thesis, University of Nairobi, Kenya).

- Nadia, B., & Amit, B. (2005). An Overview of Continuous Improvement: From the Past to the Present. *Management Decision*, 43(5), 761-771.
- Rahman, S. S., Waddock, S., Andriof, J., & Husted, B. (2002). Unfolding stakeholder thinking: Theory, responsibility and engagement
- Riillo, C. A. F, Essa, S.C, Mangiarotti,G (2011). Why do Companies Choose to be ISO 9000 Certified and What is the Relationship Between Certification and Innovation? an empirical analysis for Luxembourg
- Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to TQM practices in Turkey. *Advances in Decision Sciences*, 2014.
- Singels, J., Ruël, G., & Van De Water, H. (2001). ISO 9000 series-Certification and performance. *International Journal of Quality & Reliability Management*, 18(1), 62-75.
- Sun, H. (2000). Total quality management, ISO 9000 certification and performance improvement. *International Journal of Quality & Reliability Management*, 17(2), 168-179.
- Terlaak, A. & King, A. (2006). The effect of certification with the ISO 9000 quality management standard: A signaling approach. *Journal of Economic Behavior and Organization*, 60 (4): 579-602
- Terziovski, M., Power, D., & Sohal, A. S. (2003). The longitudinal effects of the ISO 9000 certification process on business performance. *European Journal of operational research*, 146(3), 580-595.
- Wayhan, V. B., Kirche, E. T., & Khumawala, B. M. (2002). ISO 9000 certification: The financial performance implications. *Total Quality Management*, 13(2), 217-231.
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, 12(4), 451 – 483.