

## **TQM practices and firm performance of Pakistani service sector firms**

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### **ABSTRACT**

This study explores the key factors of Total Quality Management (TQM) and their impact on performance of selected service sector organization in Pakistan. Using structured questionnaire data has been collected from 220 managerial level employees working in service sector organizations in Pakistan. To attain the objective of this study the collected data entered and analyzed using statistical software SPSS 17. Five key factors has been identified using factor analysis these five factors explains the 61.947% variance. To check the criticality of these factors AHP (Analytic Hierarchy Process) is used. This study reveals that most significant factors which effects firm performance are Human Resource Focus (HRF), Customer oriented process Management (COPM), Top Management Commitment (TMC) and Strategic Alignment (SA). This study also highlights the significance of TQM in contribution to performance of firms within the perspective of service sector. This study has been used to explore the total quality management (TQM) practices in selected service sector firms of Pakistan. As Pakistan is a developing nation and country is focusing on service sector since last decade, this study would be helpful to several service sector firms that are in other rapidly growing developing countries those are focusing upon the significance of service industry.

**Keywords-** TQM, performance, Managers, services, sector, Pakistan.

### **INTRODUCTION**

In today's globalized world, both public and private organization major concern is quality. This major concern increased the significance of quality which motivates the service sector organizations to consider quality as a necessary part of planning because this is the most significant part that is used to meet the challenges in current international scenario. Between all quality management practices, the most important for today's organizations is to focus on TQM. According to Dean Jr and Bowen, (1994) Total Quality Management (TQM) is considered as the basis of competitive edge and due to its importance it has been extensively endorsed around the world. Many studies are available on TQM but most of them focused on organizations currently in manufacturing sector these studies haven't given importance to the service sector organizations (Agus & Abdullah, 2000; Agus, 2000; Ljungstram & Klesfsjap, 2002). But in current scenario the importance of service sector has been increased which indicates that TQM is also important for service sector organizations (Al-Ibrahim, A, 2014). According to Huq (2005) there is a lack of studies on service sector organizations. Yasin et al. (2004) studied the TQM in service sector organizations and found that organizations working in service sector are lagging at the back of their manufacturing counterparts in terms of their SC (strategic commitment) to TQM (total quality management).

Many service organizations use TQM concepts selectively Huq and Stolen (1998) and these organizations are not committed like manufacturing sector organizations. Manufacturing sector organizations apply full range of TQM practices but within manufacturing sector organization, non-

manufacturing process such as sales, marketing, accounting, and further intangible service sections observe the TQM concepts as slightly applicable to their activities. In service processes managers are inclined by strategies to attach value to customer service processes, and several fail to see how TQM addresses this problem. Even though, TQM is inattentive with inner excellence, it translates into better outer performance because the entire standard is based on customer satisfaction. Quality in service process means building the service practice easy, useful, complete, and even entertaining. TQM is the important part of organizational development of service sector organization (Rendall, 2014; Faisal, Talib, Zillur, & Rahman, 2015).

Therefore, this paper is used to identify the TQM factors through in-depth literature survey and find out the relationship of these factors with performance of service sector organizations in Pakistan. First it will check the effect on overall performance of service sector then separately on different industries of service sector in Pakistan. The discussion of this paper will be around three selected industries of service sector of Pakistan these three industries are banking, telecom and hospitality.

## LITERATURE REVIEW

In the recent decades total quality management (TQM) has become the vibrant phenomena in organizational management practices, today organizations those wish to be on the cutting boundary of process improvement, business process optimization, operations reengineering and waste reduction are moving to grasp the recent trend that is the beam of TQM (Sit et al. 2009). TQM is considered as important tool by the management during 1980 it can be witnessed by its popularity and awards those are introduced at national and multinational level (Boyne & Walker, 2002). According to Boyne and Walker (2002) quality movement originates from manufacturing sector and it moves toward services sector and as well as toward public sector organizations. Discussing the growth of TQM there are many questions which comes to mind of every reader these questions are what is TQM. What are its practices and what are the factors which influence the performance of firm.

Boyne and Walker (2002) defined TQM differentiation between quality which we can consider output of organizations that can be restrained and which is the arrangement of business processes having objective achieve superior performance. Prajogo and Sohal (2001) quoted that defining TQM is problematic to support this argument that there is absence of a uniform definition of TQM. According to Prajogo and Sohal (2001) there is no uniform definition of TQM is available. According to Brah et al. (2000) total quality management (TQM) practices are highly significant in service sector firms as these practices are considered important in manufacturing sector firms. Brah et al. (2000) said that both organizations use input to satisfy customer needs. Brah et al. (2000) argued that in current scenario of organizations the service sector firms lags behind the firms categorized in manufacturing sector in the

sense of adopting TQM in the process of business.

According to Samat et al. (2006) the accomplishment of total quality management (TQM) will concern in “improved employee involvement, improved communication, increased productivity, improved quality and less reworks, improved customer satisfaction, reduced costs of poor quality and improved competitive advantage”.

The study of Saraph et al. (1989) highlighted eight critical factors which are “top management leadership, role of the quality department, training, product design, supplier quality management, process management, quality data reporting, and employee relations.” Saraph et al. (1989) further commented that these factors are based upon the data that was attained from 162 top level managers (general managers, quality control managers) of 20 companies those are working in 89 different divisions of firms. These actions can be uses separately or it may be the combination of more than one to construct organizational profile based upon the use of quality practices. Validity and reliability of these measures has been confirmed. These actions are useful for the decision makers in the organization to measure the status of quality area in the organization (Saraph, Benson et al., 1989). Study further reveals that these actions are useful to measure the performance of firm.

Black and Porter (1996) collected data from 200 managers and based upon this collected data 10 critical factors of total quality management has been identified these factors include “people and customer management, supplier partnerships, communication of improvement information, customer satisfaction orientation, external interface management, and teamwork structures for improvement, operational quality planning, quality improvement measurement systems, and corporate quality culture”.

Brah et al. (2000) empirically investigated critical TQM factors with the help of the perception and experiences of TQM practitioners in Singapore service industry. This study has been used to check the relationship among total quality management (TQM) practices and firm performance. This study further reveals important sensation factors of TQM were “top management support, customer focus, employee involvement, employee training, employee empowerment, supplier quality management, process improvement, service design, quality improvement rewards, benchmarking and cleanliness, and organization”. Sit et al. (2009) found six critical factors of TQM in service sector organizations.

Through empirical investigation Dayton (2003) in US corporation they identified these critical factors of TQM are “people and customer management, supplier partnerships, communication of improvement information, CS orientation, external interface management, strategic quality management, teamwork structures for improvement, operational quality planning, quality improvement measurement systems, and corporate quality culture”.

According to Motwani (2001) important factors to TQM are “top management commitment, quality measurement and

benchmarking, process management (PM), product design, employee training and empowerment, supplier quality management, and customer involvement and satisfaction”.

Based on the literature survey we found six critical constructs which we think are important to include in research these constructs are.

- Top Management Commitment
- Strategic Planning
- Customer Focus and Market Focus
- Information and Analysis
- Human Resource Focus
- Process Management
- Top Management Commitment

According to Tsang and Antony (2001) top management commitment in such a way that success of TQM program is mostly depends upon top management commitment and the way how the top management is committed toward organizational goals. Tsang and Antony (2001) further argued that it is very difficult to motivate lower levels of peoples where the main processes of organization are done and these are the key peoples of organization whose are directly interacting with the service. Tsang and Antony (2001) further said that it is possible to motivate lower level peoples if the top management is committed and they have a vision for the future that is clear and convincing and also providing a strategic leadership. Thiagarajan and Zairi (1997) argued that everything starts with a committed management and obsessive leader of the business organization and a person who makes basic changes to organization called leadership.

Ahire et al. (1996) argued that top management act as a driver for TQM because it creates values, goals and systems to satisfy customers both internal and external customers. Ahire et al. (1996) also argued that it fulfills the expectations of customers and it also has positive impact on firm performance. Top management commitment and their participation includes actions such as congregation among employees, Satisfy customers, so that the assessment of formal and informal training. Each manager, together with the President, should be established for the own vision of TQM effort. Managers should be projected on the hard work to determine what their vision is, both as a single management team and portfolio. The management team, particularly the excellent management, we see that those who are implementing programs or collapse TQM ultimately responsible, they are responsible for these managers need to be allowed to produce their own vision, focus frank on these issues, and attach the activities and behaviors and try to implement TQM (Anjard 1998).

Gupta et al. (2005) argued that visionary leadership is extremely significant in developing holistic organizational cultures and gaining employee commitment. Thiagarajan and Zairi (1997) argued that top management as well build up and speak key company quality ethics which put accent on the significance of the customer, process direction, constant development, teamwork, management by fact, common respect

and self-esteem, and value of entity employees and their contributions.

### **Strategic Planning**

According to Sit et al. (2009) strategic planning can be defined in such a way that strategic planning is a process used by the managers to initiate and perform strategies for providing the best value to stakeholders and accomplish the programmed goals of the organizations and it also involves the roadmap of long term and short term organizational vision/mission.

Vinzant and Vinzant (1996) argued that strategic planning is a process which is used to determine organizational objectives and strategies. Olian and Rynes (1991) argued that management of top organizations are using the process of policy growth and use to make persuaded that employees know the objectives of the corporation, and how they will contribute to meeting the objectives. Thiagarajan and Zairi (1997) argued that TQM are as well common in stressing the significance of a strategic planning process based on total quality. Olian and Rynes (1991) argued that TQM in several organizations need the alignment of each member’s hard work with the plan of organization. A critical factor for success in the management of quality would emerge to be concentration to policy expansion and goal setting and planning, and the useful consumption of goals (Thiagarajan & Zairi, 1997). Crosby (1979) found that quality strategy as a “standard for practice that sets priorities by influencing the entire organization on what to do and what not to do”.

### **Customer Focus and Market Focus**

The main objective of TQM is to gain customer satisfaction. Ahire et al. (1996) argues that activities of organization must be planed and these also executed in planed time it will lead toward quality services. However quality of service must be incorporated in such a way that demonstrate clear message of customer focus. They further argue that such firms which neglect their customers may lose their customers which may lead them toward a great disaster.

Jablonski (1992) argues that customers only influenced by such services which looks to customers in such a way that these services fulfill the need of customers. Customer is important because customer is the one who determine the level of quality delivered to him (Kugytė & Šliburytė, 2015; Jablonski 1992).

In today’s world TQM has been become a well-established system for improving performance of the firm and customer satisfaction because customer satisfaction is an important element for a firm (Lagrosen 2001). Quality starts and ends with customer needs that’s why customer focus is very important (Jablonski 1992). The organization must have systematic, organized and effective system which determine customer satisfaction (Blazey 2009). An external customer service program must comprise providing customers with well-timed information and speedy reaction to complaints, and maintaining a corporate goal to diminish the number of complaints while recognizing all successful hard work by employees in providing excellent service (Motwani 2001).

### **Information and Analysis**

This element is concentrated in the "scope of data and information for the use of management, in order to maintain customer focus and leadership excellence in quality, better performance" (Malcolm Baldrige National Award Criteria, 1995). Total quality management philosophy, emphasizing customer needs, information and operational issues involved in the analysis, and the fact that the work to improve the success of the decision. The overall quality of many popular technologies (for example, causal analysis, Pareto charts) is designed to help companies effectively process their information. The TQM literature suggests that organizations that consistently collect and analyze information will be more successful than those that do not (Samson & Terziovski, 1999).

### Human Resource Focus

The accomplishment of the service industry depends on the quality of its human resources and their effective management in order to support the organizations to attain its objectives Berger and Ghei (1995). TQM succeeds only with human resources participation in the TQM process and their commitment to its goals (Thiagarajan & Zairi, 1997). It is need for each individual in the organization to know his role in making quality ensue (Crosby, 1989). In reality the need to maximize the participation of all human resources in one of the basic philosophy of change accomplishment in an organization. The serious significance of workers participation in the quality process of an organization is based on the trust that the best process innovation ideas appear from the people actually doing the job (Thiagarajan & Zairi, 1997).

### Process Management

This factor of total quality management has a impact on how firms design their services and how they integrate their processes with the suppliers and other channel members to manage their performance (Evans & Lindsay, 1999). The main thing at the back of this belief is that firms are sets of interlinked process, and if we improve these processes then it will work as a base of improvement of firm performance (Deming, 2000). Deming further argues that processes are interlinked as a system and his action of organizational systems is usually steady with the use of this term in management theory (Deming, 2000). The academic territory represented by this category has been vacant by management theorists and is at present engaged by industrial engineers (Dean Jr & Boen, 1994). "Some organizations have experienced dramatic performance improvements through process redesign and reengineering" (Hammer & Champy 1993).

### METHODOLOGY

To complete present study author uses the significant factors of TQM those were identified using in depth literature review, based upon the review author established the relationship among critical factors of Total quality management (TQM) performance of firms operating in service sector of Pakistan. These TQM factors are further confirmed by using statistical package SPSS 20. To prioritize the different factors we use AHP (Analytical Hierarchical Process). To know the impact of these factors on performance of firms Multivariate

test method has been used. Results of Banking, Telecom and hospitality has been compared using one way ANOVA. To check the reliability of factors used in questionnaire Cronbach's alpha is used which suggests that scale is highly reliable (0.926).

The sample size for this study consist of 220 managerial level employees those were randomly selected from five major cities of Pakistan including Islamabad (Capital), Lahore (provincial capital), Karachi (commercial hub of the country), Multan (Southern Punjab; known as city of saints), Faisalabad (major industrial hub) from services sector organizations. A structured questionnaire has been used data collection. In the questionnaire, respondents are asked to indicate their opinion, on five-point Likert scale, which ranges from "strongly agree" to "strongly disagree", a statement explaining the degree of their perceived importance of a factor. Critical TQM factor those are used in questionnaire are taken from past studies on TQM (Sit et al., 2009; Samat et al., 2006; Motwani, 2001; Saraph et al.; Brah et al., 2000 1989; Black & Porter, 1996). From complete set of data 210 respondents returned the questionnaires after completion and the 10 questionnaires were considered unusable because the purpose of the research that will be treated with secrecy and their answers remain confidential. Respondents have been also informed that no information can be individually identified, disclosed or published, and it will display all of the summary results of the data collected. The final data consisting of 200 questionnaires has been entered into statistical software SPSS 20 to complete the analysis using accumulated investigation of answers.

### Research Model

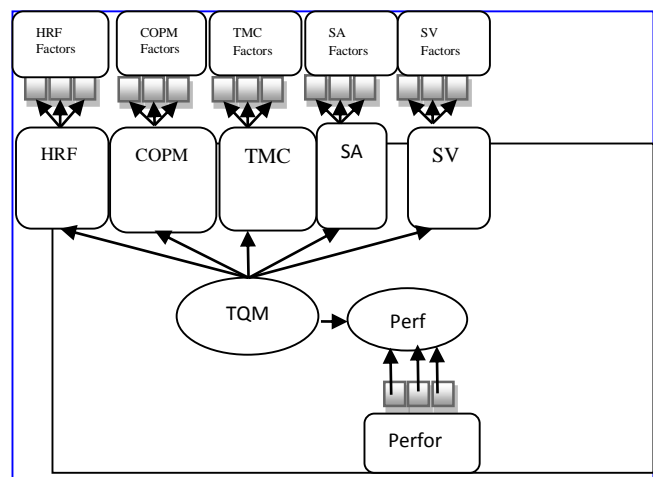


Figure 1. The Research Model for total quality management and its impact on performance of service sector in Pakistan

### DISCUSSIONS

#### Factor Analysis

First of all to establish the factor structure of Total Quality management factors a confirmatory factor analysis has been applied on the survey data using SPSS 20. The proposed critical factors of TQM and performance constructs are used to

determine the influence of critical total quality management (TQM) factors on organizational performance of service sector in context of Pakistan.

**Table 1**  
*Factor Analysis*

	HRF	COPM	TMC	SA	SV
receive information on time	.504				
cooperation in organization	.574				
encouragement by the manager	.572				
recognition by work	.712				
organization care me	.802				
safe workplace	.694				
system for customer relationship management		.560			
repeat purchase behavior of customers		.678			
info system is there		.658			
get information about org		.671			
control over work		.548			
values driven organization performance based promotion			.600		
management concern			.671		
flexible organization			.656		
prepared for emergency			.591		
road map effects			.512		
Road map for future				.555	
Friendly working environment				.673	
knowing organization mission				.813	.795
knowing important customers					.529
% of Variance	15.662	13.965	12.515	10.896	8.910
Cumulative %	15.662	29.627	42.142	53.038	61.947

Table 1 shows the results for factor analysis performed for TQM critical factors items used in the questionnaire. Factor analysis found five dimensions which explains 61.947 percent variance, whereas maximum variance explained by Human resource focus (HRF=15.662 percent) followed by customer oriented process management (COPM=13.965 percent), top management commitment (TMC=12.515 percent), strategic alignment (SA=10.896), shared vision (SV=8.910).

**Analytical Hierarchical Process (AHP)**

The main objective of AHP is to categorize a number of choices (e.g. Determinants of Quality) by considering a given set of quantitative criteria according to pair wise comparisons given by the different decision makers. AHP results in a hierarchical leveling of the quality determinants, where the upper level of hierarchy shows the objective of the decision process, the next level describes the selection criteria which can be additional subdivided into sub criteria a lower level of hierarchy and finally the bottom level of hierarchy presents the alternative decisions to be evaluated.

**Analysis of Variance (ANOVA)**

To check the difference among selected sectors (Banking, Telecom and Hospitality) we used ANOVA with post hoc LSD on different factors of TQM. Results are shown in table II.

**Table 2**  
*ANOVA (Analysis of Variance)*

Dependent Variable	(I) Organization sector	(J) Organization sector	Mean Difference	Sig.
Index	Banking	Telecom	-.13991	.119
		Hospitality	-.27322*	.002
	Telecom	Banking	.13991	.119
HRF		Hospitality	-.13331	.115
	Banking	Telecom	-.08847	.396
		Hospitality	-.13989	.174
COPM	Telecom	Banking	.08847	.396
		Hospitality	-.05143	.600
	Banking	Telecom	-.17507	.148
TMC		Hospitality	-.28719*	.017
	Banking	Telecom	.17507	.148
		Hospitality	-.11212	.325
SA	Telecom	Banking	-.27378*	.021
		Hospitality	-.31755*	.007
	Banking	Telecom	.27378*	.021
SV		Hospitality	-.04377	.694
	Banking	Telecom	-.11800	.358
		Hospitality	-.36231*	.005
Telecom	Banking	Telecom	.11800	.358
		Hospitality	-.24431*	.044
	Banking	Telecom	.00522	.961
Hospitality		Hospitality	-.22067*	.039
	Banking	Telecom	-.00522	.961
		Hospitality	-.22589*	.027

Results of Table 2 suggests that Banking sector gives more weight to overall quality index as compare to Hospitality sector (p=0.002) and there is no such difference found in case of telecom sector and banking and hospitality sector respectively. Results suggest that all sector give same weight to human resource focus (HRF). Banking sector gives more weight to customer oriented processes (COPM) as compare to hospitality (p=0.17). Telecom sector and hospitality sector gives same weight to customer oriented process management (COPM). Banking sector and telecom sector gives same weight to customer oriented process management (COPM). Banking sector gives more weight to Top management commitment (TMC) as compare to telecom and hospitality (p=0.21, p=0.07) but telecom and hospitality sector give same weight to TMC. Banking sector gives more weight to strategic alignment (SA) as compare to hospitality (p=0.005). Banking and telecom sector gives same weight to strategic alignment (SA) but telecom sector gives more weight to strategic alignment (SA) as compare to Hospitality sector (p=0.044). Banking sector gives more weight to shared vision (SV) as compare to

hospitality sector (p=0.039). Telecom sector also gives more weight to shared vision (SV) as compare to hospitality sector (p=0.027). But banking sector and telecom sector give same weight to shared vision (SV).

**Table 3a**  
Correlations Coefficient between Factors of TQM for Banking Sector

		HRF	COP M	TMC	SA	SV	Quly Index
HRF	Pearson Correlatio n Sig. (1- tailed)	1					
COP M	Pearson Correlatio n Sig. (1- tailed)	.83** .000	1				
TMC	Pearson Correlatio n Sig. (1- tailed)	.83** .000	.81** .000	1			
SA	Pearson Correlatio n Sig. (1- tailed)	.61** .000	.66** .000	.67** .000	1		
SV	Pearson Correlatio n Sig. (1- tailed)	.54** .000	.54** .000	.58** .000	.55** .000	1	
Quly Index	Pearson Correlatio n Sig. (1- tailed)	.98** .000	.88** .000	.89** .000	.84** .000	.74** .000	1
		58	58	58	58	58	58

**Table 3b**  
Correlations Coefficient between Factors of TQM for Telecom Sector

		HRF	COP M	TMC	SA	SV	Quly Index
HRF	Pearson Correlatio n Sig. (1- tailed)	1					
COP M	Pearson Correlatio n Sig. (1- tailed)	.35** .001	1				
TMC	Pearson Correlatio n Sig. (1- tailed)	.21** .008	.44** .000	1			
SA	Pearson Correlatio n Sig. (1- tailed)	.52** .000	.30** .001	.37** .001	1		
SV	Pearson Correlatio n Sig. (1- tailed)	.31** .004	.28** .006	.135 .135	.177 .072	1	
Quly Index	Pearson Correlatio n	.71** .000	.70** .000	.64** .000	.74** .000	.54** .000	1
		69	69	69	69	69	69

Sig. (1-  
tailed)  
N

**Table 3c**  
Correlations Coefficient between Factors of TQM for Hospitality Sector

		HRF	COP M	TMC	SA	SV	Quly Index
HRF	Pearson Correlatio n Sig. (1- tailed)	1					
COP M	Pearson Correlatio n Sig. (1- tailed)	.59** .000	1				
TMC	Pearson Correlatio n Sig. (1- tailed)	.50** .000	.64** .000	1			
SA	Pearson Correlatio n Sig. (1- tailed)	.58** .000	.42** .000	.50** .000	1		
SV	Pearson Correlatio n Sig. (1- tailed)	.48** .000	.37** .001	.33** .000	.269* .011	1	
Quly Index	Pearson Correlatio n Sig. (1- tailed)	.79** .000	.89** .000	.78** .000	.78** .000	.6* .000	1
		73	73	73	73	73	73

To check the contribution of different TQM factors toward overall quality index we used the correlations and regression methods. The Pearson correlation coefficients between different factors of TQM are listed in Table 3 (a), Table 3 (b) and Table 3 (c) for banking, telecom and hospitality sector respectively.

Table 3(a) suggest that Top management commitment (TMC) index have significantly positive correlation with Strategic alignment (SA), Shared vision (SV), Human resource focus (HRF) and customer oriented process management (COPM) for banking. As a core factor of quality, top management commitment (TMC) influences Strategic alignment (SA), Shared vision (SV), Human resource focus (HRF) and customer oriented process management (COPM). A favorable Strategic alignment (SA), Shared vision (SV), Human resource focus (HRF) and customer oriented process management (COPM) positively contribute toward enhancement of Top management commitment (TMC). Results for telecom sector are very similar to the banking sector but the difference is that shared vision (SV) is not a contributor toward the index of top management commitment (TMC). Table 3 (c) shows that hospitality sector have similar results to banking sector.

Human resource focus (HRF) index have significantly

positive correlation with Strategic alignment (SA), Shared vision (SV) and customer oriented process management (COPM) for all selected sectors. Focusing on shared vision (SV), customer oriented process management (TMC) and strategic alignment (SA) will increase the Human recourse Focus (HRF) because these factors are positive contributor of Human resource focus (HRF) index for banking, telecom and hospitality sector. Shared vision (SV) index have significantly positive correlation with strategic alignment (SA) and Customer oriented process management (COPM) for banking, telecom and hospitality sector. Customer oriented process management (COPM) and strategic alignment (SA) positively contribute toward the shared vision (SV) of banking, telecom and hospitality sector. Strategic alignment (SA) index have significantly positive correlation with Customer oriented process management (COPM) for banking, telecom and hospitality sector. It shows that if customer oriented process management (COMP) improved then it will positively contribute toward strategic alignment (SA).

**Table 4**  
*Regression Coefficients for TQM Factors*

	Banking			Telecom			Hospitality		
	Be	T	Si	Be	T	Si	Be	T	Si
	ta		g.	ta		g.	ta		g.
Human Resource Focus (HRF)	.26	18.1	.0	.24	10.7	.0	.24	9.35	.0
Customer oriented process Management (COPM)	.18	13.3	.0	.28	12.8	.0	.33	12.9	.0
Top Management Commitment (TMC)	.23	16.6	.0	.24	11.2	.0	.21	8.16	.0
Strategic Alignment (SA)	.23	22.1	.0	.38	16.6	.0	.33	14.1	.0
Shared Vision (SV)	.24	28.1	.0	.30	14.9	.0	.15	7.27	.0

To check the contribution of TQM factors toward overall quality index we used regression coefficients. Results are shown in Table 4 which shows that all factors contribute positively toward overall quality index of banking sector but the more contributing factor is Human Resource Focus (HRF) followed by Shared vision (SV), Strategic alignment (SA), top management commitment (TMC) and customer oriented process management (COPM) respectively. But in case of telecom sector all factors contribute positively toward overall quality index. The more contributing factor is Strategic alignment (SA) followed by shared vision (SV), customer oriented process management (COPM), top management commitment (TMC) and human resource focus (HRF) respectively. In case of hospitality sector the more contributing factor toward overall quality index is Strategic alignment (SA) followed by Customer oriented process management (COPM), human resource focus (HRF), top management commitment (TMC) and shared vision (SV).

**Table 5**

*Service Sector Overall Tests of Between-Subjects Effects*

Source	Dependent Variable	F	Sig	Source	Dependent Variable	F	Sig
HRF	Org. growth	8.023	.00	SA	Org. growth	.104	.74
	Sales growth	12.85	.00		Sales growth	2.29	.13
	Profitability	.356	.55		Profitability	.000	.98
	Sales	.369	.54		Sales	.315	.57
	Complaints	1.215	.27		Complaints	2.317	.13
COPM	Org. growth	19.40	.00	SV	Org. growth	.283	.59
	Sales growth	3.985	.04		Sales growth	.573	.45
	Profitability	4.395	.03		Profitability	.001	.97
	Sales	5.247	.02		Sales	.933	.33
	Complaints	11.92	.00		Complaints	5.09	.02
TMC	Org. growth	1.111	.29				
	Sales growth	1.312	.25				
	Profitability	2.013	.15				
	Sales	4.291	.04				
	Complaints	16.10	.00				

Table 5 suggests that HRF (human resource focus) significantly positive impact on sales growth (p=0.000) followed by organizational growth (p=0.001) of overall service sector. It shows that if service sector firms focus on human resource it will contribute toward sales growth as well as organizational growth. COPM (customer oriented process management) have significantly positive impact on organization growth (p=0.000) followed by complaints (p=0.001) sales (p=0.023), profitability (p=0.037) and sales growth (p=0.047). It shows that if service sector firms design customer oriented processes it will result in decrement in complaint rate and it will contribute toward organizational growth and it will also result in sales growth which leads to high profitability. TMC (top management commitment) have significantly positive impact on complaints (p=0.000) followed by sales (0.040). It shows that if the top management of service sector organizations is committed toward organizational goals it will decrease complaint rate and it also contribute to increment in sales. SV (shared vision) have significantly positive impact on complaints (p=0.025). It shows that if vision of service sector organizations is widely shared then it will decrease complaints by the customers.

Sector Wise analysis

**Table 6**  
*Tests of between-Subjects Effects*

Source	Dependent Variable	Section I		Section II		Section III	
		Banking	Telecom	Banking	Telecom	Banking	Telecom
HRF	Org. growth	5.161	.027	20.539	.000	.285	.595
	Sales growth	.850	.361	24.874	.000	1.944	.168
	Profitability	.872	.355	.168	.683	1.445	.234
	Sales	1.406	.241	.144	.706	1.270	.264
	Complaints	.906	.345	.002	.969	2.274	.136

COPM	Org. growth	2.471	.122	8.239	.006	10.848	.002
	Sales growth	2.861	.097	7.649	.007	.134	.715
	Profitability	.379	.541	1.459	.232	4.041	.048
TMC	Sales	.456	.503	1.150	.288	3.639	.061
	Complaints	1.791	.187	1.068	.305	9.498	.003
	Org. growth	.589	.446	.000	.983	2.533	.116
SA	Sales growth	5.031	.029	.018	.895	1.748	.191
	Profitability	3.325	.074	1.648	.204	.769	.384
	Sales	2.799	.100	2.486	.120	1.377	.245
SV	Complaints	3.634	.062	2.069	.155	7.166	.009
	Org. growth	.110	.742	2.688	.106	.032	.859
	Sales growth	.512	.477	.084	.773	2.703	.105
TMC	Profitability	2.974	.091	.371	.545	.000	.987
	Sales	15.85	.000	.411	.524	.266	.607
	Complaints	4.234	.045	1.699	.197	.060	.807
COPM	Org. growth	1.592	.213	1.707	.196	.362	.550
	Sales growth	.482	.491	.215	.645	1.248	.268
	Profitability	.049	.826	.403	.528	.174	.678
TMC	Sales	9.621	.003	.726	.397	.181	.672
	Complaints	7.391	.009	.804	.373	.138	.712

Table 6 section-I (banking sector) suggests that HRF (Human resource focus) have significantly positive impact on organizational growth ( $p=0.027$ ). It shows that Human resource focus will contribute toward organizational growth for banking sector in Pakistan. COPM (customer oriented process management) have significantly positive impact on sales growth ( $p=0.097$ ). It shows that if banking sector focus on COPM it will contribute toward organizational growth positively. TMC (top management commitment) have significantly positive impact on sales growth ( $p=0.029$ ) followed by complaints ( $p=0.062$ ), profitability ( $p=0.074$ ) and sales ( $p=0.10$ ) it shows that if top management is committed then it will contribute toward organizational growth of a banks and it will reduce customer complaints, increase profitability. And it positively impact on sales means that if top management is committed toward organizational goals then it contributes toward sales growth. And it also has positive impact on sales. SA (strategic Alignment) have positive impact on sales ( $p=0.000$ ) followed by complaints ( $p=0.045$ ) and profitability ( $p=0.091$ ) it shows that if banks improve their strategic alignment then their sales increase profitability and it decrease the complaint rate by customers in banks. SV (shared vision) have significantly positive impact on sales ( $0.003$ ) followed by complaints ( $0.009$ ) it shows that if banking sector in Pakistan focus upon shared vision it will result in high sales and it will lower down the complaints by customers.

Table-6 section-II (telecom sector) suggests that HRF (Human Resource Focus) have significantly positive impact on sales growth ( $p=0.000$ ) and organizational growth ( $p=0.000$ ) which shows that if telecom companies focus on their human resource it will lead to increase in sales and it also contribute toward sales growth. COPM (customer oriented process Management) have significantly positive impact on organizational growth ( $p=0.006$ ) followed by sales growth

( $p=0.007$ ) it shows that if telecom sector companies design customer oriented process it will increase sales and it contribute toward organizational growth positively. TMC (top management commitment) have significantly positive impact on organizational growth ( $p=0.000$ ) followed by sales ( $p=0.018$ ). It shows that if top management is committed toward organizational goals it will lead to increase in sales and it contributes toward organizational growth positively.

Table-6 section-III (Hospitality sector) suggests that COPM (customer oriented process Management) have significantly positive impact on organizational growth ( $p=0.002$ ) followed by complaints ( $p=0.003$ ) profitability ( $p=0.048$ ) and sales ( $p=0.061$ ). It shows that if hospitality sector of Pakistan design customer oriented process in a hotel it will lead to increase in organizational growth, profitability, sales and it will decrease complaints. TMC (top management commitment) have significantly positive impact on complaints ( $p=0.009$ ) It shows that if top management is committed toward organizational goals it will lead to decrease in complaints.

## CONCLUSIONS

Results from this study suggests that most of TQM factors (COPM, TMC, SV) have significantly positive impact on complaints because in service sector complaints are the major determinant which determine the performance of firm. HRF have positive impact on sales growth and organization growth. COPM decrease complaints and it also contribute to organizational growth and sales growth. TMC also contribute to sales. Results from selected sector organizations give us the direction by which we can determine the performance. In banking sector HRF have significantly positive impact on organizational growth. It shows that banking sector have to focus on Human resource because it is the determinant which contribute toward organization growth which positively contribute to performance of the firm. COPM have positive impact on sales growth in banking sector. It suggests that banking have to design their process according to customer needs and wants so that they can increase their sales. It will positive contribute toward firm performance. TMC have significantly positive impact on complaints, sales, profitably and sales growth in banking sector. It suggests that banking sector have to focus on making their top management committed toward organizational goals because it is major factor which increase sales, profitability and it will also positively contribute toward sales growth and it will decrease the complaints from customers. And it will increase the performance of the banks in Pakistan. SA has significantly positive impact on sales, complaints and profitability it suggests that if banks use strategic alignment and share their strategies throughout the organization it will increase sales, profitability and it well decrease the complaints by the customers and it will positively contribute to firm performance. SV have significantly positive impact on sales and complaints of banking sector it suggests that shared vision will positively contribute toward organization performance of banks in



Pakistan. HRF positively contribute toward organizational growth and sales growth of telecom sector in Pakistan. It suggests that telecom companies have to focus on their human resource for the purpose of organizational growth and sales growth. COPM also contribute to organizational growth and sales growth of telecom sector in Pakistan so that it confirmed that if telecom companies want to grow and want to increase their sales then they should design their process according to customer need and want so that these companies can grow positively in Pakistan. COPM has significantly positive impact on complaints, organizational growth, sales and profitability of hospitality sector. It confirmed that if hospitality sector in Pakistan designs customer oriented process it will decrease the complaints from customers which will positively contribute to performance of hospitality sector in Pakistan. TMC have significantly positive impact on complaints. It suggests that hospitality sector of Pakistan have to focus on top management commitment to complaints by the customers. Results show that all most of the factors are correlated with each other. The most contributing sector toward overall quality index is SV and COPM so that we can say that service sector in Pakistan have to focus upon these.

Results from ANOVA suggest that banking sector gives more weight to overall quality index as compare to Hospitality sector and there is no such difference found in case of telecom sector and banking and hospitality sector respectively. Results suggest that all sector give same weight to human resource focus (HRF). Banking sector gives more weight to customer oriented processes (COPM) as compare to hospitality. Telecom sector and hospitality sector gives same weight to customer oriented process management (COPM). Banking sector and telecom sector gives same weight to customer oriented process management (COPM). Banking sector gives more weight to top management commitment (TMC) as compare to telecom and hospitality. But telecom and hospitality sector give same weight to TMC. Banking sector gives more weight to strategic alignment (SA) as compare to hospitality. Banking and telecom sector gives same weight to strategic alignment (SA) but telecom sector gives more weight to strategic alignment (SA) as compare to Hospitality sector. Banking sector gives more weight to shared vision (SV) as compare to hospitality sector. Telecom sector also gives more weight to shared vision (SV) as compare to hospitality sector. But banking sector and telecom sector give same weight to shared vision (SV).

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