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An Investigation of Leadership-Culture Fit with Quality Improvement and Cost Reduction by Synchronizing TQM and KM Philosophies

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Abstract: The emergence of Knowledge Economy and globalization has pushed the businesses into a new paradigm. The concept of organizational performance excellence solely based on TQM Philosophy is no longer valid in international businesses and needs to be improved. The ever increasing global competition is forcing organizations for cost reduction on one hand and enhanced quality on the other. This dilemma faced by the organizations is difficult to solve. It is argued that mixed practices based on the philosophies of TQM and KM and their synchronization is necessary to achieve performance excellence in organizations. The current research endeavoured to determine the common grounds between TQM and KM philosophies for their synchronization. The review of literature identifies two common enablers for TQM and KM namely Leadership and Corporate Culture with respect to performance excellence, using these common enablers a conceptual framework is proposed that can be used by organizations to obtain the benefits of both philosophies. The validation of the proposed framework was conducted by obtaining data from manufacturing sector. The managers from manufacturing concerns were interviewed in detail using structured questionnaire. Delphi method is adopted to develop consensus between the participants. The results showed that different leadership styles with different cultures have distinct impact on quality improvement and cost reduction efforts in the manufacturing sector. Moreover, directive leadership style and achievement oriented styles put more positive impact on quality improvement in TQM philosophy while supportive style and participative style are more consistent with KM philosophy. Similarly, results also showed that in dominant developmental or rational culture cost can be reduced in KM philosophy while leading achievement oriented or group culture improves the quality in TQM philosophy. Finally it is concluded that TQM and KM philosophies can be implemented in synchronization and their combined implementation will lead o higher performance excellence.

Key words: Knowledge Management · Total Quality Management · Quality Improvement · Cost Reduction

INTRODUCTION

In today's global competition and liberalization of the economy, improvement in the quality and cost reduction has become one of the most important factors to achieve a competitive advantage. Product or service with good quality with reasonable price allows an organization to add and retain customers. Poor quality leads to dissatisfaction of customers, so that the cost of poor quality is a waste not only immediate but also loss of future sales. Spread of technological innovations resulting customers aware of this. The business environment is becoming increasingly complex and the market has changed from local to global. There is a constant pressure on management to improve competitiveness by reducing operating costs and improving quality. There is an increase in demand for products and / or services and the world revolution was forced organizations to invest substantial resources in the adoption and implementation of strategies for managing the overall quality and reducing costs.

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In early 1980's Total Quality Management was introduced in public and private organizations for achieving performance excellence by improving quality but it did not gain much acceptance globally and companies were not focusing on implementing TQM practices. With the passage of time quality management for performance excellence became an evidence for removing this polemics. Knowledge Management (KM) is the procedure of acquiring, saving, disseminating and successfully using organizational knowledge. Knowledge Management is relatively a younger discipline and an emerging field which can take benefit from highly established and globally accepted TQM practices for quality improvement in order to get performance excellence. The same situation which was previously facing by organization with TQM in early 1980's is now facing by organizations with knowledge management philosophy. Companies leverage knowledge and experiences of its employees to reduce the cost, improvement in quality and satisfaction of customer needs [1]. There are myriad benefits of knowledge sharing which includes increase responsiveness of customers, forcible creation of traditional content and maintaining better customer relationships [2]. An effective knowledge management change employee's activities towards ratification and credibility of knowledge sharing among employees [3]. In order to get the competitive advantage, achieving firm's desire performance and to elite its appetite position TQM is considered as core element for the organizations [4]. Moreover in order to achieve the competitive advantage and for the survival of the organizations, the function of TQM is critical determinant [5]. It is valuable for the organizations to attain the long term workable competitive advantage with actual knowledge management. Total Quality Management is based on customer focus, process oriented and necessarily required a cultural change and the same enablers can also be applied to knowledge management for quality improvement and cost reduction [6].

Regardless of this all, due to strong antagonism now incursion among firms has been converted into beginning of getting knowledge management. There is a shifting of economy from industrial to knowledge base, where commodity is considered as information and knowledge [7]. Organizations can enhance performance in TQM philosophy as well as well as in KM philosophy. Previously there were lot of studies conducted on TQM philosophy for quality improvement and KM philosophy for cost reduction. However, there is a need for finding synchronization in between these two philosophies where organizations can enhance organization performance in a better way. This research is based on balancing the philosophical perspective of TQM and KM practices with Top Management Support for getting performance excellence by quality improvement and cost reduction.

Leadership or top management support in an organization can be defined as the role of a leader to influence their subordinates to follow their instructions so that they can achieve the desired aims and intentions that has been fixed by the organization [8]. Leaders can play a crucial role in effective knowledge management and through KM organizations can gain workable modest benefit [9]. Leadership always work in supporting role for practical implication of knowledge management trough knowledge acquisition, knowledge dissemination and knowledge sharing and these KM processes are used for the vigorous progress of combined learning ability in organizations. There are numerous surfaces of leaders behaviour have been discovered as to examine that what are reasons behind for the success or failure of leadership. Leadership philosophies can be split into three categories including trait theories, behavioural theories and contingency theories. Firstly, Trait theories distinguish leadership abilities with non- leadership abilities by aim of individual enduring characteristics whereas behavioural theories focused on that philosophy where leadership skills can be imparted or taught. And contingency theories have different leadership styles based upon situations. Path Goal theory is based on two possibilities i.e. supporters' features and work setting. There are four leadership styles according to above mentioned two possibilities and these styles of leadership according to path goal theory are named as Directive, Participative, Supportive and Achievement Oriented Leadership leads to high organizational performance. Knowledge management is more concerned with supportive leadership style and directive style normally using organizations with Total Quality Management philosophy.

Organizational culture is the usual of public past, beliefs, oral guidelines and societal values that impacts on individual behaviour [10]. Knowledge sharing culture is acknowledged by the authors, the core issues that have a consequence on knowledge management [11]. Organizational culture could influence the behaviours of employees to share knowledge and create an environment where there are dense shared morals concerning the worth of the preparedness of employees knowledge sharing with others [12].

Total Quality Management and Knowledge Management both focus on organizational culture. TQM talk about new styles of management in the organization, whereas KM introduces a new way of looking at the information sharing and decision making by using that valuable information. Investigators have discovered numerous scopes of organizational culture mainly based on common values or principles. However corporate culture can be separated into four extensive categories. These are named as group culture, developmental culture, hierarchal culture and rational culture. Group culture is industrialized on the basis of common standards and principles among individuals. In this way it can be seen that group culture is more concerned with people. Developmental culture talks about new ideas or innovation and also permits employees for openness to experience. Whereas, Hierarchal culture is based on administration and gives strong orders to employees regarding every task they are assigned to do. On contrary, rational culture is based on result alignment and solely grounded on the accomplishment of goals. Knowledge management is more concerned with developmental culture and TQM normally focuses on rational culture.

Authors highlighted on cost reduction, quality improvement, providing value to its customers to plan and execute knowledge management and these tactics are the awareness of making a modest benefit. [13]. There is a strong belief for the development of value for customers. The use of the quality of intangible assets is a key job for every company. This utilization aims at enhancing the likely structural and working performance. Intangibles are those assets providing trust, value, faith, product, thoughts, knowledge, associations and performance excellence by better utilization of knowledge assets. Knowledge management is the addition to value to customers by knowledge acquisition, knowledge storage and then application of that knowledge and reusing that store knowledge whenever it is required with certain situations [14]. Moreover, through knowledge management philosophy organizations strive for getting competitive advantage through customer oriented approach, customer relationship management, concern for employees, creativity and also cost reduction [15]. Competitive advantage, development and reduction in costs provided more positive consequences to organizations in order to take long term benefits by knowledge management. For instance employees training and development, skills enhancement, attraction and retention of employees could increase development

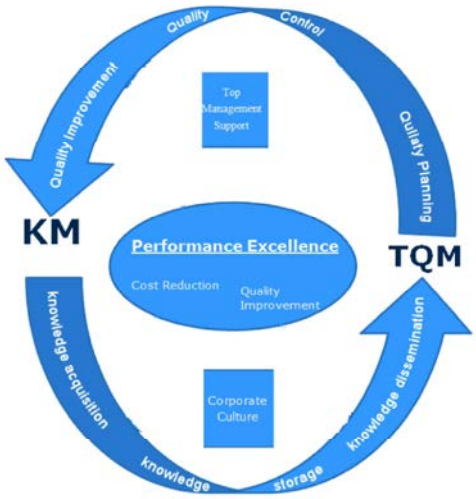

Fig. 1: Excellence TQM and KM Cyclic Model

opportunities and also reduces cost. Emergence of knowledge management is growing and leads towards performance excellence and the implied goal is to delegate authority to people for the development of behaviour that is required for the success of organizations [16].

Knowledge management is used in order to improve profitability and delegation of authority for attaining difficult tasks and enhancing creativity and innovation. Arthur Andersen Business Consulting is developed in 1999 and it provides information of the enablers of knowledge management as shown in Figure (1). Enablers used in this model are leadership, culture, technology and measurement for standardization creation, storage and application of knowledge in organizations for performance excellence. Leadership talks about the emphasis of leaders for knowledge management usage in organizations and also provides an opportunity for knowledge workers for strengthening organizational ability. Educational practices reproduce organizational activities towards innovation and creativity for providing value to customers. Culture represents norms, values and those working that are accomplished with standard formats. Technology emphasizes that aim of the organizations is to provide opportunity for employees for creation, storage and application of knowledge for enhancing organizational cost. And finally this perspective covers that all these enablers work for knowledge economy where resources are deployed for performance excellence and growth. This model includes enablers and processes of knowledge management for the creation, identification, collection and adaption, organization, application and sharing of knowledge among employees for better performance.

Authors identified some basic reasons for the implementation of knowledge management in organization and these motives include competitive markets, creativity, innovative ideas, information and data management and quick response as compared with competitors [17]. Knowledge management helps organizations in smart decisions, quick and rapid response to customers, creativity and innovation and also providing value to customers by providing their desired products. Project management is also an important case where knowledge management can play a strong role. Knowledge management always linked with some criterion and without that criterion it will not be able for the execution of this philosophy. So for getting modest benefits organizations have to decide on the criterion opted for getting results by applying knowledge management. And criterion involves whether they gain competitive advantage through information and knowledge management or just for the sake of other benefits. Quality improvement, project management always has some pre planned ways. And new product development also based on distinctive criterion. Though new product development success or failure totally depend on all functional departments and also on entire cost spent on it. However, through knowledge management philosophy cost can be reduced.

Excellence TQM and KM Cyclic Model Development: Common enablers of TQM and KM philosophies such as leadership, culture, training and development and customer focus are used to develop an excellence cyclic model. The enablers with their explanation are discussed below.

Leadership: Leadership is the managerial ability to put orders to subordinates for influencing them and it is the accreditation of all working of leader's behaviour [18]. Moreover, leadership is the convincing association between leader and his workers for attainment of organizational goals [19]. Authors provide different styles of leaderships in path goal theory [20]. This theory is emphasized on important factors involved in leadership theory [21]. This theory is based on the concept that leader's responsibility is to support subordinates for attaining goals and it also covers matching of employee's goals with organizational goals. The importance of this theory is to remove barriers and problems facing by employees in goals achievement [21]. This theory is based on four styles and these styles are participative, achievement oriented, directive and supportive. Selection of any style is targeted for achieving performance.

Authors provide detail of these styles [20]. Firstly directive style includes those leaders who have some expectations from subordinates and they also provide support to their subordinates for appropriate working. So it can be seen that directive leadership style is suitable when nature of the job is stressful [19] and it is not appropriate when subordinates are highly experienced and motivated to their work [20]. Secondly supportive leadership style is emphasized on collaborative and friendly environment. Thirdly participative leadership style is of the view that leaders involved subordinates in decision making. Employees with internal locus of control work more comfortable when participative decision making style is applicable. Finally achievement oriented style is normally closer towards outcomes. This structure is normally using organizations when organizations are using ambiguous structure [20].

Culture: Organizational culture is those values that are shared by large number of employees and become same for new comers to organization [19]. Culture represents where organization working is accomplished with standard formats [22]. However there are different cultures involved in organizational work setting. Author highlighted three different dimensions of culture involves bureaucratic, innovative and supportive [23]. Likewise another author pointed out four cultural dimensions [24]. These dimensions include group, hierarchical, rational and developmental culture. Hierarchical culture refers to the concept of standardized work setting. Group culture includes teamwork and collaboration in decision making. Developmental culture talks about innovation and creativity and rational culture strictly follows standard rules and regulations and talks about achievement of goals more effectively.

Conceptual Model: The proposed conceptual model has been developed to instantaneously balance TQM and KM philosophies for achieving performance excellence. This research provides the new look by proposing a model for performance excellence through balancing quality improvement by using the philosophical perspective of TQM and cost reduction by managing the valuable knowledge. TQM philosophy as shown in model comprises of quality planning, quality control and finally quality improvement. However, Knowledge Management has three processes involved such as knowledge acquisition, knowledge storage and knowledge dissemination. This cyclic model continuously strengthens one another through common enablers such as Leadership, Culture, Training and Development and

Customer focused strategy. The centric phase of this model is performance excellence and it can be attained through cost reduction and quality improvement as shown in Figure (5). So, in order to precede this research synchronization of TQM and KM is used for finding high performance. It is assumed in this cyclic model that through TQM philosophy quality can be improved by quality planning and quality control and through KM philosophy cost can be minimized by knowledge acquisition, knowledge storage and knowledge sharing. It can be seen in this model that all four enablers have linkage with performance excellence and TQM and KM philosophies are moving across them. TQM and KM cyclic arrows shows that already established and highly accepted TQM philosophy will strengthen emerging KM philosophy for performance excellence.

Hence the current study tries to link the gap by providing a root for a detailed awareness of the impact of balanced TQM and KM philosophies for performance excellence. Therefore the relationship among the enablers of TQM and KM shown in the proposed excellence model seems candid to our knowledge. In order to get practical implications of balanced TQM and KM Model and its association with performance excellence, this model requires further analysis.

MATERIALS AND METHODS

Quality of research methodology lies within critical selection criterions rather than the ways to which research philosophy is described [25].

Research philosophy can be defined as the way through which research will be taken and discovered within particular expectations. Researcher's consecration to related way of thinking allows them to select suitable plan that eventually move towards what they do and learn throughout study process [26]. Present study has organized investigation viewpoint of positivism and this is grounded on objectivism. The particular selection is dependable to present research because of many reasons. Firstly, the literature of all four enablers i.e. Leadership, Training and Development, Customer focused and organizational culture is fairly rich and earlier studies have given substantial consideration to these enablers. Secondly, present study also inclines to show comprehensive assumption with respect to forecasted research. Thirdly, the pattern of present research starts with study objectives, research questions and then development of hypothesis which will be investigated to testify proposed area of research on the base of investigation accompanying on data collection from quantified sample.

The purpose of current study is the synchronization of TQM and KM philosophies with respect to quality improvement and cost reduction with four common enablers such as leadership, customer focused, training and development and corporate culture. However, Path Goal theory is used to study leadership and competing value approach is adopted to study organizational culture.

In research strategy there will be three approached normally used while conducting a research such as Quantitative, Qualitative and Mixed strategies. It can be seen that first approach which deals with numbers and quantitative sizes are refereed as Quantitative approach while second strategy which deals with words and behaviours etc. are normally known as qualitative research [27]. Conversely, third strategy which deals with both quantitative and qualitative research is known as mixed strategy. However, current study is emphasized on Delphi technique and structured questionnaire is also used to collect quantitative responses from respondents. In other words structured questionnaire specifies the range of quantitative data in advance in the shape of numbers. For instance questions are scaled at responses from 1 to 7. It is consistent with quantitative research strategy.

Delphi Technique is used in this study for reaching consensus after surveying questionnaire from professionals. This technique is used with in-depth interviewing and takes data for analysis. Initially Delphi Technique was used by RAND organization in 1960's for consensus development and forecasting. Author argued that after the emergence of this technique US government enhanced this technique for group decision making [28]. Another author infers that Delphi technique is used for the development of several purposes or objectives and also for gaining high success in every program [29]. Delphi technique is used as a technique, methodology, survey analysis and also as workout. Delphi technique is a set of values without astonishment and also an opportunity for decision-making. Delphi is based solely on the opinion, with arguments and thoughts. Methods involved in this technique are to gather data and analyze data on behalf of results gathered from experts. This technique can be used by interviews, questionnaires, observations and focus groups. Delphi is concerned as a method with diverse variations. And it remembers an identical pattern in the gathering and interpretation of data.

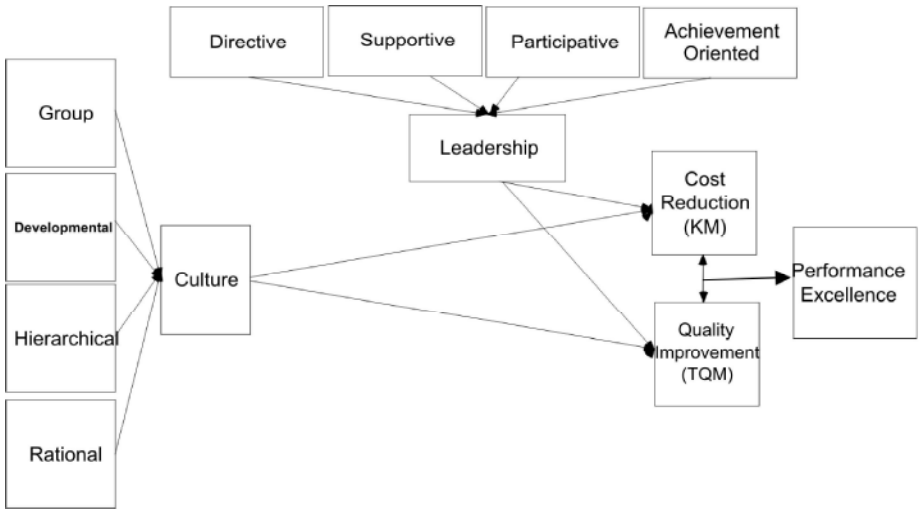

Fig. 2: Theoretical Framework

Theoretical Framework: Theoretical framework is also established in order to show and deliver the graphical picture of under study variables and it can also be used to find relationships of these variables among them. Furthermore, it also provided help in writing the hypotheses that are tried to testify in succeeding part of thesis. Figure (2) shows the theoretical framework used to conclude proposed theory. However, this research is based on four independent variables of TQM and KM philosophies such as Leadership styles, types of Cultures and quality improvement and cost reduction are mediating variables. However, performance excellence is dependent variable. One can find many approached to investigate performance excellence. However; in current study two enablers of TQM and KM philosophies are selected as shown in Figure (2) and it is tried to investigate their relation with quality improvement and cost reduction that mediates its effect for performance excellence.

Hypothesis Development: Earlier studies on Path goal theory found that different leadership styles show different results with respect to different organizational culture and also environmental based contingency factors. For example out of four leadership styles, directive leadership may be more appropriate or suitable in case where jobs are unclear or complex and way of direction is needed to complete tasks. It can be also seen that supportive leadership style is more suitable within extremely structured jobs. However, organizational culture is the main enabler in this respect. For instance it can be viewed that group culture enhanced the success of participative and supportive leadership styles used in organizations. It is because there can be a good fit between participative leadership style with group culture. Similarly, it can also be the case of good fit between supportive leadership style and group culture. Furthermore directive leadership style is suited within hierarchal culture. Moreover Training and development and customer emphasizing is more consistent with enhancing organization performance. So, on the basis of above discussions following hypotheses are proposed further in TQM and KM philosophies.

H1a: *Directive Leadership as KM enabler will have a positive impact on cost reduction.*
H1b: *Supportive Leadership as KM enabler will have a positive impact on cost reduction.*
H1c: *Participative Leadership as KM enabler will have a positive impact on cost reduction.*
H1d: *Achievement Oriented Leadership as KM enabler will have a positive impact on cost reduction*

H2a: *Directive Leadership as TQM enabler will have a positive impact on quality improvement.*
H2b: *Supportive Leadership as TQM enabler will have a positive impact on quality improvement.*
H2c: *Participative Leadership as TQM enabler will have a positive impact on quality improvement.*
H2d: *Achievement Oriented Leadership as TQM enabler will have a positive impact on quality improvement.*

H3a: *Group Culture as KM enabler will have a positive impact on cost reduction.*
H3b: *Developmental Culture as KM enabler will have a positive impact on cost reduction.*

H3c: *Hierarchical Culture as KM enabler will have a positive impact on cost reduction.*
H3d: *Rational Culture as KM enabler will have a positive impact on cost reduction.*

H4a: *Group Culture as TQM enabler will have a positive impact on quality improvement.*
H4b: *Developmental Culture as TQM enabler will have a positive impact on quality improvement.*
H4c: *Hierarchical Culture as TQM enabler will have a positive impact on quality improvement.*
H4d: *Rational Culture as TQM enabler will have a positive impact on quality improvement.*

RESULTS AND DISCUSSIONS

Leadership: Leadership is one of the most imperative factors that stimulate employees to transfer the valuable knowledge to others via tacit knowledge sharing [30]. Predominantly leadership plays a vital role in creating such tacit and explicit knowledge sharing atmosphere that further can lead to assistance in problem solving. However, it is also argued that leadership styles can also affect the quality improvement. Leaders help their subordinates in completing their job more efficiently so this can result into quality improvement and cost reduction. So, leadership styles can affect both cost reduction and quality improvement positively. Leadership support and involvement in support of a more positive prominently on the group or cultural development department, but on the cultural hierarchy leadership support and involvement were negatively related to the behaviour of employees [31].

However, important thing is to explore that which leadership style is consistent with quality improvements and cost reduction. Subsequent part will explore this intriguing question.

Directive Style: Directive leadership follows bureaucratic style and direct the employees that what they are supposed to do [18]. In other words directive leadership is a more task oriented approach.

Figure 3 is presenting the comparative results for directive leadership. Results reveal that there is comparatively more positive relation between directive leadership style and quality improvement as compared to cost reduction. It is found that average scores of only 3 respondents were less than 5.50 for positive effects of directive style on quality improvements. However, in case of positive effects of directive style on cost reduction 7 respondents score less than 5.50. So it can be concluded that directive leadership style is more appropriate when organization wants to improve quality. So hypothesis 1a and 2a is supported. It is because in directive style leader directs their subordinates to do standardized job that ultimately enhance the quality of product. However, in KM openness and innovation are needed that is not consistent with directive leadership style. So, this is why directive style is more consistent with quality improvements as compared to cost reduction in KM philosophy.

Supportive Style: Supportive leadership do not concentrate on organizational benefits only but also consider employees' personal needs (Robbins 2005). So, supportive leadership can be attributed as employee oriented approach.

Results from figure 4 interpret that positive effect of supportive leadership style on cost reduction is more prominent comparatively as 11 respondents score more than 4.5 for supportive leadership with respect to cost reduction while for quality improvement only 7 respondents scored more than 4.5. So it is concluded that for cost reduction supportive leadership style is more productive. In supportive leadership style employees are supported to take creative steps that are the essence of KM philosophy. Such intriguing ability of supportive leadership makes it more consistent with KM philosophy. So, in this way one can relate supportive leadership style with cost reduction in KM philosophy positively. So it can be seen that hypothesis 1b and 2b are supported.

Participative Style: Participation leadership seeks employees' input in decision making (Robbins 2005). Employees are encouraged to participate in their decision making process.

Results shown in figure 5 suggests that there are only 2 respondents out of 15 who put their score less than 4.5for cost reduction against participative leadership style. However, for cost reduction in KM philosophy most of the respondents score around 4.5. This shows that participative leadership style is more favourable in KM philosophy for cost reduction as compared to TQM for quality improvement. So it can be seen that hypothesis 1c and 2c are supported. It is argued that knowledge sharing is heart of KM philosophy. On the contrary in participative style subordinates are encourage to take part in decision making or in other words employees are asked to share their opinion that ultimately results into knowledge sharing and cost reduction in this respect.

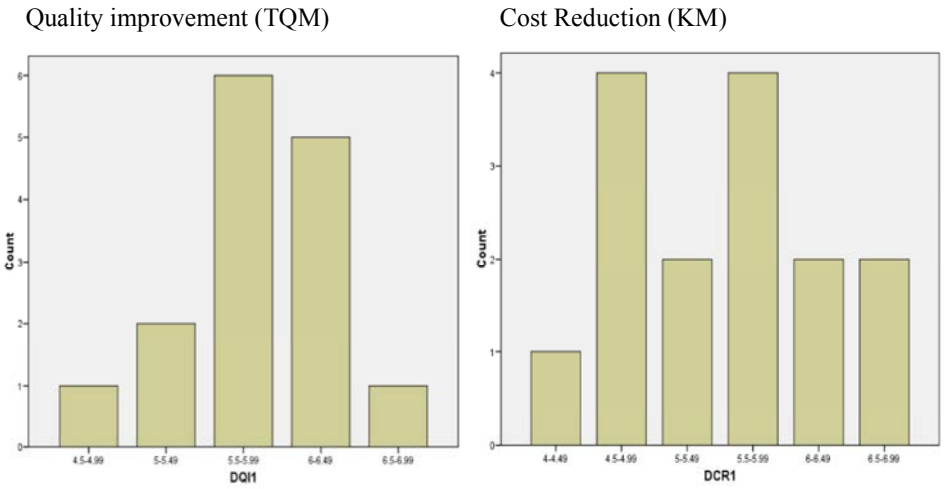

Fig. 3: Average scores of directive leadership style and its impact on both quality improvement and cost reduction

Following scale is used to calculate average scores of directive leadership style with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

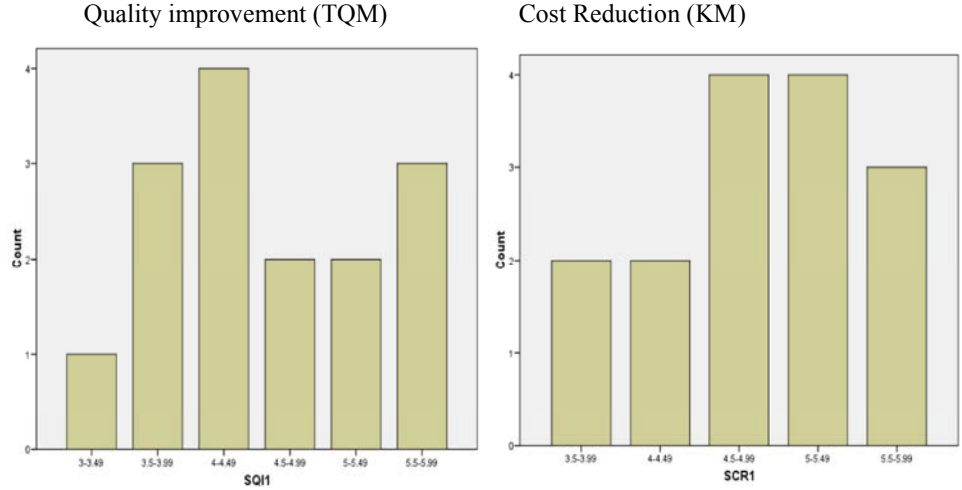

Fig. 4: Average Scores of supportive leadership style and its impact on both quality improvement and cost reduction

Following scale is used to calculate average scores of supportive leadership style with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

Achievement oriented Style: Achievement oriented style spotlights on outcomes and believe on giving challenging targets to employees [18]. In other words achievement oriented style represents the result oriented structure.

It is also found that achievement oriented leadership is more productive for quality improvements as compared to cost reduction according to the results shown in figure 6. Results reveal that only one respondent assigned average scores of less than 5 for achievement oriented style and its impact on quality improvements. However, for cost reduction five respondents scored below than this level. This implies that managers perceive achievement oriented style more prominently as quality improvement enabler. In achievement oriented style result oriented approach is adapted and concentration is given to the outcome. In this way achievement oriented style enhance the quality improvement as expected by the managers. So it can be seen that hypothesis 1d and 2d are supported.

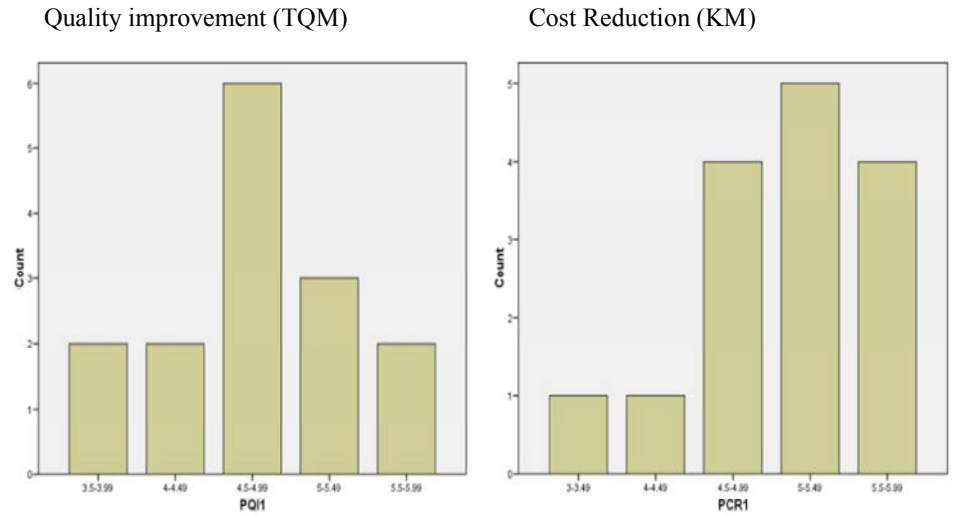

Fig. 5: Average Scores of participative leadership style and its impact on both quality improvement and cost reduction

Following scale is used to calculate average scores of participative leadership style with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

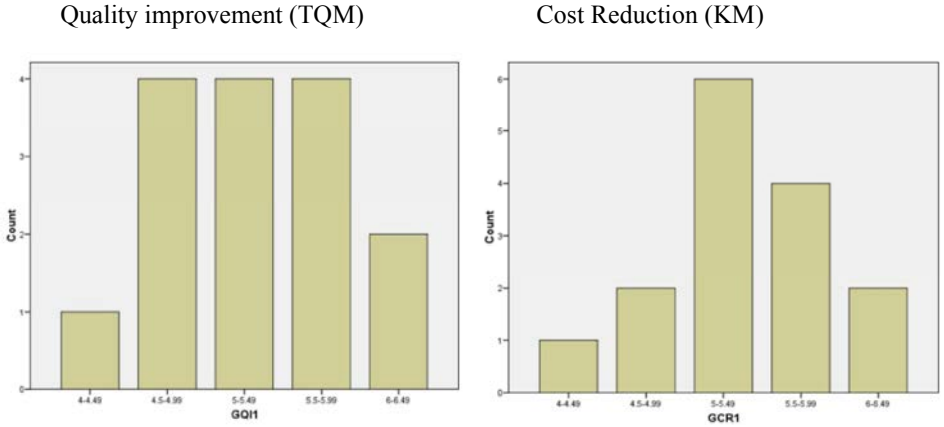

Fig. 7: Average Scores of Group Culture and its Impact on both Quality Improvement and Cost Reduction

Following scale is used to calculate average scores of group culture with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

Culture: Culture creates an environment where there are dense shared morals concerning the worth of the preparedness of employees knowledge sharing with others [12].

Group Culture: Follows employee oriented approach and developed on the basis of teamwork and affiliation. It is found that most of the respondents believe that group culture leads to both quality improvements and cost reduction. Figure 7 is showing that average scores of group culture are high in both cases. Since, group culture is more supportive and allows knowledge sharing that ultimately leads to cost reduction and quality improvements. However, results are not showing major difference between the benefits of group culture with respect to the quality improvements and cost reduction. So it can be seen that hypothesis 3a and 4a are supported.

Developmental Culture: Developmental culture promotes innovation and allows employees to take risk. Similarly, Figure 8 is showing the graph output for role of developmental culture to the quality improvements and

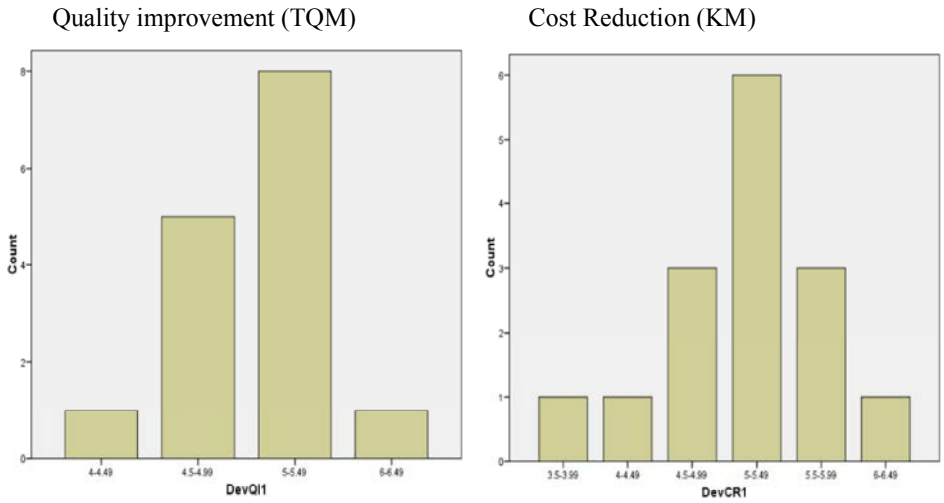

Fig. 8: Average Scores of Developmental Culture and its Impact on both Quality Improvement and Cost Reduction

Following scale is used to calculate average scores of development culture with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

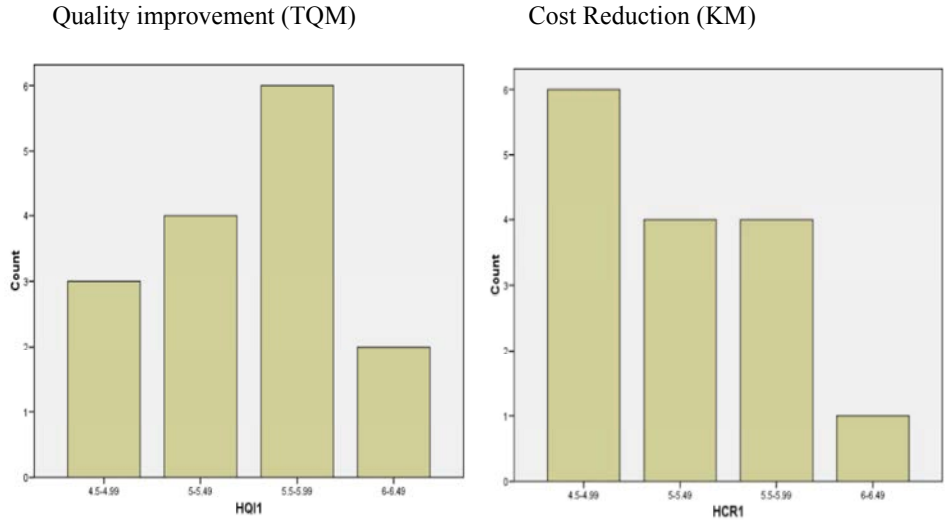

Fig. 9: Average Scores of Hierarchal Culture and its Impact on both Quality Improvement and Cost Reduction

Following scale is used to calculate average scores of hierarchal culture with respect to both quality improvement and cost reduction

Negative	Neutral	Very High				
1	2	3	4	5	6	7

cost reduction. It is found that most of the respondents scored more than 4.5 for both quality improvements and cost reduction. However, it can be evidenced that average scores for cost reduction are high comparatively. Graph is showing that for cost reduction average scores of 4 respondents are more than 5.5 in case of cost reduction while for quality improvement only one respondent responded at that level. This implies that developmental culture is more consistent with cost reduction within KM philosophy. It is because developmental culture encourages the employees to take innovative and creative actions to gain competitive advantages. So, innovative and creative ability of developmental culture helps in effective knowledge management that ultimately results into cost reduction. So it can be seen that hypothesis 3b and 4b are supported.

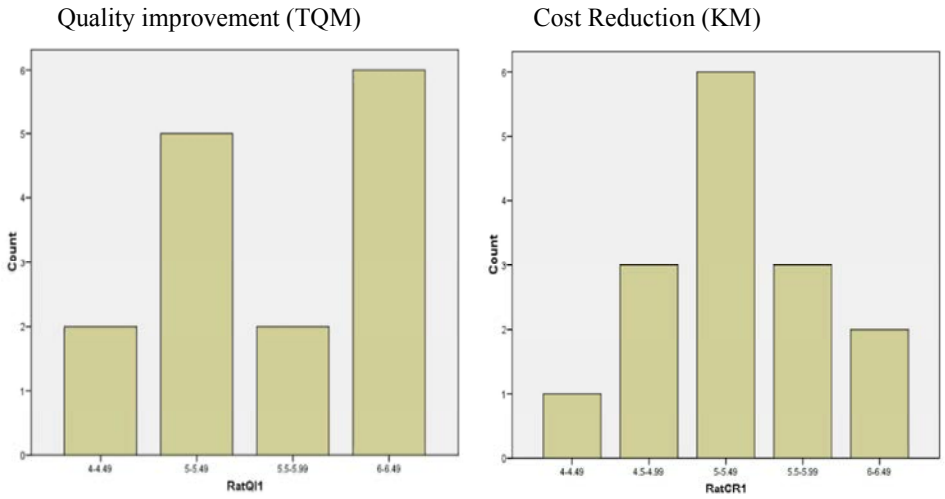

Fig. 10: Average Scores of Rational Culture and its Impact on both Quality Improvement and Cost Reduction

Following scale is used to calculate average scores of rational culture with respect to both quality improvement and cost reduction

Negative		Neutral			Very High	
1	2	3	4	5	6	7

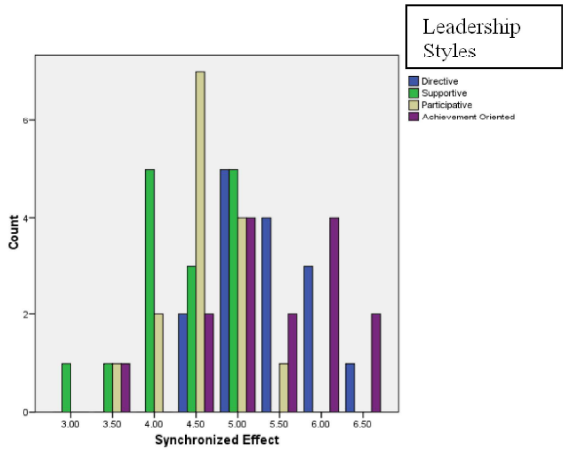

Fig. 11: Average scores of synchronized TQM and KM effect on performance excellence

Following Criterion is used to evaluate average scores of leadership styles and its synchronization with both quality improvement and cost reduction

Weak	Neutral	Very High
<4.5	4.51-5.5	> 5.5

Hierarchal Culture: Hierarchal culture deals with the development of shared beliefs and values on the basis of bureaucracy. Clear instructions are given to complete tasks. This research also argued that hierarchal culture also affects the quality improvements and cost reduction. Figure 9 is showing that on average most of the respondents believe that hierarchal culture positively affects the quality improvement and cost reduction. In both cases average scores of most of the cases are more than 4.75. However, for quality improvements average scores are high as compared to cost reduction. It can be viewed that average scores for quality improvements are more than 5.00 for 12 respondents out of 15. On the contrary only 9 respondents scored more than 5.00 for cost reduction. In hierarchal culture things are done in standardized ways that increase the efficiencies. However, such efficiencies are more prominent for quality improvement. So it can be seen that hypothesis 3c and 4c are supported.

Rational Culture: Rational culture concentrates on results and also follows result oriented approach. Figure 10 is showing that rational culture also positively effects on both quality improvements and cost reduction. However, such positive effects are more prominent in case of quality improvements. For quality improvement average scores of all respondents except two are more than 5.00 and even some respondents scored more than 6.00. On the other hand for cost reduction fewer respondents scored more than 5.50. This concludes that rational culture is more effective if the objective is to improve quality as compared to cost reduction. In rational culture focus is given towards output. Such concentration towards output enhances the quality as well. So, it is concluded that rational culture enhances the quality and reduce cost as well with prominent effects on quality improvements. This concludes that hypothesis 3d and 4d are supported.

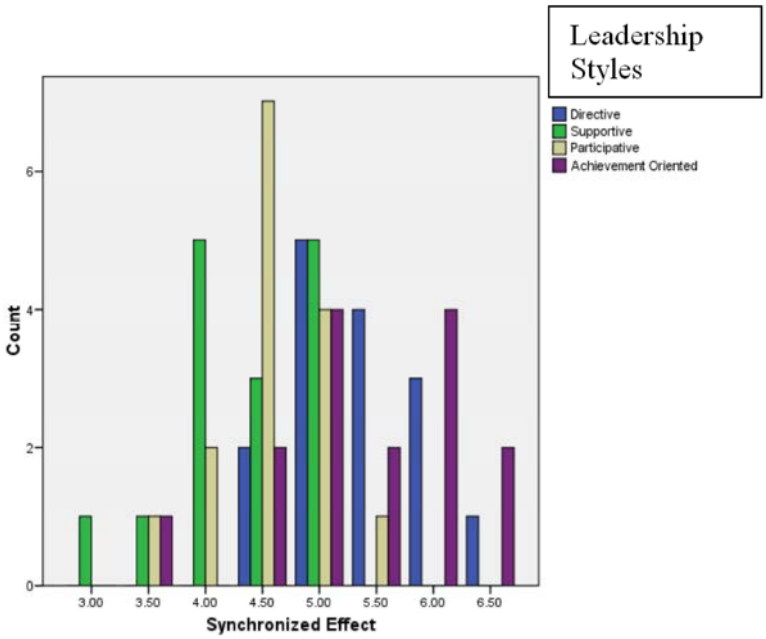

Fig. 12: Average Scores of Synchronized TQM and KM Effect on Performance Excellence

Following Criterion is used to evaluate average scores of types of cultures and its synchronization with both quality improvement and cost reduction

Weak	Neutral	Very High
<4.5	4.51-5.5	> 5.5

Synchronized Effect: Second part of this research endeavours to investigate the synchronized effects of different leadership styles, culture, training and development and customer focus strategies with respect to the both quality improvement and cost reduction. To do so I take average scores of both quality improvements and cost reduction for all 15 respondents. It is assumed that average scores of 5.50 or more are showing strong synchronized effects for both quality improvement and cost reduction. While average scores of 4.5 or less and 4.51 to 5.49 are considered as weak and average synchronization respectively.

Synchronized Effects of Leadership Styles: Figure 11 is showing the leadership characteristics and its synchronized effects. It can be viewed that average scores of both quality improvement and cost reduction in case of directive and achievement oriented leadership style are high. Results reveal that average scores by eight respondents out of fifteen are 5.50 or more for both quality improvement and cost reduction in directive and achievement oriented leadership styles. While on the contrary only one respondent believe that participative leadership style leads to both quality improvements and cost reduction simultaneously as average scores of fourteen respondents were less than 5.50. Similarly, none of the respondents scored 5.50 or more for synchronized effect of supportive leadership on both quality improvement and cost reduction. This implies that in case of manufacturing concerns and more specifically in textile firms directive and achievement oriented style of leadership are more appropriate and results into high performances through quality improvements and cost reduction. One of the reasons behind this can be the nature of job within these textile firms. Since, the nature of the job is standardized within these firms so employees are required to complete their efficiently and effectively. So, to complete such standardized task both directive and achievement oriented styles are more appropriate to reduce cost at sustainable quality requirements.

Synchronized Effects of Culture: Figure 12 is presenting the average scores for both quality improvements and cost reduction in case of four cultures. It is found that six out of fifteen respondents have average scores of 5.50 or more for rational culture with respect to both quality improvements and cost reduction. Similarly, for group and hierarchal culture these statistics are 5 respondents. However, only one respondent has average scores of 5.5 or more for developmental culture. This implies that among four cultures rational culture is viewed as strong determinant of both quality improvements and cost

reduction. In textile industry creativity and innovation is not needed that much that decrease the importance of developmental culture. However, in rational culture where importance is given to output that stimulate employees to gain efficiencies that ultimately results in to both cost reduction at sustainable level of quality. So, it is concluded that rational culture is more appropriate if the objective is to gain both quality improvements and cost reduction in case of manufacturing and especially textile firms.

CONCLUSION

It can be argued that TQM and KM both are equally important for organizations to enhance performance. The current study is based on synchronization of TQM and KM philosophies and its effects on performance excellence while considering two common enablers such as Leadership and Corporate culture. Data is collected from manufacturing firms listed at LSE. Targeted respondents are area unit managers having adequate expertise and experience of minimum 3 years. Path goal leadership questionnaire is adapted to measure leadership styles those are further tried to relate with quality improvement and cost reduction. Results showed that Leadership styles put different impacts on the quality improvement and cost reduction. Directive Leadership style and achievement oriented style are more constructive in respect to the quality improvement in TQM philosophy. It is because directive style and achievement oriented style direct their subordinates to follow standard procedures that ultimately results into high quality output. On the contrary supportive style and participative style are more suitable to cost reduction in KM philosophy. It is because such supportive or participative style promotes knowledge sharing that is essence to KM philosophy. In short, this research provides useful information regarding KM and TQM philosophies and their four enablers in respect to firm performances. KM leads to cost reduction while TQM results into quality improvements and their combined effect could enhance the performances to optimal level. So this study is helpful for manufacturing organizations and practitioners that how they can improve their performance by setting the synchronization of TQM and KM philosophies. In conclusion it can be argued that in Pakistani manufacturing organizations, synchronization of TQM and KM philosophies for high performance occurs when directive or achievement oriented leadership style is used with rational culture.

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