

# Influence of Motivation, Empowerment, Work environment on Work Effectiveness: A Study of Quality Management as a Moderator

**Archana Kuchroo Chandra**

*Quality Assurance and Enhancement, Amity University, Noida, Uttar Pradesh, India*

**Teena Bagga**

*Amity Business School, Amity University, Noida, Uttar Pradesh, India*

**BK Srivastava**

*Bridge School of Management, Gurugram, Haryana, India*

## **Abstract**

The aim of the paper is to assess the moderating role of quality management between motivation, empowerment, and work environment as elements of organizational culture and work effectiveness. While organizations have shown very good results due to implementation of quality management, doubts are often raised on the extent to which quality management can bring about the desired work effectiveness. Studies have shown that organizational culture plays an important role in facilitating smooth quality implementation. In absence of the right organizational culture, Quality Management Systems are not able to foster effectiveness in organizations. The study aims to understand if quality Management Systems can play a role in moderating the elements of organizational culture such that it facilitates performance effectiveness. It attempts to identify the elements of quality management that can foster a strong culture which would further lead to work effectiveness. Survey was conducted to gauge the extent to which quality management can moderate the existing motivation level, empowerment, and work environment of an organization to get the desired results. Multiple moderator regression analysis was carried out to test the moderation effect

The study is expected to help organizations where quality management does not seem to bring excellence in the long run due to unfavorable organizational culture.

**Key Words:** Motivation, Empowerment, Work Environment, Work Effectiveness, Quality Management, Moderating Effect, Multiple Moderator Regression

## **1. Introduction**

The concepts of organizational culture, quality management and organizational effectiveness have been researched extensively and still have many dimensions yet to be explored. The organizations that have been conscious of quality and its culture from the beginning are the ones that have grown steadily. In the past few decades, 'quality assurance' has become a norm. Quality management certificate has become a way for organizations to promise its stakeholders about its success. However, QMS cannot produce the desired result unless supported by a positive organizational culture. Since the principles of quality management center on continuous improvement in each process, it is imperative that employees share the ideology of improving constantly; otherwise, it only leads to eyewash with ground realities being far from true. While it has become essential to have the formal quality assurance mechanism in place, its successful implementation is considerably dependent on the prevailing organizational culture. (Gambi et al. (2013)

Organizations do not merely work on their quality assurance processes; they also develop their internal quality cultures. (Juan Antonio et al. 2013).

According to Oliver Vettori (2011), if a quality culture needs to be sustained by the organization, the basic vision and values must be largely shared or atleast accepted. Previous studies on implementation of quality management draw out two conclusions. One, that if properly implemented, QMS improves organizational performance (Dellana and Hauser 1999). Literature also suggests that developing explicit characteristics of culture may reduce the barriers and thus facilitate smooth quality implementation (Zeitzi et al., 1997). With companies becoming multinational the role of culture in maintaining uniformity in standards has become very significant. The culture of an organization is often associated with the country from where it originates. The work culture of a multinational firm is therefore likely to clash in different countries with the ideologies of the parent organization. Organizations that do not have a strong culture their branch offices will reflect the culture of the host nation thereby altering the basic values and disturb uniformity. (Adler 1997).

In such cases change management becomes difficult (Lindberg et. al., 2001). It has been reasonably explained that for attaining the desired objectives, appropriate organizational culture is a must. Getting the right culture thus appears to be a challenge for leadership (Steve Denning, ‘Age of the agile’, 2018)

A need was therefore felt to derive simpler method that can interact with various aspects of ongoing organizational culture in order to produce the desired effectiveness. Whether quality management can moderate these is a question that needs to be answered.

## 2. Review of Literature

### 2.1 Organizational Culture

Organizational culture is the pattern of beliefs and values that are shared by members of the organization, leading to visible common behaviors and practices. It is a predominant style of operations in an organization (Armstrong, 2006). The pattern of behavior and ways adopted by a group of individuals focusing on a common set of goals which proved to be effective during course of time, hence were inducted to new entrants as the expected behavior to be explicated in working towards achievement of the goals is what makes the organizational culture (Leovaridis, C., & Cismaru, D., 2016). An organizational culture is effective only when it is in alignment with the organization’s values, and goals (Okatan, K.; Alanku, O.B. 2017), (Majid Z Nafchi, Hana Mohelská, 2020). According to Sopow (2006), factors such as developmental factors and historical factors like past experiences and lessons learnt historical and factors lead to formation of an organizational culture

These shared values and beliefs differentiate one organization from another and also from one region to another (Alan Gutterman 2017).

Following variables and sub variables were identified from the literature studies on Organizational culture and are taken up for the present study:

Variables of Organizational Culture	Sub Variables	Author
Motivation	Rewards, Employee Participation, Recognition & Feedback, Flexible working hour, Working Conditions, Financial incentives, Challenging and interesting work, Delegation of Authority	Janine Krüger (2010) Ayesha (2015) Connie Bao, Dr. Ismail Nizam (2015)
Empowerment	Personal (Training, skill improvement, grooming), Structural (Delegation), Environmental (Role clarity, Behavioral, Psychological empowerment)	Goudarzi, (2016) Boudrias et al. (2009) Pigeon et al (2017).
Work environment	Job Aids, Supervisor Support, Physical work environment, Workplace incentives, Role congruity	Lankeshwara, P. (2016). Thushel Jayaweera1 (2015) Chandrasekar, (2011)

Table1: Variables of Organizational Culture taken up for the study

#### 2.1.1 Developing a strong organizational culture:

Loyalty and trust from subordinate as a result of security and care provided over a long period, leads to hesitation in taking ownership of work, which further gives way to over-dependency. Sub-groups are further created within departments due to common factors like religion, caste; language, place of origin, age group, gender etc. get in the way of a just work culture. This fosters prejudice and favoritism further leading to less respect towards organizational values and procedures. Resistance to change prevents organizations to remain ahead of times (Panda A., Gupta, R. 2002).

Organizational culture plays a catalytic role in change management and effective implementation of quality management. Studies have highlighted the importance of strong quality culture as a prerequisite to enable quality implementation. (Ibidunni, Agboola , 2013). Need for change in organizational culture is therefore much desired before planning anything for organizational improvement.

Changing the organization’s prevailing culture is a big challenge. (Fairfield-Sonn, 1993).

### 2.2 Effectiveness of an organization

Effectiveness of an organization is analyzed in terms of its productivity, availability of resources, flexibility, stakeholder satisfaction and goal attainment (Hale Kaynak, 2003). Some have viewed effectiveness of an organization in terms of effective input i.e., motivated human resource, sufficient material resource, process effectiveness, effective change management,

knowledge, innovative ambidexterity. (Kim Cameron, 2015). After outbreak of COVID-19 pandemic, an effective organization is now viewed in terms of resilience, flexibility, agility, empowering remote workforce, innovation, virtual collaboration, sustainability and VUCA efficiency. Paula C. et al., (2020). So, the question again bounces back to getting the desired organizational culture to enable the effectiveness. (Giti Ashraf et al., 2012)

### 2.2.1. Organizational Culture and Effectiveness

A major obstacle in investigating the relationship between organizational culture and performance is related to application and difficulties in measurement of aspects of culture (Bernard Lim (1995). Triangulation of data collection methods for cultural aspects to minimize the limitations faced in singular measures in investigation was suggested (Kotter and Heskett, 1992) by categorized the role of culture on organizational performance as helping or hurting performance. The study of background of good performers it was deduced that most performers come from organizations with a strong culture. This further clarified the importance of cultural change required and at the same time highlighted that bringing about substantial cultural change may not be an easy task.

## 2.3 Quality Management

The concept of quality control traces back to the medieval period with European craftsmen to produce flawless goods. Industrial revolution took this further to manufacturing industry for developing procedures for product inspection. During World War II quality had become a critical component to check the safety of military equipment. During this time the concepts of sampling and statistical quality control and training programmes on quality emerged. Since then, the quality paradigm has evolved penetrated every organizational sector and every facet of the sector.

Several new approaches and programmes like process-based approach, Total Quality Management (TQM), Six Sigma management emerged in the quality stride (Ching Chow Yang, 2017).

### 2.3.1 Quality implementation models

Models of quality management have been developed by several Quality Gurus. Some of the most popular models are discussed below: (Juozas Ruzevicius, Jurate Sauciuniene, 2006), (Seyed-Hosseini, S.M., Barkhsha, A., Taleghani, 2009),

- Deming Model of Total Quality Management gives 14 points focusing on continuous improvement, adoption of new philosophy, cease reliance on mass inspection, minimize total cost, on the job training, institute leadership, drive out fear, break barriers between departments, Remove barriers, institute education and self-improvement, (Chiarini, 2011)
- Malcolm Baldrige Criteria for Performance Excellence, focuses on six key systems viz. Leadership System, Strategic Planning System, Operations Focus System, Workforce Engagement System, Knowledge Management System, Customer Management System (Cazzell, B., Ulmer, J.M., 2009)
- European Foundation for Quality Management (EFQM) is based on nine enablers which are derived from organizational activities and results from organizational achievements. (Gómez-López, R., Serrano-Bedia, A.M., López-Fernández, 2016)
- ISO standards for Quality Management talk about eight principles viz. Customer focus, leadership, people involvement, process approach, systematic approach to management, continual improvement, factual approach to decision making, mutually beneficial supplier relationship. (ISO Quality manual, 2015)

## 2.4 Quality Management: Organizational Culture and Effectiveness

Group culture and development culture support quality management practices whereas hierarchical and rational culture are least supportive. (VS Patyal, M. Koilakuntla, 2017). Effective TQM implementation requires an organizational culture that is receptive to change. The key characteristics of organizational culture viz. leadership, HR practices, organizational bonding, strategic goals and criteria for success play a vital role in promoting quality culture. (Inga Lapina, 2015).

## 3. Research Methodology

Literature on organizational culture, effectiveness and quality management has mainly examined how quality management systems have contributed to improving organizational performance, and processes. The review has further revealed that there is a pre-condition to it which is an affirmative organizational culture. So, a gap was seen with respect to refining organizational culture to enable the desired effectiveness. This led to foundations of present study “Moderating Effects of Moderating Role of Quality System between Organizational Culture and Effectiveness”

Review of literature helped in identifying constructs of the three variables i.e., organizational culture as independent variable, organizational effectiveness as dependent variable and quality management as moderator variable. The objective was to examine whether the constructs of quality management can moderate various dimensions of organizational culture to impact the corresponding dimensions of effectiveness.

Eight hypotheses were formulated on this objective. The main hypothesis states the ‘there is a significant moderating effect of quality management between organizational culture and effectiveness. This is supported by following hypothesis:

**Hypothesis 1:** Quality Management has a significant moderating effect between motivation and organizational effectiveness

H<sub>0</sub>: Quality Management have no moderating effect between motivation and organizational effectiveness

H<sub>1</sub>: Quality Management has a significant moderating effect between motivation and organizational effectiveness

**Hypothesis 2:** Quality Management has a significant moderating effect between empowerment and organizational effectiveness

H<sub>0</sub>: Quality Management has no moderating effect between empowerment and organizational effectiveness

H<sub>1</sub>: Quality Management has a significant moderating effect between empowerment and organizational effectiveness

**Hypothesis 3:** Quality Management has a significant moderating effect between work environment and organizational effectiveness

H<sub>0</sub>: Quality Management has no moderating effect between work environment and organizational effectiveness

H<sub>1</sub>: Quality Management has a significant moderating effect between work environment and organizational effectiveness

Based on the constructs of each of the variables i.e., Organizational culture, effectiveness, and quality management four variables with 33 sub variables for organizational culture, five variables and 21 sub variables from organizational effectiveness and 9 variables with 44 sub variables were identified for the study. Thus, a measurement tool was developed in the form of a questionnaire, which was validated through focused group discussion with subject matter experts. Reliability of scales was tested on pilot study through item analysis, reliability test and factor analysis. Once the scales were found reliable the measurement tool was used for final study.

Out of 1000 plus questionnaires that were distributed among were employees of ISO certified organizations in Delhi NCR; only 266 valid responses were received and analyzed.

#### **4. Analysis**

Moderated multiple regression analysis was used to test interaction effects of quality management with organizational culture on organizational effectiveness (OE).

Following pretests were conducted on sample data before putting it through MMR analysis:

- The data was put through pre analysis test.
- The data passed eight assumptions required for MMR analysis.
- Linear relationship exists between organizational culture and effectiveness
- Homoscedasticity of data was checked on SPSS
- No multicollinearity was observed across variables
- No significant outliers were noticed
- Residuals are approximately normally distributed

**4.1** The results of MMR analysis on final data are given in tables 2-7:

**4.1.1 Hypothesis 1** Moderating effect of QM between motivation (OC) and organizational effectiveness

The results of multiple regression analysis to test the interaction effects and main effect on the relationship between motivation and OE are given in Table 2

Dependent Variables	Independent/Moderator Variables Motivation Management (M/ QM) /Quality	N=266		
		R <sup>2</sup>	ΔR <sup>2</sup>	F
Environmental effectiveness	M	.00512		
	M + QM	.53712	.532	174.69754**
	M + QM + M X QM	.53919	.00207	.67830
Profitability	M	.00000		
	M + QM	.46252	.46252	130.80122**
	M + QM + M X QM	.46316	.00064	.18001
Innovation	M	.00632		
	M + QM	.10610	.09978	16.96673**
	M + QM + M X QM	.12419	.01809	3.11892
Stakeholder satisfaction	M	.00050		12.11619**
	M + QM	.07429	.07379	5.17949*
	M + QM + M X QM	.10499	.0307	
Productivity	M	.00459		28.54307**
	M + QM	.16196	.15737	.17678
	M + QM + M X QM	.16294	.00098	

P<0.05, P<0.01

Table 2: Interaction effect between Motivation and Organizational

### Effectiveness

Table 1 shows, the interaction effect on motivation is seen on all variables of organizational effectiveness. The effect is lowest in case of profitability and highest in case of stakeholder satisfaction.

Frequency of significant interactions involving quality management between motivation and OE is summarized in Table 3

Effectiveness Culture	Environmental effectiveness	Profitability	Innovation	Stakeholder satisfaction	Productivity	Total
Rewards	-	1	1	-	-	2
Employee Participation	1	-	-	1	1	3
Recognition & Feedback	1	-	-	1	-	2
Delegation of Authority	1	-	1	1	1	4
Total	3	1	2	3	2	11

Table 3: Summary of significant interactions involving quality management between motivation and OE

11 interaction terms are found significant out of 20. All interactions are in the direction of H<sub>1</sub> of hypothesis 2. Therefore, null hypothesis for Hypothesis 2 is rejected. This indicates that QM has a positive moderating effect between motivation and OE.

#### 4.1.2 Hypothesis 2 Moderating effect of QM between empowerment (OC) and organizational effectiveness

The results of multiple regression analysis to test the interaction effects and main effect on the relationship between empowerment and OE are given in Table 4

Dependent	Independent/Moderator Variables	N=266
-----------	---------------------------------	-------

Variables	Empowerment /Quality Management (E/ QM)	R <sup>2</sup>	ΔR <sup>2</sup>	F
Environmental effectiveness	E	.12224		
	E + QM	.48052	.35838	104.88228**
	E + QM + E X QM	.49098	.01036	3.07327
Profitability	E	.07183		
	E + QM	.04148	.32965	83.71783
	E + QM + E X QM	.40452	.00304	.77087
Innovation	E	.13409		
	E + QM	.15767	.02358	4.25505*
	E + QM + E X QM	.16534	.00767	1.38759
Stakeholder satisfaction	E	.06494		
	E + QM	.14587	.02358	4.25505*
	E + QM + E X QM	.14590	.00397	1.38759
Productivity	E	.00388		
	E + QM	.08590	.08202	13.63859**
	E + QM + E X QM	.08987	.0307	.65866

P<0.05, P<0.01

Table 4: Interaction effect between E and OE

Table 4 shows, the interaction effect on empowerment is seen on all variables of organizational effectiveness. The effect is lowest in case of profitability and stakeholder satisfaction and highest in case of productivity.

Frequency of significant interactions involving quality management between elements of empowerment and OE is summarized in Table 5

Effectiveness	Environmental effectiveness	Profitability	Innovation	Stakeholder satisfaction	Productivity	Total
Culture						
Training	1	1	1	1	1	5
Delegation	1	-	1	-	1	3
Psychological	1	-	1	-	1	3
Total	3	1	3	1	3	11

Table 5: Summary of significant interactions involving QM between E and OE

11 interaction terms are found significant out of 20. All interactions are in the direction of H<sub>1</sub> of hypothesis 3. Therefore, null hypothesis for Hypothesis 3 is rejected. This indicates that QM has a positive moderating effect between empowerment and OE.

**4.1.3 Hypothesis 3** Moderating effect of QM between Work environment (OC) and organizational effectiveness

**4.1.4**

The results of multiple regression analysis to test the interaction effects and main effect on the relationship between Work environment and OE are given in Table 6

Dependent Variables	Independent/Moderator Variables Work environment /Quality Management (WE/ QM)	N=266		
		R <sup>2</sup>	ΔR <sup>2</sup>	F
Environmental effectiveness	WE	.13351		
	WE + QM	.48507	.35156	103.77550**
	WE + QM + WE X QM	.49471	.00964	2.88080
Profitability	WE	.08901		
	WE + QM	.40495	.31594	80.70394**
	WE + QM + WE X QM	.40535	.00001	.10157
Innovation	WE	.21729		
	WE + QM	.23051	.01322	2.61139
	WE + QM + WE X QM	.23052	.00048	.00196
Stakeholder satisfaction	WE	.06386		
	WE + QM	.14578	.08192	14.57685**
	WE + QM + WE X QM	.14579	.0307	.00176
Productivity	WE	.04078		
	WE + QM	.09345	.05267	8.83110**
	WE + QM + WE X QM	.09363	.00018	.02998

P<0.05, P<0.01

Table 6: Interaction effect between WE and OE

Table 5 shows, the interaction effect on work environment is seen on all variables of organizational effectiveness. The effect is lowest in case of profitability and highest in case of stakeholder satisfaction.

Frequency of significant interactions involving quality management between Work environment and OE is summarized in Table 7

Effectiveness Culture	Environmental effectiveness	Profitability	Innovation	Stakeholder satisfaction	Productivity	Total
Job Aids	1	1	1	1	1	5
Supervisor Support	1	-	1	1	1	4
Physical work environment	1	-	-	1	-	2
Workplace incentives	-	-	1	1	1	3
Total	3	1	3	4	3	14

Table 7: Summary of significant interactions involving quality management between WE and OE

14 interaction terms are found significant out of 20. All interactions are in the direction of H<sub>1</sub> of hypothesis 4. Therefore, null hypothesis for Hypothesis 4 is rejected. This indicates that QM has a positive moderating effect between Work environment and OE.

#### 4.1.5 Direction of the Moderation

We conclude the direction of moderation in improvement of organizational effectiveness by calculating the differences found in main and moderation effects. The differences are explained in Table 8

Organizational Culture	Independent Effect	Moderated Effect	Outcome
Motivation-Rewards Work Environment- Incentives	<ul style="list-style-type: none"> <li>Stakeholder satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder satisfaction</li> <li>Profitability</li> <li>Innovation</li> </ul>	+2
Motivation- Employee Participation	No response received	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Profitability</li> <li>Productivity</li> </ul>	+3
Motivation- Recognition	No response received	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Stakeholder satisfaction</li> </ul>	+2
Empowerment and Motivation through Delegation	<ul style="list-style-type: none"> <li>Profitability</li> <li>Stakeholder satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Innovation</li> <li>Productivity</li> </ul>	+3
Empowerment- Training	No response received	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Profitability</li> <li>Innovation</li> <li>Stakeholder Satisfaction</li> <li>Productivity</li> </ul>	+5
Psychological Empowerment	<ul style="list-style-type: none"> <li>Stakeholder Satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Innovation</li> <li>Productivity</li> </ul>	+3
Work Environment-job aids	No response received	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Profitability</li> <li>Innovation</li> <li>Stakeholder Satisfaction</li> <li>Productivity</li> </ul>	+5
Work Environment- Supervisor support	<ul style="list-style-type: none"> <li>Profitability</li> </ul>	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Innovation</li> <li>Stakeholder Satisfaction</li> <li>Productivity</li> </ul>	+4
Physical work environment	<ul style="list-style-type: none"> <li>Productivity</li> </ul>	<ul style="list-style-type: none"> <li>Environmental effectiveness</li> <li>Stakeholder Satisfaction</li> </ul>	+3

Table 8: Summary of direction of the moderating effect in improvement of organizational effectiveness

Following inferences are drawn from Table 8:

- Moderating effect of QM between variables of Motivation and OE:** Positive interaction effect of QM was observed on reward-oriented culture to improve profitability and innovation with no effects to improve environmental effectiveness, stakeholder satisfaction and productivity. With respect to employee participation positive interaction effects were observed on environmental effectiveness, stakeholder satisfaction and productivity whereas no effects were observed on profitability and innovation. Interaction of QM with recognition and feedback has shown positive results on environmental effectiveness and stakeholder satisfaction and no change in the results of profitability, innovation and productivity. Interaction of QM with delegation of authority has shown positive effects on environmental effectiveness, innovation, stakeholder satisfaction and productivity and no effect on profitability.
- Moderating effect of QM between variables of Empowerment and OE:** In case of empowerment by training positive interaction effects have been observed on all variables of organizational effectiveness. No interaction effect with respect to delegation has been observed on stakeholder feedback and profitability whereas positive interaction effects have been observed on environmental effectiveness, innovation and productivity. No interaction effect is observed on psychological empowerment to improve productivity and stakeholder satisfaction whereas positive effect on environmental effectiveness, innovation and stakeholder satisfaction.



- **Moderating effect of QM between variables of Work Environment and OE:** Positive interaction effect of QM was observed between job aids and all variables of organizational effectiveness. With respect to supervisor support positive interaction effects were observed on environmental effectiveness, innovation, stakeholder satisfaction and productivity whereas no effect was observed on profitability. Interaction of QM with physical work environment has shown positive results on environmental effectiveness and stakeholder satisfaction and no change in the results of profitability, innovation and productivity. Interaction of QM with workplace incentives has shown positive effects on innovation, stakeholder satisfaction and productivity and no effect on environmental effectiveness and profitability.

## 5. Conclusion

For Hypothesis 1, 11 interaction terms were found significant out of 20 which led us to reject the null hypothesis and conclude that Quality Management has a positive moderating effect between Motivation and Organizational Effectiveness.

For Hypothesis 2 also 11 interaction terms were found significant out of 20 which led us to reject the null hypothesis and conclude that Quality Management have a positive moderating effect between empowerment and Organizational Effectiveness.

Hypothesis 3, 14 interaction terms were found significant out of 20 which led us to reject the null hypothesis and conclude that Quality Management have a positive moderating effect between work environment and Organizational Effectiveness.

Overall results indicate that Quality Management has positive moderating effect between some variables of culture and has no effect on few, whereas it has no negative effect on any of the variables.

## 6. Limitations

The investigation was restricted to organizations in Delhi NCR. Since organizational culture often varies from small towns to bigger cities, the results may not be a true representative in a broader perspective.

Initially interaction with employees of organizations under study was also planned, which could not happen because of the COVID pandemic. Therefore, responses were taken only through online survey. Interaction with employees could have brought out some deeper perspectives.

The study has not been able to draw any relationship of the effects in different sectors of industry.

## 7. Recommendations for future research

The study was conducted with different organizations irrespective of the type of organizational culture prevailing in the organizations. It has not addressed the pattern of moderation effect of quality management within different types of organizational cultures to capture a complete picture of the effects.

Therefore, it is suggested that similar study be carried out by first identifying the prevailing culture of organizations, categorizing them based on the culture and do a comparative study. This would give a clearer picture of moderating effect of quality management between different types of cultures and effectiveness. It is possible that with different types of cultures the moderation effect may exhibit a different pattern.

Separate models for moderating effect between organizational culture and effectiveness or performance can be formulated which could be directly used by quality organizations.

## REFERENCES

1. Lillian et al. (2013), A Theoretical Model of the Relationship Between Organizational Culture and Quality Management Techniques, *Procedia - Social and Behavioral Sciences* (pp. 334 – 339)
2. Juan et al. (2013) , Organizational culture for total quality management, *Total Quality Management & Business Excellence*, 24:5-6, 678-692, DOI: 10.1080/14783363.2012.707409
3. Vettori, Oliver / Lueger, Manfred (2011): No short-cuts in Quality Assurance – Theses from a sense-making perspective. In: Blättler, Andrea et al. (eds): Building bridges: Making sense of quality assurance in European, national and institutional contexts. *A selection of papers from the 5th European Quality Assurance Forum*. Brussels: EUA, pp. 50-55
4. Dellana and Hausser (1997). Toward Defining the Quality Culture, *Engineering Management Journal* (pp: 11-15)
5. Zeitz et al., 1997, 'An Employee Survey Measuring Total Quality Management Practices and Culture', *Group & Organization Management*, vol 22, pp 414-444
6. Adler, E. (1997). Seizing the Middle Ground: Constructivism in World Politics. *European Journal of International Relations*, 3, 319-363.
7. Lindberg, Kreg & Andersson, Tommy & Dellaert, Benedict. (2001). Tourism development: Assessing Social Gains and Losses. *Annals of Tourism Research*. 28. 1010-1030.
8. Steve Denning, 'Age of the agile', 2018
9. Armstrong, M. Armstrong's Handbook of Management and Leadership: A Guide to Managing for Results, 2nd ed.; Kogan Page: London, UK; Philadelphia, PA, USA, 2006

10. Leovaridis, C., & Cismaru, D. (2016). Characteristics of organizational culture and climate in knowledge-intensive organisations. *Romanian Journal Of Communication And Public Relations*, 16(2), 35-56.
11. Okatan, K.; Alankus, O.B. (2017). Effect of Organizational Culture on Internal Innovation Capacity. *Management and Business Academy*, 4(3), 18–50
12. Janine Krüger: Metropolitan University Chantal Rootman: Department of Business Management, Nelson Mandela Metropolitan University, Acta Commercii 2010
13. Employee Motivation and its Most Influential Factors: A study on the Telecommunication Industry in Bangladesh Ayesha Binte Safiullah\* *World Journal of Social Sciences* 2015, 5(1), 79-92
14. International Journal of Accounting & Business Management www.ftms.edu.my/journals/index.php/journals/ijabm Vol. 3 (No.2), November 2015
15. Bao, C., & Nizam, I. (2015). The Impact of Motivation on Employee performance in the Electronics Industry in China, *International Journal of Accounting and Business Management*, 3(2)
16. Study on Variables Influencing the Employee Empowerment, Gholamreza Fatahi-Bayat, Ahmad Goudarzi, *Mediterranean Journal of Social Sciences*, Oct 2016
17. Boudrias, Jean-Sébastien & Gaudreau, Patrick & Savoie, André & Morin, Alexandre. (2009). Employee empowerment: From managerial practices to employees' behavioral empowerment. *Leadership & Organization Development Journal*. 30. 625-638. 10.1108/01437730910991646.
18. Pigeon, Marilyne & Montani, Francesco & Boudrias, Jean-Sébastien. (2017). How do empowering conditions lead to empowered behaviours? Test of a mediation model. *Journal of Managerial Psychology*. 32. 10.1108/JMP-09-2016-0292.
19. Lankeshwara, P. (2016). A study on the impact of workplace environment on employee's performance: with reference to the Brandix Intimate Apparel - Awissawella.
20. Thushel Jayaweera<sup>1</sup>, Online Published (2015), Impact of Work Environmental Factors on Job Performance, *International Journal of Business and Management*; 10(3) pp271-278
21. Chandrasekar (2011), Workplace Environment and its Impact on Organizational Performance in Public Sector Organizations, *International Journal of Enterprise Computing and Business Systems* 1(1)
22. Majid Z Nafchi \* and Hana Mohelská (2020). Organizational Culture as an Indication of Readiness to Implement Industry 4.0, *Information*, 11, 174; doi:10.3390/info11030174
23. Sopow, Eli (2006). The impact of culture and climate on change programs, *Strategic Communication Management*, 10(6), pp. 14-17
24. Alan Gutterman (2017). Organizational Culture: A Global Survey of Theory and Research, DOI: 10.13140/RG.2.2.24392.21760
25. Panda A, Gupta R (2002), Challenges in developing strong organizational culture: lessons from case study of a High-Tech company in India, *Indian Journal of Industrial Relations* (pp. 332-355)
26. Samson Ibidunni, Mayowa Agboola , Organizational Culture: Creating, Changing, Measuring and Consolidating for Performance, *European Journal of Business and Management* vol.5, No.32, 2013
27. Fairfield-Sonn, J.W. (1993), "Moving beyond vision: fostering cultural change in a bureaucracy", *Journal of Organizational Change Management*, Vol. 6 No. 5, pp. 43-55
28. Hale Kaynak , The relationship between total quality management practices and their effects on firm performance, *Journal of Operations Management*, Volume 21, Issue 4, July 2003, Pages 405-435
29. Kim Cameron, Organizational Effectiveness Volume 11. *Organizational Behavior*, 21 January 2015, <https://doi.org/10.1002/9781118785317.weom110202>
30. Paula Caligiuri<sup>1</sup>, Helen De Cieri<sup>2</sup>, Dana Minbaeva<sup>3</sup>, Alain Verbeke<sup>4,5,6</sup> and Angelika, International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice, *Zimmermann Journal of International Business Studies* (2020) 51, 697–713
31. Giti Ashraf, Suhaida Abd Kadir, A Review on the Models of Organizational Effectiveness: A Look at Cameron's Model in Higher Education, *International Education Studies* · March 2012
32. Lim, B. (1995). LODJ OrgCultureOrgPerfLink. LODJ.
33. Kotter and Heskett (1992), Corporate Culture and Performance
34. Ching Chow Yang, 22 Feb 2017, The evolution of quality concepts and related quality management, DOI:10.5772/6211)
35. Seyed-Hosseini, S.M., Barkhsha, A., Taleghani, A.: A system dynamics approach for improving efficiency of Total Quality Management (TQM). 10 (2009)
36. Juozas Ruzevicius, Jurate Sauciuniene (2006), Quality Models And Systems And Their Influence To The Business, *Vadyba / Management*. 2(11) (pp:129)
37. Chiarini, A. (2011). Japanese total quality control, TQM, Deming's system of profound knowledge, BPR, Lean and Six Sigma: Comparison and discussion. *International Journal of Lean Six Sigma*. 2 (pp:332–355) doi:10.1108/20401461111189425
38. Cazzell, B., Ulmer, J.M. (2009). Measuring Excellence: A Closer Look at Malcolm Baldrige National Quality Award Winners in the Manufacturing Category, *Journal of Technology Management & Innovation*. 4 (pp:134–142) doi:10.4067/S0718-27242009000100012
39. Gómez-López, R., Serrano-Bedia, A.M., López-Fernández M.C (2016). Motivations for implementing TQM through the EFQM model in Spain: an empirical investigation, *Total Quality Management & Business Excellence*. 27 (pp:1224–1245). doi:10.1080/14783363.2015.1068688
40. ISO Quality manual, 2015

41. Patyal VS, Koilakuntla M (2017) The impact of quality management practices on performance: an empirical study. *Benchmark Int J* 24(2):511–535.
42. Inga Lapina, Ilze Kairišab, Daira Araminac (2015), Role of Organizational Culture in the Quality Management of University, *Procedia - Social and Behavioral Sciences* 213, 770 – 774