

1 The Impacts of ISO9001:2008 Implementation on Employees Job 2 Satisfaction TheImpact- 3 sofISO90012008ImplementationonEmployeesJobSatisfaction

4 Elias Bekele¹ and Shimelese Zewedie²

5 ¹ Jimma University

6 *Received: 16 December 2016 Accepted: 3 January 2017 Published: 15 January 2017*

7 **Abstract**

8 The main objective of this study is to examine the impacts of implementing ISO9001:2008
9 practice towards employee's job satisfaction in Dire tannery located in Addis Ababa Kolfe
10 Keranyo sub city. The paper proposed main hypothesis and 4 sub-hypotheses and tests on the
11 relationship between ISO9001:2008 practices and job satisfaction. The data for this study
12 were collected using self-administered questioners from a total of 167 respondents in
13 representative from seven departments of the tannery. Stratified sampling technique was used
14 to draw samples out of the population. Out of this 167 questionnaires distributed 136 was
15 collected back. The data was analyzed using descriptive statistics, correlation analysis and
16 regressions. The result revealed that, customer focus; training and education, empowerment
17 and team work and continues improvement are all positively associated with employee's job
18 satisfaction. It is also found that ?"empowerment and teamwork?" and ?"continuous
19 improvement?" explains 46.5 percent of job satisfaction variance which is significant.
20

22 **Index terms**— ISO 9001, job satisfaction, total quality management.

23 **1 Introduction**

24 In recent years, ISO 9000 has gained significant acceptance in many organizations in Ethiopia. Most of these
25 organizations believe that ISO 9000 can assist them in surviving the unstable business environment and achieving
26 competitive advantage over their competitors. The main motive behind this adoption is that the quality has
27 become increasingly central features that the customers value. Customers are now more aware and looking for
28 quality products and services than they were in previous years. Satisfaction is the focal point for the shift in
29 their behavior. Because of this, some companies use ISO 9000 certification as a way to show their customers that
30 they are quality concern and looking forward to providing only quality products or services ??Othman, 2001).

31 The stress on quality has also led to a demand by organizations for outsider quality recognition, which has in
32 turn provided the drive for the International Organization for Standardization's (ISO) development of the ISO
33 9000 series of international quality management standards for quality assurance of products and services in 1987.
34 These standards have now been used by many countries globally, including the European Union (EU) Cukovic
35 and Handfield, (1996). while the ISO 9000 is not mandatory by all EU directives, many EU consumers need
36 conformity to the ISO standards such that a firm planning to export to the EU is likely to have to obtain ISO
37 9000 qualifications Handfield and Cukovic (1996).

38 Under the ISO standards, quality management includes quality control and quality assurance, and incorporates
39 the additional concepts of quality guidelines, quality plan and quality progress (Standards Australia and
40 Standards New Zealand, 1994). The ISO standards include 20 items which cover three aspects of quality;
41 management of the quality system, tactic of the system, and repairs of the system ??Brooks, 1995). ??rooks

3 MATERIALS AND METHODS

42 (1995) recognized external and internal payback of ISO certification. External payback relate to client perceptions
43 about quality, better customer satisfaction, improved core competencies, and reduced customer quality audits.

44 Internal benefits include enhanced documentation, better quality consciousness, and improved effectiveness
45 and efficiency.

46 ISO 9001 Registrars make bold claims for the business benefits of quality management system award, for
47 example in the USA, ANAB the leading ISO 9001 Registrar in the USA (2008) claim sixteen opportunities from
48 quality management system award including increased operational efficiency, cost reduction from less rework and
49 scrap, customer satisfaction, competitive edge, perceived improved quality and bigger market share. In Europe
50 similar claims are made by leading national registrars as being supported by academic research (Gavin, 2009). But
51 what about employees and job satisfaction?

52 In ISO quality standards and other quality initiatives, employees are believed to be satisfied and committed
53 with their job as a result of increase employee participation and involvement in decision making process
54 ??Wilkinson et al, 1998; ??ageman & Hackman,1995). Also, the reward system under ISO 9000 series is said to
55 increase their level of satisfaction and commitment as employees will be rewarded based on the team performance
56 not on individual basis. These believes need to be proven, as people are the important elements of the organization
57 that have to be taken care of ??shikawa (1985) has mentioned that an organization whose members are not happy
58 and cannot be happy does not deserve to exist.

59 ISO 9000 involves adjustment to the organizations. When change is on a large scale, and involves many
60 individuals and divisions, there are problems ??Harvey and Brown, 1996; ??erguson & Cheyne, 1995). When
61 ISO 9000 is adopted, employees are assigned with different job and with increased workload and paperwork,
62 change in working environment, change in management style and organization culture.

63 Mainly, these changes can be grouped into four main categories namely, job-related characteristics (skill variety,
64 task importance, task uniqueness, autonomy and feedback from the job), organization characteristics or work
65 relationships (with supervisors and relationship with co-workers) and employment contract (job security, pay
66 and growth). These factors are the providers to the decrease in job satisfaction and commitment if change is
67 implemented without proper change interventions and this as a result will affect the employees' performance
68 ??eNisi and Schweiger (1991). Now a day's many firms operating in Ethiopia are in hurry to get the award
69 of ISO9001 certification and to expand their market destination externally. But the researcher did not find
70 any study that deals with impact that ISO9001 implementation have on employees in the context of Ethiopian
71 industry. The researcher also did not find any theoretical literature associated with this issue. Because of the
72 above two major reasons the researcher become highly motivated to conduct this study with the aim of analyzing
73 the impact of ISO 9001 on job satisfaction of employees in Ethiopian manufacturing industry in the case of Dire
74 Tannery which is certified with ISO9001:2008.

75 2 II.

76 3 Materials and Methods

77 This study aims to evaluate the impacts of ISO9001:2008 implementations on employee's job satisfaction in the
78 case of Dire tannery, Addis Ababa Ethiopia. The sample size of the Study has been calculated as follows, ??=
79 ?? 2 .???.???.?? 2 (??1)+?? 2 .???.?? Where n = sample size e = margin of error p = probability of success
80 q = probability of failure N = population Z = the value of the standard variate at a given confidence level to
81 be worked out from table showing area under Normal Curve. After the sample size determined this sample of
82 167were divided proportionally for each strata (department) according to its percentage as follows:-Primary data
83 and secondary Data collection are the ways used for collecting information. This study mainly relied on primary
84 data. Such types of data are firsthand information collected for the first time directly from the respondents.
85 The collection of primary data involves the use of research instruments, such as questionnaires and interview
86 schedules that have been constructed exclusively for the purposes of a specific study. For the purposes of this
87 research, primary data were collected by self-administered questionnaire and unstructured interviews.

88 For the purpose of this study the questionnaires were adopted with a little modification from Valmohammadi
89 and Khodapanahi (2011), Ooi.et.al ??2008) and Akashah (2010) who conduct a survey in the same area before.
90 Basically the questionnaire is divided into two major parts. The questionnaire is in dual language, Amharic
91 and English to make it easily understandable for the targeted respondents. Part one keeps track on the
92 general information of respondents on their demographic information. In this section, the background aspects of
93 respondents such as gender, marital status, years of working experience with current company, positional level
94 in the organization and educational level.

95 Respondents were asked to rate each statement on the bases of five point likert scale. This scale used in this
96 study to generate statistical measurement of employee's job satisfaction. Respondent were asked how strongly
97 she or he agrees or disagrees with a statement or series of statements, usually on a four, five, six or seven-point
98 rating scale ??Saundersn.et.al 2009). In this study five point likert scale were used as indicated below:- Y i = b
99 0 + b 1 X i1 + b 2 X i2 + b 3 x i3 + b 4 X i4 +?i III.

100 4 Result and Discussion

101 5 a) Hypothesis Testing -Correlation Analysis

102 These correlation analyses are on the independent variables and dependent variable consists of customer focus, 103 empowerment and team work, training and education, continues improvement. The dependent variable for this 104 study is employee job satisfaction. The correlation is done on dimensions of independent variable on dependent 105 variable.

106 The SPSS output for Pearsons correlation coefficient show the relationship between two variables, which are 107 independent variables and dependent variables. The measure of goodness between the variables should fall within 108 the range of 1 to -1. If $r= +1$, there is a perfect linear (positive) relationship between the two variables. On the 109 other hand, if $r=-1$, the inverse (negative) relationship between variables.

110 Hypotheses that postulate a significant positive or negative relationship between two variables can be tested by 111 examining the correlation between the two. (Customer focus has a positive effect on employee's job satisfaction) 112 Table 4.12, shows the Pearson correlation test for hypothesis 1. There is a significant positive correlation 113 between customer focus principles with employee's job satisfaction with a significant value of 0.000. Hence 114 accept alternative hypothesis (H_a) and reject the null hypothesis (H_0). In other words customer focus and 115 job satisfaction have a positive moderate relationship($r=0.405$). From this it can be understood that customer 116 focus practice of the tannery has a positive impact on employee's job satisfaction. In other word, an increase in 117 customer focus practice of the tannery will also result in an increased job satisfaction among employees. 4.13, 118 shows that there is a significant positive correlation between training and education and job satisfaction with 119 a significant value of 0.000. Hence accept the alternative hypothesis (H_a) and reject the null hypothesis (H_0). 120 In other word training and education and job satisfaction has a positive moderate relationship ($r=0.565$). 121 It means the two variables have positive relationship when independent variable increase and the dependent 122 variable also increase. Training and education considered as a factor to affect the employees job satisfaction in 123 the study. (Continuous improvement has a positive effect on employees' job satisfaction) Table 4.15, shows there 124 is a significant positive correlation between Continuous improvement and job satisfaction with a significant value 125 of 0.000. Hence accept the alternative hypothesis (H_a) and reject the null hypothesis (H_0). In other word 126 Continuous improvement and job satisfaction has a positive moderate relationship ($r=0.605$). Accordingly this 127 implies that continues improvement has a positive impact on employee's job satisfaction. Increase in continues 128 improvement practice of the company will also result increased employees job satisfaction. After entered the 129 four variables into the regression model R is 0.682 with the dependent variable. Inter correlation among four (4) 130 independent variable taken into account, the R square value is 0.465. Thus our model explains only 46.5 percent 131 influence that our four (4) independent variables have on the dependent variable.

132 The ANOVA, as shown in table 4.17 below implied that the F value of 28.499 is significant at the 0.000 level 133 and the model summary. This result reflects that the 46.5 percent of the variance (R square) in job satisfaction 134 has been significantly explained by the four (4) independent variables. The Durbin-Watson of 1.587, falls between 135 acceptable range ($1.5 < D < 2.5$) indicating no autocorrelation problem in the data. Therefore, it indicates that 136 the error term is independent. $Y (JS) = 1.158+0.1(X3) + 0.223 (X 4) + ?$

137 Where: (X 1 = customer focus, X 2 = training and education, X 3 = empowerment and teamwork, X 4 = 138 continuous improvement and problem prevention)

139 The results indicate no multicollinearity problems (the multicollinearity statistics shows that the tolerance 140 indicator for customer focus, training and education, empowerment and teamwork, and continuous improvement 141 and problem prevention are all greater than 0.1, and Variation Indication Factor (VIF) are all lesser than 10). 142 This shows that there is no multicollinearity problem between the four independent variables.

143 6 IV.

144 7 Discussion

145 The main objective of this study is investigating the impact of ISO9001:2008 practices on employees' job 146 satisfaction. This study was conducted in Dire tannery processing facility located in Addis Abeba. Demographic 147 factors such as gender, marital status, working experience, levels in the organization position and educational 148 level achieved have been used to describe the characteristics of the respondents.

149 On the basis of the correlation analysis customer focus, training and education, empowerment and teamwork 150 and continuous improvement have a significant positive correlation with employee's job satisfaction. Further 151 results of regression analysis revealed that the four construct of independent variables was a relevant ISO 152 9001:2008 factors, there was a strong association with job satisfaction. The result implied that continues 153 improvement was perceived as a dominant factor for ISO9001 practice; there was a strong association with 154 job satisfaction.

155 The results also provided supporting evidence for the view of ??aria. et.al (2006) affirmed that Continuous 156 improvement and problem prevention", which is an essential is shown to have a positive effect on "job satisfaction" 157 and "organizational commitment" and Valmohammadi et.al (2011) states "Continuous improvement and problem 158 prevention", which is an essential aspect of ISO9001, is shown to have a positive effect on "employees' job 159 satisfaction". As Asaari et.al ??2003), states continuous improvement and problem prevention practices are

8 CONCLUSION

160 significantly positive correlated to job involvement, job satisfaction, career satisfaction, and organizational
161 commitment. Therefore, job involvement, job satisfaction, career satisfaction, and organizational commitment
162 increase as continuous improvement and problem prevention practices increase. Empowerment and team work
163 which is an essential aspect of ISO9001 is shown to have a positive effect on employee's job satisfaction next
164 to continues improvement. As Assari et.al (2006) states, Empowerment and teamwork is the most important
165 in enhancing employee's job satisfaction, organizational commitment, career satisfaction, and job involvement.
166 The greater the extent of empowerment and teamwork, the greater the enhancement of these job-related
167 attitudes. Also, Valmohammadi et.al (2011) affirmed that ISO9001 recognize and emphasize the importance
168 of "empowerment and teamwork" to facilitate employees' ability to work together to get a job done.

169 However, customer focus practice of the firm is not significant in determine employees job satisfaction. This
170 indicates that customer focus practice of the firm required motivating effects on employees at work, thus
171 aspects of emphasis on customer focus practice, such as reward employees when there is positive customer
172 satisfaction is needed. The present study results are equivalent with the findings of previous study conducted
173 by ??almohammadi et.al (2011) and Ooi et.al ??2008) in which found that Customer focus was discovered to be
174 insignificant to job satisfaction. The results suggest that it is possible that employees' effort were not taken into
175 consideration when it comes to customer satisfaction; for example, employees were not rewarded or motivated
176 by, when there is positive customer satisfactions. Karia et.al (??006)also states that Customer focus does not
177 contribute to employees' work-related attitudes. This suggests that management has failed to communicate its
178 commitment to this important practice. This might be due to the lack of an established support relationship
179 between employees and customers.

180 Finally training and education also found to be insignificant towards employees job satisfaction. The result is
181 consistent with the findings of Ooi et. Further, the results of multiple regression analysis confirmed that the job
182 satisfaction variable was significantly related to the perceptions of ISO9001: 2008 practices and thus practice of
183 ISO9001 principles come up with positive payoff.

184 Finally, the present study support previously conducted studies by Valmohammadi et.al (2011), and Ooi et.al
185 ??2008) which found that both continues improvement and empowerment and team work as significant factor in
186 determine employees job satisfaction. Similarly they found training and education and customer focus practice of
187 ISO9001 practice no significant effect towards employee's job satisfaction. However this study does not support
188 the finding from previous studies conducted by ??aria et.al (2006) which concluded that the greater the extent
189 of ongoing training and education in an organization, the greater the employees' job satisfaction. And Yusuf
190 and Ali ??2000), which state that education and training was found to have positive influence on employee's job
191 satisfaction.

192 V.

193 8 Conclusion

194 The ??003)) quality management systems play a vital role in shaping (influencing) the attitudes of employees
195 towards their job and organization. Based on the result of Pearson correlation analysis, which is used for
196 determining the relationship between the four independent variables (customer focus, training and education,
197 empowerment and team work and continues improvement) and the dependent variable (job satisfaction) shows
198 that there is a significant positive correlation. Therefore, job satisfaction increases as customer focus, training
199 and education, empowerment and team work and continues improvement increased.

200 Based up on the multiple regression analysis the finding identify two of the independent variables namely
201 continues improvement and empowerment and team work are more significantly associated with improvements of
202 employees job satisfaction than the other two variables namely customer focus and training and education. The
203 implication is that the organization should focus firstly on continues improvement and then for empowerment
204 and team work. On the other hand the other two elements namely training and education and customer focus
205 are inputs of long term infrastructural benefits which is useful for continues improvement in the future, but with
less significant relationship with employees job satisfaction. 1 2 3 4



Figure 1:

1

	Pearson Correlation	Significant
Value	0.405**	0.000
** Correlation is significant at the 0.01 level (2 tailed)		
c) Test of Hypothesis 2		
(Training and education has a positive effect on employees job satisfaction)		
Table		

Figure 2: Table 1 :

2

	Pearson Correlation	Significant
Value	0.565**	0.000

[Note: ** Correlation is significant at the 0.01 level (2 tailed) d) Test of Hypothesis 3 (Empowerment and teamwork has a positive effect on employees job satisfaction) As presented in Table no. 4.14, shows there is a significant positive correlation between Empowerment]

Figure 3: Table 2 :

3

	Pearson Correlation	Correlation	Significant
Value	0.623**		0.000
** Correlation is significant at the 0.01 level (2 tailed)			
e) Test of Hypothesis 4			

Figure 4: Table 3 :

4

	Pearson Correlation	Significant
Value	0.605**	0.000
** Correlation is significant at the 0.01 level (2 tailed)		

[Note: f) Regression AnalysisA result for regression analysis summary for the four (4) independent variables versus the job satisfaction is depicted in table 4.16.]

Figure 5: Table 4 :

5

Model	R	R square
1	0.682	0.465

Figure 6: Table 5 :

8 CONCLUSION

6

Model	F	Significant
1	28.499	0.000

Figure 7: Table 6 :

7

Model	R	R square	Durbin-Watson
1	0.682	0.465	1.587

Figure 8: Table 7 :

4

Figure 9: Table 4 .

8

1	Model (Constant) Customer focus Training and Education .025 Unstandardized Coefficients B Std. Error 1.158 1.141 -.008 .044 .032 Empowerment and .100 .033 Team work Continues Improvement .223 .057	Standardized Coefficients B	Confidence Interval for B Lower Bound	Upper Bound	Tolerance	Collinearity Statistics VIF	Year 39	Volume XVII	Issue III	Version I ()
		Beta	-.184	.854	-.095	.079	.598	1.674		
			-.015	.777	.438	-.038	.087	.310	3.227	
			.089	3.034	.003	.035	.165	.319	3.136	
			.343	3.885	.000	.109	.336	.525	1.903	
			.342							

a. Dependent Variable: Employee job satisfaction

Global
Journal of
Management and
Business
Research

[Note: A 2017 © 2017 Global Journals Inc. (US)]

Figure 10: Table 8 :

¹© 2017 Global Journals Inc. (US) 1The Impacts of ISO9001:2008 Implementation on Employees Job Satisfaction

²© 2017 Global Journals Inc. (US)

³The Impacts of ISO9001:2008 Implementation on Employees Job Satisfaction

⁴© 2017 Global Journals Inc. (US) 1

206 [Journal of Quality Management] , *Journal of Quality Management* 5 p. .

207 [Kreitner and Kiniki (ed.) ()] , R Kreitner , Kiniki . Behavior. 9 th ed. USA: Mac Graw Hlls (ed.) 2010.

208 [Brooks] (1995) *the Yellow Brick Road: The Path to Building a Quality Business*, I Brooks . New Zealand, 209 Auckland: Nahanni Publishing.

210 [Lambert et al. ()] 'the impact of job satisfaction on turnover intent: A test of structural measurement model 211 using a national sample of workers'. E G Lambert , N L Hogan , S M Barton . *Social Science Journal* 2001. 212 38 p. .

213 [Magd and Curry ()] 'An empirical analysis of management attitudes towards ISO 9001:2000 in Egypt'. H Magd 214 , A Curry . *The TQM Magazine* 2003. 15 (6) p. .

215 [Awan and Bhatti ()] 'An evaluation of ISO 9000 registration practices: a case study of The productivity dilemma 216 revisited'. H M Awan , M I Bhatti . *Academy of Management Review* 2003. 28. (in press)

217 [Buttle ()] 'An investigation of the willingness of UK certification firms to recommend ISO 9000'. F Buttle . 218 *International Journal of Quality Science* 1996. 1 (2) p. .

219 [Mart?'nez-Costa et al. ()] 'and TQM: The performance debate revisited'. M Mart?'nez-Costa , T Y Choi , J A 220 Mart?'nez , A R Mart?'nez-Lorente . ISO 9001/2000. *Journal of Operations Management* 2009. 27 p. .

221 [Babin and Griffin ()] G Babin , Griffin . *Business research Methods*, 2010. (th ed.USA: Cengage learning)

222 [Fabra and Camisón ()] 'Direct and indirect effect of education on job Satisfaction: A structural equation model 223 for the Spanish case'. M E Fabra , C Camisón . 10.1016/j.econedurev.2008.12.002. *Economics of Education 224 Review* 2008.

225 [Gardner and Carlopio ()] 'Employee affective reactions to organizational quality efforts'. D Gardner , J Carlopio 226 . *International Journal of Quality Science* 1996. 1 (3) p. .

227 [Saari and Judge ()] 'Employee attitudes and Job satisfaction'. L M Saari , T Judge , A . *Human Resource 228 Management* 2004. 43 p. .

229 [Marczyk and Dematteo ()] *Essentials of Research Design and methodology*, G Marczyk , Festinger Dematteo . 230 2005. USA: John Wiely & Sons Inc.

231 [European Foundation for the improvement of living and working conditions (2007)] *European Foundation for 232 the improvement of living and working conditions*, www.eurofound.europa.eu 2007. June 2008. p. 13. 233 (Measuring job satisfaction in surveys -Comparative analytical report)

234 [Ebrahimpour et al. ()] 'Experiences of US and foreign-owned firms: a new perspective on ISO 9000 implemen- 235 tation'. M Ebrahimpour , B Withers , N Hikmet . *International Journal of Production Research* 1997. 37 (2) 236 p. .

237 [Gavin ()] 'Exploring performance attribution'. P M D Gavin . *International Journal of Productivity and 238 Performance Management* 2009. 58 (4) p. .

239 [Stevenson and Barnes ()] 'Fourteen years of ISO 9000: impact criticisms, costs and benefits'. T H Stevenson , 240 F C Barnes . *Business Horizons* 2001. 44 (3) p. .

241 [Mitara ()] *Fundamentals of quality control and improvement*, Mitara . 2009. New Delhi. (PHI learning private 242 limited)

243 [Glinow and Mcshane ()] V Glinow , Mcshane . *Organizational Behavior*. 5 th ed, (New York) 2010. MacGraw 244 Hills.

245 [Hellriegel and Slocum ()] D Hellriegel , Slocum . *Organizational Behavior*. 13 th ed. USA: South Western 246 Cengage Learning, 2011.

247 [Mathis and Jackson ()] *Human Resource management*, L Mathis , Jackson . 2010. 13. (th ed. USA: South 248 western Cengage Learning)

249 [Jain ()] *Impact of TQM on employees' job satisfaction in Indian software Industry*, A Jain . 2010. p. .

250 [Sarok ()] 'Implementing Quality Management Systems and Its Benefits in Local Authorities Administration in 251 Sarawak'. A Sarok . *The 2nd International Conference on Humanities and Social Sciences*, (Malaysia) 2010. 252 p. .

253 [Singles et al. ()] 'ISO 9000 series Certification and performance'. J Singles , G Ruel , H Van De Water . 254 *International Journal of Quality & reliability management* 2001. 18 (1) p. .

255 [Kothari ()] C R Kothari . *Research Methodology: methods and techniques*. 2 nd ed. New Delhi: New Age 256 International, 2004.

257 [Leech and Barrett ()] L Leech , Morgan Barrett . *SPSS for Intermediate Statistics: uses and interpretations*. 2 258 nd ed. New Jersey: Lawerence Erlbaum associations, 2005.

259 [Dale ()] *Managing Quality*, B G Dale . 1994. Hertfordshire; U.K.: Prentice Hall International.

8 CONCLUSION

260 [Manual of Quality Management Standards ()] *Manual of Quality Management Standards*, 1994. Wellington:
261 Standards Australia and Standards New Zealand. Standards Australia and Standards New Zealand

262 [Morgan ()] A Morgan . *SPSS for Introductory Statistics: uses and Interpretations. 2 nd ed. New Jersey:*
263 *Lawrence Erlbaum association*, 2004.

264 [Naagarazan ()] R Naagarazan , ArivalagarA . *Total quality management. New Delhi: new age international (p)*,
265 2006. p. ltd.

266 [Oakland and Porter ()] J S Oakland , L Porter . *Cases in Total Quality Management*, (Buttersworth Heinemann,
267 oxford) 1994.

268 [Kumar and Suresh ()] *Operations Management*, Anil Kumar , S Suresh . 2009. (1st ed. New Delhi: New age
269 International ltd)

270 [Stroh and Northcraft ()] *Organizational Behavior: a management challenge*, K Stroh , Neale Northcraft . 2002.
271 London: Lawrence Erlbaum associations.

272 [Pallant ()] J Pallant . *SPSS Survival Manual. 3 rd ed*, (New York) 2007. Mac Graw Hill.

273 [Philadelphia: American society for testing and materials] *Philadelphia: American society for testing and mate-*
274 *rials*,

275 [Seddon ()] *Quality at the crossroads*, J Seddon . 1998. Quality World, March. p. .

276 [Juran ()] *Quality Control Handbook*, J M Juran . 1979. New York, McGraw Hill. (3rd ed.)

277 [Lam ()] 'Quality management and job satisfaction, an empirical study'. S S K Lam . *International Journal of*
278 *Quality & Reliability Management* 1995b. 12 p. .

279 [Valls and Vergueiro ()] 'Quality management on information services according to migratory path'. V M Valls ,
280 W C S Vergueiro . *Business Process Management Journal* 2006. 6 (5) p. .

281 [Lancaster ()] *Research methods in management. 1 st ed*, G Lancaster . 2005. Great Britain: Elsevier.

282 [Robbins and Judge ()] P Robbins , Judge . *Organizational Behavior. 14*, 2010. (th ed. USA: Pearson educations)

283 [Saunders and Lewis ()] M Saunders , Thornhill Lewis . *Research Methods for business students. 5 th*, 2009.
284 Prentice Hall.

285 [Slbermerborn ()] Slbermerborn . *Organizational Behavior.11 th ed. USA*, 2010. John Wiley and sons Inc.

286 [Douglas et al. ()] 'The case for ISO 9000'. A Douglas , S Coleman , R Oddy . *The TQM Magazine* 2003. (5) p.
287 15. (Research paper)

288 [Shahalizadeh and Mostabseri (2006)] 'The impact of implementation of ISO9000:2000 on technology improve-
289 ment: A case study'. M Shahalizadeh , M Mostabseri . available at: <http://kiie.org/iems>, 2006. may 2009. 7 p.
290 14.

291 [Lam ()] 'The impact of total quality management on front-line supervisors and their work'. S K Lam . *Total*
292 *Quality Management* 1995a. 6 (1) p. .

293 [Jime'nez and Costa ()] 'The performance effect of HRM and TQM: a study in spanish organizations'. D J
294 Jime'nez , M Costa , M . *International journal of Operation & Production Management* 2009. 29 (12) p. .

295 [Ugboro and Obeng ()] *Top management leadership, employee empowerment, job satisfaction in TQM organiza-*
296 *tion: an empirical study*, I O Ugboro , K Obeng . 2000.

297 [Pekar ()] *Total Quality Management: guiding principles for applications*, P Pekar . 1995. (st ed)

298 [Kumar et al. ()] 'TQM success factors in north Indian manufacturing and service industries'. R Kumar , D Garg
299 , T K Garg . *TQM journal* 2010. 23 (1) p. .

300 [Tricker ()] R Tricker . *for Small Businesses*, (Butterworth-Heinemann) 2005. 2000. 9001.

301 [Curkovic and Handfield (1996)] 'Use of ISO 9000 and Baldrige Award criteria in supplier quality evaluation'. S
302 Curkovic , R Handfield . *International Journal of Purchasing and Materials Management* 1996. May, 2-11.