Impact of Quality System on Financial, Innovation, and Operational Performance of Business Projects in Pakistan SME's.

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Abstract

Quality practices are globally recognized efforts in a relationship to the entities' financial, Innovational and operational performances in an organization's project implementation. They help them to determine their levels of satisfaction in all aspects of projects and their systematic approaches adopted. This research work took place to find out the Impact of Quality systems on SMEs' Business Project Performance: case study for Pakistan. The population for this research was all the small and medium enterprises established in Pakistan. That were sampled with random sampling technique. This research work took place to have investigative descriptive method in design with deductive reasoning approaches. The data was collected with close ended questionnaire and it was analyzed on SPSS 22.0 version. The main findings determined the correlation between quality system and organizational project implementation process with regards to its financial, Innovational and operational performance with some high positive attributions.

Keywords: *Quality System, Financial Performance, Innovation Performance, Operational Performance*

Introduction

The word quality has many meanings, no specific meaning is applied worldwide. Every company or organization defines it from its perspective Bican & Brem (2020). Theoretical and realistic advances concerning quality tasks go further. Consequently, deepened information on the way valuable study subjects have evolved and advanced over the years is no longer effective in enabling instructional discourse to quality improvement. Even quality standards in services and products have involved researchers and practitioners for centuries Rushton et al., (2019). In the 20th century, quality has become high-precedence control vicinity in its very own right through the contribution of quality gurus. However, irrespective of its term or context, quality has had a couple of regularly muddled definitions that try to account for all feasible variables. The aim must be to broaden fashions and definitions which might be comparable, and cumulative and that account for collaborators which have been formerly neglected Dudin et al., (2015). Deming is among the world's highly distinguished management scholars in the world. The quality reflects that the organizational system has got all the significance in ensuring quality. All the major setbacks that become important factors in business failure are related to poor organizational systems. 85% of the causes that affect businesses negatively are because of this and those quality concepts revolve around fourteen points in management according to Deming Walton (1988).
It is Deming who has adopted a satisfactory method of management control in Japan where Japanese enterprises have long been following his technique for significant quality improvement. Deming firmly believes that quality is the duty of the management, and his philosophy is summarized by the following fourteen points which have been covered in his enormous work “Out of the Crisis” Raza et al., (2020); Mansor et al., (2022). Management is effective when it can foresee the long-term effects on the business. This can help the management in becoming committed to longer-term approaches. Short routes for prompt results end in failures in a business. The following fourteen points are the strength of result-oriented management in the means of a business according to Deming is as follows Deming et al., (1982; Ishikwa & Loftus (1990). Total quality control (TQC) consists of quality development, quality maintenance, and quality improvement integration at the organizational level Chiarini (2011). It is adapted for customers' satisfaction through production and services enabling in most economical services. Feigenbaum was the first who gave this thought on quality in his book "Quality Control" in 1951 and revised his views in 1961. According to his thoughts on TQC, the organizational management should carefully design the ideas of the product so that the customer should feel absolutely satisfied when the product is in his hands. He further assesses that the organizational departments should have specific roles in their activities with clear descriptions to ensure the quality of a system. However, TQC thought on the quality that was given by Feigenbaum (1999).

Feigenbaum is considered different from total quality management in terms of the different elements these two have Feigenbaum thought that there has been tremendous progress through management in commercial enterprise quality Feighnbaum (1999). That can be determined while looking at the progress in revenues and sales, the big number of jobs created and the rapid spread of commercial enterprises (Carnerude, 2019). TQM or Business Excellence aims for "excellence" in key company performance indicators including company strategies, business practices, and all actions associated with company stakeholders. Business excellence in TQM is based on proven effective business models. Business excellence has changed TQM completely from where it was in the 80s and 90s as businesses became clear about strategic growth perspective. All betterments noticed in the businesses were associated with the TQM hence the business excellence is considered as the last commentary of TQM Shuaib & He (2022). The first Business Excellence model was advanced by the mid-eighties and befallen due to movements by the West which was turned into a reaction against the high competitiveness observed in Japan Ghafoor et al., (2022). The models themselves started as quality

awards or TQM models, and TQM had emerged by the mid-eighties as a brand-new philosophy for businesses. “Business Excellence” commenced to replace the terms “Quality” and “TQM” over time, and is proven as a primary tool for companies in improving their performance in an ever-changing competitive environment Pambreni et al., (2019). Total Quality Management is an empowering strength for the growing businesses in the world. Simultaneously companies face challenges in the implementation of TQM through their business operations. The challenges ahead are usually related to the company culture, strategy, transparency, efficiency, planning, and quality. Quality managers and decision-makers take these aspects as obstacles to TQM. They work for customer satisfaction with a sustainable, cost-effective, and high-quality cost-service mix in managing their operations under these obstacles. They use TQM to tackle these challenges since there is a strong perception prevailing globally that the obstacles as a whole hamper economy and performance of the organization but TQM keeps improving employees' performance, production, and cost-effectiveness despite these obstacles in TQM practices Nguyen et al., (2022). Organizations have been working closely on sustainable solutions to those kinds of obstacles that create hurdles in the smooth implementation of TQM practices for the last couple of decades. Removal of such obstacles in TQM is believed to speed up efficiency and excellence in project compliance Rogala & Wawak (2021).

Research Questions

1. What is the relationship between quality variables on business project results?
2. Which are the obstacles, hurdles, challenges, and problems facing by small and medium-sized business organizations in Pakistan using the quality management practices?
3. What is the relationship between quality practices and business project financial performance?
4. What is the relationship between quality practices and business project Innovational performance?
5. What is the relationship between quality practices and business project operational performance?

Review of Literature

The theory of quality systems describes the origin and philosophical foundation of a quality system that they have evolved and changed as time has passed by. Under the quality movement, Stewart’s value generation theory relates quality with the production cycle and suggests the scientific model that he calls the Plan-Do-Check-Act cycle (PDCA). Later on, Deming's conceptual examples of quality remained theoretical and practical. However, then they were considered as strong perceptions not theories, therefore, sometimes forgotten or sometimes rejected. The actual origin of the quality system in theory in the modern world is associated with the ISO standards for quality management. The standards are associated with the epistemology of the original PDCA thus they were introduced in 2015 Collet et al., (2015). Theoretical and philosophical foundations in the quality system, in theory, are a prolonged and stretched affair that needs to be researched to reach the actual origin in the area of quality Medne et al., (2020). Quality systems, in theory, have shifted by the times as the priorities have changed. According to Ohio and Shingo, there have been components calling for attention. Theoretical evidence depicts about the initial attention has been toward the manufacturing sides of the entity. The attention towards the customers and their satisfaction has always been a theoretical globally valued aspect of quality. Just-in-time concepts to ensure the right directed

flow in manufacturing have also been manufacturing-focused theoretical aspects. The discount of temporal variability is a key principle according to the flow model Coo & Verma (2002). This contrasts with the discount of variation related to dimensional and functional attributes of parts, as implied with the aid of using the doctrine of the price technology model Kevin (2018).
Quality assurance system helps to apply and conformance to requirements for the product and services. Quality Assurance (QA) makes a system of the procedures applied for the success of the project to generate an accomplished project deliverable. It consists of the subsequent outlined standards, modern improving project implementation, and removing the project defects. Quality Assurance systems are supposed to make a product error-free and ensure it conforms to requirements for the product and services Ali & Johl (2022). It technically revolves around the defective areas to bring total quality assurance. Quality Assurance architects a technique so that the product coming from this technique is error-free. These procedures have crucial roles in the project success story. Their effectiveness can simplest be actualized absolutely by the way they are properly understood, adopted, and finally executed quite effectively by the workforce under management supervision Feng et al., (2008).
Total Quality Management (TQM) and ISO9000 are both based on a quality assurance framework purely focused on companies' valued aspects. World enterprises are using these ISO9000 standards to ensure quality assurance systems within their functional areas of the business Rogala & Wawak (2021). TQM is a standard that covers several processes in the quality assurance system, which is in an unusual place to make sure that quality assurance is monitored all through the manner of production, with anybody taking duty for quality assurance, instead of simply being checked on the end.ISO9000 and TQM have reputedly been a hit in production enterprise and this has brought about them being followed in the world of industrialization Purwanto (2019).

Quality System

Quality system practices are linked to the management of the quality practitioners in an entity. It is therefore described in Quality Management Practices (QMPs) It further unfolds into multiple constructs like; people management, customer focus, information and analysis, process management, continuous improvement, employee involvement, strategic or quality planning, and supplier relationship or supply chain management. QMPs are further divided into two forms soft and hard QMPs. The soft form is considered to be about human dealing and behaviors Collet et al., (2015). The hard form of QMPs is associated with systems and software adopted to do the management under quality practices. Quality management practices in their soft form are further elaborated into the top management leadership, people management, employee involvement, customer focus, and supplier partnership. In its hard form strategic planning, information & analysis, process management, and continuous improvement are further elaborated areas Feng et al., (2008). Moreover, QMPs have a significant point of encouragement for the employees to do the interaction with public dealing because in Total Quality Management (TQM) practices there is an urge in training for employees with a special focus on communication involvement programs Mansor et al., (2022).
Furthermore, quality system practices are associated with customer satisfaction for a definite period. Quality system practices are generally made out of descriptions for the business enterprise structure, duties assigned to employees, methods to observe communication flow

from one employee to another, step-by-step tactics steadily used to behavior enterprise, and sources to attract upon to do the quality activity possible. These tactics have to be honestly documented so that each employee can observe the steps Asiedu et al., (2020); Yang et al., (2020); Yang et al., (2020); Wu et al., (2022).

Financial Performance

The financial performance of a company can be determined or analyzed through some presentation tools. The major financial statements are to be the balance sheet, profit, and loss statement, and cash flow statement. These statements help the high-ups of a company to analyze the finances based on data and make calculated decisions further. Moreover, these financial statements have their own particularly covered aspects to extend the concise form of data in a particularly organized shape Yang et al., (2020). The balance sheet of a company can express the current status of assets, liabilities, and capital. But when we look at the profit and loss statement of a company it shows us the income and expenses status of a company covering some definite periods. The financial evaluation of a company is linked to the presentations of the financial statements to help in determining the overall financial performance of a business entity Enekwe et al., (2020)

The external audit shall have the objectivity that the internal audit team cannot achieve. While audit committees can't help but be actively engaged in the results of their observations, there are no issues over consequences for the external auditor if the organization is dissatisfied with their document Omran et al., (2021). This lack of prejudice is particularly necessary to improve the integrity of the company's financial statements and overall financial well-being. External auditors offer critical and useful insight into the knowledge that resides within an entity. Their results and audit procedures provide organizations with trust and certainty that their knowledge and how they perform their business is appropriately compatible Tarmidi et al., (2019); Lin et al., (2018).

Innovation Performance

The world of business has determined the innovation of new ways to run their affairs more effectively in this modern era. The ways are based on knowledge, creativity, information technology, modernization tools, digitalization, and globalization. It has brought innovation in performance by activating intellectual properties and boosting the economy Yang et al., (2020). Today innovational performance can be seen through intangible resources like knowledge, creativity, brand and design, reputation display, innovation enhancement, and articulation in organizational culture. Markets are growing with innovative measures the companies have adopted. Innovation has forged a competitive environment in the markets Sun et al., (2020). The companies seem to have adopted more innovative product and service concepts to survive the competitive environment. Industries based on technology products are considered to be one of the best modern examples from the world of enterprises. They have managed to increase their shares in the consistency last decade and so Mardani et al., (2018). They shifted from tangible resources like hardware products to more hi-tech innovation-based designs and emotions to offer. For instance, Apple has managed to double its shares during the last five years by introducing more innovative performance through its hi-tech designs with a human touch in consideration such as; the candy-colored iMac, the diminutive iPod Nano, and the legendary iPhone and iPad. Hence the companies have now very clear mandates with

innovative performances for living in competitive environment-based markets Arbolino et al., (2019).

Innovation might also additionally be incremental and involve the extension of current marketing aspects, adjustments in aspects of modern services, and management changes. Introducing new factors into manufacturing or service operation technique innovations indirectly improves production and service delivery Asiedu et al., (2020). New techniques and techniques enable new thoughts and more importantly, they generate new abilities to pursue growing products they did no longer work on it before. As we have applied the measures of innovation performance in the public sector are particularly under progress. However, it is no more imaginary it has become practical being intangible and resource-based Tsou et al., (2018).

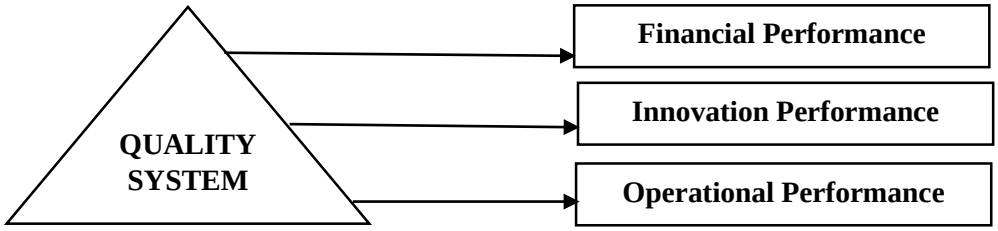
Operational Performance

The operational performance elements lead to enhance productivity along with service betterment that can ultimately bring the profitability of the company on the rise. While in particular to the service organizations profitability area enhancement through operational performance is yet to be determined around the world experiences suggest. World experts in the field of operations have been emphasizing that operational performance may be linked to the productivity factors in a small or medium-level company's overall performance Mansor et al., (2022) Wu et al., (2022);

Conceptual Framework

The researcher selected to study three variables to evaluate the business projects performance as the dependent variables. These variables are Financial Performance, Innovational Performance, and Operational Performance. The independent variable of the conceptual framework for this research study is the quality system.

Figure 1: *Hypothesized Model*



Research Hypotheses

H1. Quality system practices is significantly related to financial performance of business projects in Pakistan SME's.

H2. Quality system practices is significantly related to Innovation performance of business projects in Pakistan SME's.

H3. Quality system practices is significantly related to Operation performance of business projects in Pakistan SME's.

Research Methodology

This study was in Business organizations (Small–medium size companies) in Karachi, Lahore, Islamabad, and Hyderabad from December 2021 to February 2022. The researcher was using the primary method for data collection. The main resources for the researcher are listed in the references part. And the researcher found more research, articles, and theses related to the topic generally on quality and project performance. The researcher found studies related to project

performance in terms of financial, operational, and innovative aspects and their relation to the use and carrying out of quality systems. The researcher constructed the questionnaire based on the old studies and the researcher distributed it to the target population sample. After collecting all responses, these responses were the main source for the researcher to analyze and test these responses and come up with the results of this study Wang & Cheng (2020); Mansor et al., (2022).

The data collected were analyzed by the SPSS 26.0 version, and the descriptive statistics were used to show mean and deviation points on all demographic issues. Reliability statistics were used to measure the degree of significance of variables and hypothesis testing for data presentation frequency tables, and finally, coefficient co-relation was used to check the relationship between variables.

The descriptive research method is applied to analyze the depth of each demographic aspect of this study and to determine its reasons and potential impacts. The research technique and methodology for this analysis is a deductive reasoning approach that deals with the creation of an established theory-based hypothesis Chen et al., (2020). This work often deals with the estimation and counting of the occurrence of a particular population and provides an accurate image of a situation. It also helps in determining the logical' conclusion Wang & Cheng (2020). It works from general to the specification of an idea Rahi et al., (2020). Hence it brings out the general truth Chen et al., (2020). It is to win an argument or a belief. It is concerning the top to down Bhardwaj (2019). It narrows the broader idea first Rahman et al., (2022).

Sampling

The sample was taken in Pakistan for population analysis, where the business organizations of Pakistan were in the sense of using quality programs or systems. There were however some limitations to performing this study: Firstly, financial support or no funding for the study was required to go outside and obtain samples from other countries and cities. Secondly, the analysis primarily included small and medium-sized enterprises that applied measures and tools of quality because we did not have a big industry approach. Therefore, the whole analysis and study were eligible for completion in three months. The sampling is the unit of the population Singh & Masuku (2014). The sample was collected from Business enterprises in Pakistan from small and medium size of companies. Simple and random sampling was used for the collection of data. The data was collected from senior managers, mid-level managers, quality experts, and employees of those organizations. The number of respondents was calculated based on the sampling formula. Random sampling is taking the chosen units in between Singh & Masuku (2014). It is based on the database of the population Mansor et al., (2022). Simultaneously it allows the researcher to have the luxury of choosing different techniques within it Raza et al., (2021).

Research Analysis (Frequency Tables)

Table 1

Industrial Sector Author's own source

The industry sector that best encompasses your industry/business?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Oil Refining	2	.7	.7	.7
	Industrial	46	16.9	16.9	17.6
	Textiles	43	15.8	15.8	33.5
	Cement	32	11.8	11.8	45.2
	Agriculture	37	13.6	13.6	58.8
	Bank	22	8.1	8.1	66.9
	Medical	43	15.8	15.8	82.7
	Services	18	6.6	6.6	89.3
	Other	29	10.7	10.7	100.0
	Total	272	100.0	100.0	

The table No. 1 for the industry sector that best encompassed their industry/business analysis shows that different types of the services providing with different services like; Oil Refining, Industrial, Textiles, Cement, Agriculture, Bank, Medical, Services and Other stood at the Frequency of total 272.

Table 2

Employee's ratio Author's own source

Number of employees.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-9	14	5.1	5.1	5.1
	10-49	129	47.4	47.4	52.6
	50-200	37	13.6	13.6	66.2
	201-250	92	33.8	33.8	100.0
	Total	272	100.0	100.0	

Table No.2 for the analysis on Number of employees shows that for 1-9 frequency at 14, percent at 5.1, valid percent at 5.1 and accumulative percent at 5.1. For 10-49 frequency at 129, percent at 47.4, valid percent at 47.4 and accumulative percent at 52.6. For 50-200 frequency at 37, percent at 13.6, valid percent at 13.6 and accumulative percent at 66.2. For 201-250 frequency at 92, percent at 33.8, valid percent at 33.8 and accumulative percent at 100.0.

Table 3

Year's in Operation Author's own source

Years in operation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5 years	43	15.8	15.8	15.8
	5 to 10 years	99	36.4	36.4	52.2
	11 to 25 years	39	14.3	14.3	66.5
	More than 25 years	91	33.5	33.5	100.0
	Total	272	100.0	100.0	

Table No.3 for the analysis on Years in operation shows that for less than 5 years frequency at 43, percent at 15.8, valid percent at 15.8 and accumulative percent at 15.8. For 5-10 years frequency at 99, percent at 36.4, valid percent at 36.4 and accumulative percent at 52.2. For 11-25 years frequency at 39, percent at 14.3, valid percent at 14.3 and accumulative percent at 66.5. For more than 25 years frequency at 91, percent at 33.5, valid percent at 33.5 and accumulative percent at 100.0.

Reliability Statistics

Table 4

Cronbach Alpha Estimations Author's own source

Reliability Statistics

Cronbach's Alpha	N of Items
.874	15

Table 4 purely indicates that the reliability for all the variables used in the study is total fifteen items in numbers. Their Cronbach's Alpha is resulted as .874 and that is said to be valid and good internal consistency.

Pearson's Correlation Analysis

Table 5

Correlation estimations Author's own source

Correlations

		TQMMean	OPMean	FNMean	INMean
TQMMean	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	271			
OPMean	Pearson Correlation	.791**	1		
	Sig. (2-tailed)	.000			
	N	271	272		
FNMean	Pearson Correlation	.769**	.798**	1	
	Sig. (2-tailed)	.000	.000		
	N	271	272	272	
INMean	Pearson Correlation	.748**	.820**	.845**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	271	272	272	272

Table 5 purely highlights the relationships between the variables that are used in the study. It also supervises the P- Value hypothesis and they are tested too so that it is made sure that the study is supported or vice versa. The table of correlation here indicates the relationship between TQM and operation performance is moderate positive with the value of .791, TQM and finance performance is also moderate positive highlighting the value of .769 and the relationship between TQM and innovation performance is moderate positive with a value of .748. Moreover; the relationship between operation performance and finance performance is also moderate positive holding the value of .798 and the relationship between operation performance and innovation performance is moderate positive with .820 value. The last relationship between finance performance and innovation performance is moderate positive with a value of .845. The tables indicate that there is a positive relationship between dependent and independent variables.

Regression Analysis of Quality System with Financial Performance

Table 6

Regression estimations Quality System and Financial Performance

Co efficient

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	.097	.169		.572	.568
	TQM Mean	1.004	.051	.769	19.731	.000

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.769[a]	.591	.590	.59467

The model summary reflects the overall Correlation of model that is 0.769. This model holds strong positive correlation, R square value is 0.591, and therefore finance performance indicates 59% of variation in TQM. Table 6 establishes the analysis related to coefficient that indicates about the beta 1 variable. Beta of the variable is to denote about the positivist and validity between hypothesis and variables. The tables show Beta 1 named as financial performance that is 1.004 and it proposes that if financial performance will increase by 1% than TQM with be increased by 10%.

Regression Analysis Of Quality System With Innovation Performance

Table 7

Regression estimations Quality System and Innovation Performance Author's own source

Co efficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-.296	.204		-1.454	.147
	TQM Mean	1.130	.061	.748	18.482	.000

			R	R Square	Adjusted R Square	Std. Error of the Estimate
			.748[a]	.559	.558	.71494

The model summary replicates the overall Correlation of model that is 0.748. This model holds strong positive correlation, R square value is 0.559, and therefore innovation performance indicates 55% of variation in TQM. Table 7 establishes the analysis related to coefficient that indicates about the beta 2 variable. Beta of the variable is to denote about the positivist and validity between hypothesis and variables. The tables shows Beta 2 named as innovation performance that is 1.130 and it proposes that if finance performance will decrease by 1% than TQM with be decreased by 11%.

Regression Analysis of Quality System with Operational Performance

Table 8

Regression estimations Quality System and Operational Performance

Co efficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.036	.162		.221	.825
	TQMMean	1.030	.049	.791	21.183	.000

			R	R Square	Adjusted R Square	Std. Error of the Estimate
			.791[a]	.625	.624	.56840

The model summary reflects the overall Correlation of model that is 0.791. This model bears strong positive correlation, R square value is 0.625, and therefore operation performance indicates 62% of variation in Quality System. Table 8 establishes the analysis related to coefficient that indicates about the beta 3 variables. Beta of the variable is to denote about the positivist and validity between hypothesis and variables. The tables shows Beta 3 named as operation performance that is 1.030 and it proposes that if operation performance will increase by 1% than TQM with be increased by 10%.

Hypotheses Testing

Table 9

Hypotheses Testing Author's own source

H	Hypothesis	P Value	Result
H1	Quality system practices is significantly related to financial perfromance od business projects in Pakistan SME's.	P Value is 0.000	Supported
H2	Quality system practices is significantly related to innovation perfromance od business projects in Pakistan SME's.	P Value is 0.000	Supported
H3	Quality system practices is significantly related to operations perfromance od business projects in Pakistan SME's.	P Value is 0.000	Supported

Table 9 reflected the hypotheses testing according to the results of coefficient correlation and regression analysis the p value suggested below than 0.05 at 5% confidence interval, here for these three dependent variables (Financial performance, Innovation performance, and Operation performance) with one independent variable (TQM Practices) all have below than 0.05 P values, so we can say that our model is statistically significant and all hypotheses are supported.

C**onclusion**

This research study of descriptive approaches of deductive reasoning to find out the impact correlation of quality systems on the overall performance of the organizations working in Pakistan. TQM and ISO 9000-2000 quality systems in their enterprise that they found them using challenging with the majority of the companies Casadesus & Gimenez, (2000). Most of the companies found TQM systems most important for their profitability by branding and brand value, market acceptance and market orientation, decreasing defects, operating costs increased productivity, and their corporate culture. The majority of the companies used quantitative indicators as their KPIs for quality assurance Al-Henzab et al., (2018). They would use reports for the same in absence of KPIs and measure the quality performance every 6 months. Most of them agreed to have a well-defined mission and vision statement, a well-defined and organized quality statement, an organizational chart that is well organized, well-defined strategic, tactical, and operational plans, information on TQM, business suited for the TQM system, TQM system suited to the climate of Pakistan Raza et al., (2020). The TQM system was difficult to operate, invested well enough in the TQM system. TQM's approach increased the financial performance of their company and helped in the achievement of their company goals in their strategic plan. Hence the majority of the companies showed agreement to have TQM practices have an overall positive impact on their financial, strategic, and operational performances Pambreni et al., (2019).

Recommendations

- Drastic changes may be researched and introduced in making TQM systems easier to operate.
- Agriculture and Medical sectors may be promoted with awareness to have TQM systems in common.
- Tripoli-Libyan companies may have regular updating on befitting measures of profitability from international experiences.
- Organizational Performance may be improved further with in-depth studies on TQM systems globally.
- TQM systems with regular practices may be introduced to the nascent enterprises for-worth experimental process.

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