



Global Advanced Research Journal of Management and Business Studies (ISSN: 2315-5086) Vol. 3(10) pp. 473-478, October, 2014
Available online <http://garj.org/garjmbs/index.htm>
Copyright © 2014 Global Advanced Research Journals

Full Length Research Paper

Identification of Critical Success Factors for Successful TQM Implementation in Textile Industries, Pakistan

Qurat-UI-Aan and Dr. Zafar Rashid

¹IQTM, University of the Punjab, Lahore, Pakistan
quratulain2211@yahoo.com

²Information Technology University, Lahore, Pakistan
zafar.rashid@itu.edu.pk

Accepted 22 October 2014

Total quality management (TQM) is a modern way to do business or the enhancement of the traditional way of doing business. It is a proven technique which guaranteed the survival of the organization in this intensive competitive global market. Recognising quality as a key to competitiveness, the concept of total quality management (TQM) is now established in developed countries and is a continuously evolving philosophy for managing organization. But little attention is given to this modern management style in developing countries, like Pakistan. Pakistan is the 8th largest exporter of textile goods in Asia. The textile sector of Pakistan has been one of the most important industries for the development of Pakistan's economy. The aim and purpose of this research is to identify the critical success factors for successful TQM implementation in textile industries, Pakistan. Through thorough and extensive study of literature 11 critical success factors with 74 sub factors identified to construct the questionnaire. The results of the analysis have shown that the most important critical success factors are; communication, leadership and continuous improvement and least important factors are quality culture, people involvement and factual approach.

Keywords TQM, Implementation, Critical Success Factors, ANOVA

INTRODUCTION

Total quality management (TQM) is a modern way to do business or the enhancement of the traditional way of doing business. It is a proven technique which guaranteed the survival of the organization in this intensive competitive global market (Dale H. Besterfeld, 2004).

According to (B. Janakiraman, 2007) it is a way to involve the whole organization, each department, each function, each single person of the organization. It must be recognize that each person get affected and in turn affect the others necessary, every person, process and

function is connected with each other. Adopting Total quality management is a major change in organizations which requires cultural change, change in processes, plans, policies, strategies and beliefs of the people. According to TQM supporters if it is implemented, there are practices which are common to all organizations, will lead to better organizations performance (Motwani, 2001). The attributes of an industry or organization even affect the TQM at different location within the organization. While implementing total quality management, quality level of development of

Comparative list of critical factors of TQM identified from literature review

Authors	Critical Success Factors
(M.Terziovski, 2000)	1Leadership support 2Staff involvement 3Availability of money 4Available information 5Customer involvement 6Supplier involvement 7Government assistance
(Idris, 2001)	1Culture 2Trust 3Teamwork4 Employment continuity 5Education and training 6Top management leadership for quality and continuous improvement 7Employee involvement 8Customer satisfaction/involvement
(Motwani, 2001)	1Top management commitment 2Quality measurement and benchmarking 3Process management 4Product design 5Employee training and empowerment 6Vendor quality management 7Customer involvement and satisfaction
(Jiju Antony, 2002)	1Training and education 2Quality data and reporting 3Management commitment 4Customer satisfaction orientation 5Role of the quality department 6Communication to improve quality 7Continuous improvement
(Baidoun, 2003)	1Leadership and top management commitment 2People management 3Middle management involvement 4Training and education 5Reward and recognition 6Team work 7Quality policy 8Communication 9Supplier management 10Accredited quality management system 11Organizing for quality 12Managing by process 13Benchmarking 14Self assessment 15Cost of quality 16 Quality control techniques 17Measuring customer wants and satisfaction
(Nawal Gherbal, 2012)	1Management commitment and leadership 2Teamwork 3Training and education 4Communication 5Customer focus 6Employee involvement and participation 7Culture
(Norhayati Zakuan, 2012)	1Management commitment and leadership 2Continuous improvement 3Total customer satisfaction 4Employee involvement 5Training 6Communication 7teamwork

Table 3.2 Likert Scale

Item	Crucial	Very important	Important	Least important	Not important
Scale	5	4	3	2	1

Table 4.3 Ranking of Critical Success Factors on the basis of importance

Rank	Factor	Mean Score
1	Communication	4.28
2	Leadership	4.20
3	Continuous improvement	4.1
4	Process approach	4.02
5	System approach	4.021
6	Customer focus	4.013
7	Training and education	4.01
8	Supplier relationship	4.00
9	Factual approach	3.98
10	Involvement of people	3.90
11	Culture	3.85

organization must be taken in consideration, because this is the important factor which tells you about what method of implementation should be used here (Robin Mann, 1995).

It's a new trend in organizations that managements are moving toward total quality management to achieve positive business benefits like customer satisfaction,

quality of products, less cost due to less rework, scrape or repair and high profits (K.-S. Chin, 2002). Researchers and organizations manager have worked on this area and find out elements for successful implementation. Various studies have been conducted to find out those critical success factors which are necessary for successful implementation manager must find out that what

The means ranking and their means can also be shown by the help of bar chart.

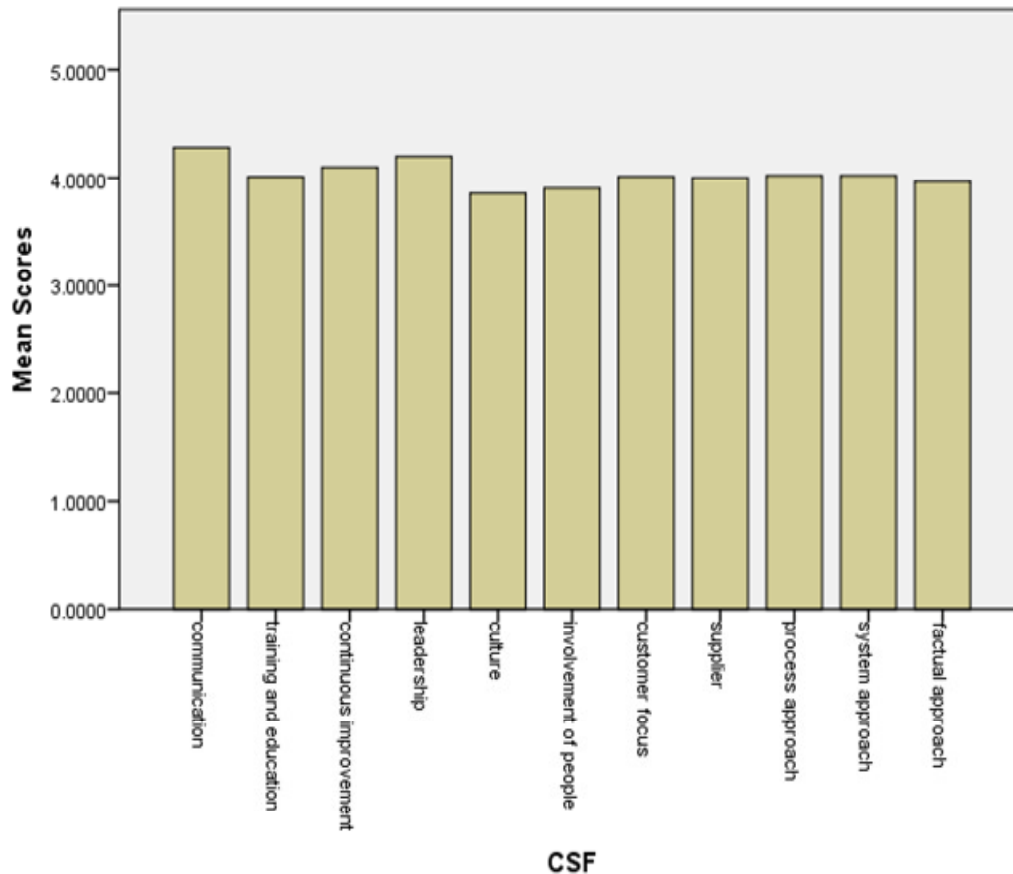


Fig.4.1 Bar graph of critical success factors

elements are necessary to convert organizational culture into quality culture (Francisco Jose Conca, 2004). Many organizations have less knowledge about critical success factors, so it halted the way toward successful and effective implementation of TQM in these organizations. An organization to convert into quality organization depends on the extent to which quality practices in the organization are practicing. These practices are necessary but insufficient for successful TQM implementation. So, a study must be conducted to find out critical success factors in TQM implementation because TQM benefits and results have wide range of variations (Idris, 2001). Many managers do not understand the TQM concepts fully and they don't know which elements are critical for TQM implementation (Jiju Antony, 2002). TQM must be tailored according to organization culture and their needs. There is not one best method to implement it, but the best one is that which is according to organizations needs and demands (M.Terziovski, 2000).

This paper identifies critical success factors for successful TQM implementation in Textile industries, Pakistan.

METHODOLOGY

Research methodology is very important and helpful to guide the researcher that what steps they should take to achieve the research objectives. Research methodology can be viewed as a process to achieve the research objectives. This is an important aspect of the research. The survey was conducted through electronic mail and personal visit to the organizations. 300 questionnaires were distributed all over the Pakistan textile mills. From them we got 160 responses ten responses were incomplete and not usable. So we used 150 usable responses for analysis with the response rate of 50% which was beyond the expectations.

It was ensured that questionnaire was filled by the person responsible for the quality in the company. They were mainly quality managers and also the other managers who have the first hand information about the quality activities and its status in their businesses. The questionnaire contained 11 critical success factors with 5-6 sub factors to determine the TQM implementation. All these factors have been extracted from the previous conducted studies only three new factors are also added

Table.4.7. One-way ANOVA results

Scores					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.027	10	2.203	9.437	.000
Within Groups	382.574	1639	.233		
Total	404.600	1649			

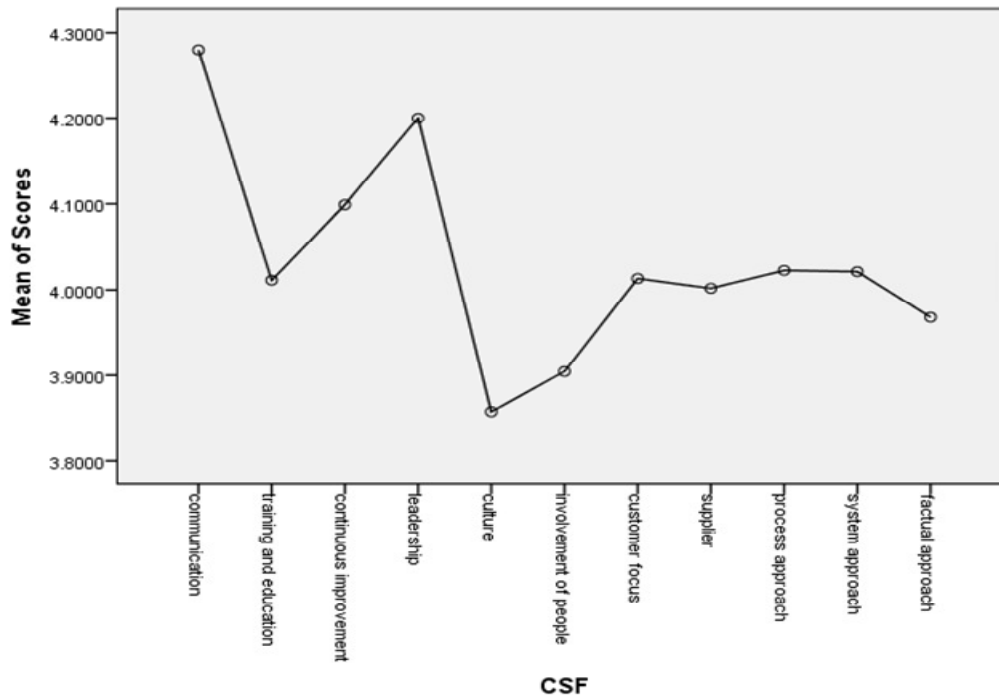


Fig.4.13 Plot of means

from quality principles, process approach, system approach and factual approach.

Questionnaire factors

1. Leadership/ Team of experts
2. Customer focus
3. Culture
4. Continuous improvement
5. Training awareness of human resource
6. Communication
7. Supplier relationship
8. People involvement
9. Process approach
10. System approach
11. Factual approach

The questionnaire was built by using closed questions, it had two sections

Section1: general information about industry like, name, size, product, respondent name, designation etc.

Section 2: 11critical success factors of TQM including 74 sub factors

The questionnaire was developed in English which was easy to understand, respond and also to record. Close ended questions were used because they are easy to respond and time saving. There is no need to write extra neither researcher nor respondent. The respondents were asked to use likert scale to give importance according to their perception as shown in table 3.2

The collected responses then analysed by using SPSS statistics 20. A reliability test, descriptive analysis, ANOVA, t-test, and one way correlation analysis carried out to check the constructed hypothesis.

DISCUSSION OF RESULTS:

From these results it is shown that of these 11 factors 3 factors *Communication*, *Leadership* and *Continuous improvement* perceived to be most critical success factors with means of 4.28, 4.20 and 4.1 respectively.

And the least critical perceived factors are *Involvement of people* and *Culture* with 3.90 and 3.85 mean score. From this result it can be concluded that almost all respondent perceived these factors important for TQM implementation.

Correlation Analysis between the Variables

H1: All the critical success factors have positive relationship with each other

There is no negative value in coefficient table so there is a positive relationship between all variables. Few variables have strong positive relationship like

- Culture and people involvement have large positive relationship as the coefficient value is 0.571
- Supplier and process approach also have large positive relationship with the Pearson coefficient of 0.520
- Process approach and system approach also have large positive relationship with the coefficient value of 0.536

So, by the correlation test our first hypothesis (*H1: All the critical success factors have positive relationship with each other*) proved right, because there is positive relationship within all variables.

Independent t-test

H2: There is no significant differences between perceived importance of small, medium (on each of TQM factors) and large companies.

In the first comparison between large and medium the Sig.(2-tailed) is 0.830 which is greater than 0.05 means there is no significant different between the mean score of large and medium sized organizations. In the second comparison between large and small sized organization Sig.(2-tailed) 0.538 which is greater than 0.05, it means there is also no significant difference between mean scores of large and small sized organization.

So, our hypothesis (*H2: There is no significant differences between perceived importance of small, medium (on each of TQM factors) and large companies*) proved right. Because from the independent t-test it is shown that there is no significant difference between mean scores of all three groups of organizations (large, medium, small). So we can conclude that organizations are giving the same importance to TQM irrespective to its size.

One way ANOVA

H3: All the factors of TQM have equal importance in the eyes of the respondents

In this dialogue box we check the significance value if it is

equal or less than 0.05 it means there are significant differences between the variables (factors). And here the value is 0.00 it means that significant differences do exist among the variables. But this is no telling or giving the complete detail about the variable those have significant differences.

So the hypothesis (*H3: All the factors of TQM have equal importance in the eyes of the respondents*) proved wrong. It would have proved right if there are no significant differences. So we can conclude that the all the critical success factors of TQM do not have equal importance in the eyes of the respondents. As shown in the mean plot given below:

RESULTS AND CONCLUSION

Communication, leadership and continuous improvement are found most critical factors perceived in textile industries of Pakistan. However all these 11 critical success factors have positive relationship with each other which gives the idea that implementation of one factor will facilitate the implementation of other factors.

The importance of critical success factor of TQM doesn't relate to the organization's size in any sense. And this proves the real essence of quality management system that it is equally suitable and beneficial for any organization irrespective to their type, size and products or services they are providing.

The other important finding of this study is that all these factors are not equally important, however some factors considered very important some less important.

The other findings are based on the prevailing situation of quality management in textile industries, Pakistan and the barriers or difficulties they are facing while implementing it. The current status of TQM in Pakistan textile industries and the difficulties or barriers they are facing are discussed here with detail.

- From the descriptive analysis of 150 responses of companies with the help of mean score, standard deviation and skewness it can be concluded that status of TQM in Pakistan textile industries at moderate level. Most organizations are not beginners but at the middle stage but these are very slow toward transforming their traditional culture into quality culture. This suggest that TQM is not successfully implemented in these organization because of lack of knowledge of modern management and quality approaches, especially the customer focus and people involvement.

- There is top management commitment but it is not up to the level, to change the culture of the organization. And this is because the top management has not made their people aware and educated, because before change in the physical environment first there must be change in minds. Everyone must have clear understanding of quality management then they can

contribute for it.

- There is lack of people involvement. It is of two reasons first, top management is not fully committed and still they are following traditional management style where only CEO's or higher officials make decisions without involving other people. No doubt, most of Pakistan textile industries are "Saith" industries. And they don't let anyone to influence their decisions, which is very negative for their own benefits and the organizations. The 2nd most important reason of lack of people involvement is that there are no reward and recognition for workers. If their efforts are encouraged and acknowledged, they will feel motivated and next try to do more good before first. For getting good results and performances the workers should be high morale and motivated.
- Favoritism and nepotism is very common in Pakistan textile industries where CEO's and directors are sons, daughters and other family members of the owner. And it reduces the odds of the successful implementation of TQM. Because if there is no nepotism and favoritism than the new people will be selected on the basis of experience and their expertise, and they will bring new changes in the organization like new management approaches (TQM) and try to make their organization more competent in the market.
- Textile industries of Pakistan tend to managed by gut feel or intuition with most of their decisions based on opinions rather than a well defined approach or a thorough analysis of data collected which is based on facts and figures. So, that's why there is clear lack of factual approach shown in the analysis. The organizations cover up information to hide their vital mistakes and to show just their positive side of their internal operations.
- There is no legislation or government participation to ensure quality management and to promote it into the organizations. If there is government support and help for the organization to improve and enhance the quality management system of the organization then, definitely a positive change will come in the industries.

REFERENCES

- Janakiraman BRG (2007). Total Quality Management text and cases. New Dehli: Prentice Hall of India private limited.
- Baidoun S (2003). an empirical studies of critical factors of TQM in palestinian organizations. logistic information management, p. 16.
- Bayazit O (2003). Total quality management practices in turkish manufacturing organization. The TQM magazine, p. 6.
- Dale H.Besterfeld, C. B. M. G. H. B. M. B.-S., (2004). Total Quality Management. Dehli: Pearson Education.
- Daniel I.Prajogoa, S (2008). The effect of TQM on performance in R&D environments:. technovation, p. 9.
- Francisco Jose Conca, J. L. J. J. T., (2004). Development of a measure to assess quality management in certified firms. European Journal of Operational Research, p. 15.
- Idris, H. L. a. M., (2001). The soft foundation of the critical success factors on TQM implementation in malaysia. The TQM magazine, p. 10.
- Jiju Antony, S. G. K. L. G. K., (2002). Critical success factors of TQM implementation in Hong Kong industries. International journal of quality and reliability management, p. 16.
- K.-S. Chin, K.-F. P. Y. X. J. C., (2002). An AHP based study of critical factors for TQM implementation in Shanghai manufacturing industries. Technovation, p. 9.
- Kilmann, R. S. A. a. R. H., (2001). Aligning Reward Practices in support of total quality management. Buisness horozones , p. 8.
- M.Terziovski AS (2000). TQM in Australian manufacturing: factors critical to success. International journal of quality and reliability management, p. 10.
- Motwani, J., 2001. Critical factors and performance measures of TQM. The TQM magazine, p. 9.
- Nawal Gherbal, A. S. M. S. A. s., (2012). Critical Success Factors of Implementing Total Quality Management in Libyan Organisations. istanbul, s.n., p. 10.
- Norhayati Zakuan, S. M. M. Z. M. S. M. S. M. A. S. S. R. A. J., (2012). Critical Success Factors of Total Quality Management Implementation In Higher Education Institution. International Journal of Academic Research in Business and Social Sciences, p. 14.
- Robin Mann DK (1995). Factors affecting the implementation and success of TQM. International journal of quality and reliability management, p. 14.
- Selvan Rungasamy JASG (2002). Critical success factors for SPC implementation in UK small and medium enterprises. The TQM magazine, p. 8.
- Irani Z a, A. B. b. P. L., 2004. Total quality management and corporate culture: constructs of organizational excellence. technovation, p. 8.