

# Total Quality Management on Performance in Saudi Post

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## Abstract

The purpose of this study is to identify compliance with standards and principles of total quality Management and its role in the performance of Saudi Post. The study is quantitative and a descriptive analytical in nature and detects the role of TQM standards and principles on the level of improvement and development of performance in Saudi Post, using questionnaire to collect data. The sample of 175 responded has been collected of 5 regions in the Kingdom (West - Central - North - South - East) from Saudi Post employees. Data analysis was conducted using many statistical techniques through the SPSS program, including: correlation analysis, descriptive statistics, factor analysis, and multiple regression analysis. The results show that TQM principles used in this study are positively related to the level of improvement and development of performance in Saudi Post. Education and training of employee is found the most influential of variables on level performance. The results of study reveal that Saudi Post's interest in the total quality, and level of application is different between the regions, where the central region was the highest. This paper provided for practitioners, administrators, and academics a vision on quality management principles and their role on performance. Finally, it serves as a reference for future initiatives aimed to implement quality in organizations.

**Keywords:** Total Quality Management, Performance Improvement, Performance Development, Total Quality Principles.

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## 1. Introduction

### 1.1 Background of the study

The wheel of evolution in today's world has become fast and continuous in all public and private institutions. Therefore, the administration in every firm is faced with challenges to rise to modern levels of development and improvement. The concept of overall quality became more popular in United States as a business strategy in late 1980s or early 1990s. (Omachonu et al. 2005) defines that Total Quality Management integration of all functions and processes within the organization in order to continuously improve the quality of goods and services, the goal is customer satisfaction. The success of TQM and its success in Japan, has been achieved by focusing on some factors, the most important of which is to focus on the correlation between productivity and quality (more quality improvement leads to increased productivity).

The concept of quality management is one of the outstanding concepts in the contemporary management philosophy for national organizations in particular with the economic, political and technological developments taking place in the world. This is because of the competition in societies that seek to achieve the best levels, whether financial and human financial services of access to the global market? It requires a total vision and philosophy capable of facing current and future environmental challenges and increasing their own capacities to adapt to changes in the competitive environment. The change in management style has a significant impact on national and global institutions. The rapid development of technology, the global population structure, the increasing emphasis on quality and flexibility in product production and service delivery all underscore the need for change.

Apparently, TQM is a contemporary approach to management adopted by organizations in order to achieve the best possible performance, so it should be as decision. This depends on existing culture of organization, also the preferences of senior management as an important element in its success. (Dale, 2011) This TQM focuses on the interest in quality, especially as its application depends primarily on the extent commitment of management and employees to this application as the main driver of the change process. The present study seeks to identify the role of quality management in improving and developing performance in Saudi Post.

### The Saudi Post

Saudi Post is a public government corporation that works in the organization of Postal services, as well official operator of it's in Kingdom of Saudi Arabia such as mail, parcels, express mail and modern services such as online shopping, money transfers, and e-government transactions. Saudi Post have postal transportation networks across regions, which cover more than 6000 points in the Kingdom, Saudi Post has the largest transportation network in the region. The Post offices consist of more than 550 equipped and integrated Post offices in various regions, provide a range of modern postal services, and designs of offices architecturally special and comfortable for the customers. In addition, Saudi Post consists personnel network of a local developed resources of more than 13000 personnel in different activities and operations who are hired through recruitment programs have financial benefits

and quality healthcare through a system rehabilitation and training programs to enhance their performance efficiency and develop their potentials. It provides different postal, electronic and commercial services and products for individuals, government authorities, charity organizations, and business sector enterprises.

## **1.2 The problem statement**

The Total Quality is considered a modern management concept, which has become the focus of organizations seek to apply it, to improve their performance and eliminate problems before they occur. This is what Saudi Post has sought since 2007 to apply total quality standards and establish an independent quality management. Since then, Saudi organizations are beginning to recognize the importance of introducing the concept of TQM to improve performance and improve productivity by building a deep culture of quality and customer care. The success or failure of total quality program is achieved by combining factors such as culture of the organization, infrastructure, and readiness of system to implement them. So, each organization must work on adapting its approach to TQM to exploit its characteristic strength while focusing on its weaknesses. In reality, the application of TQM concept varies from one organization to another depending on the specificity, culture and status of each organization. Although, there're many Saudi studies that discuss TQM in different sectors such as security, health and education, but there were no studies related to in the Saudi Postal Corporation. Therefore, the researcher saw need to carry out a field study on the institution of Saudi Post. Because this institution has been interested in establishing the total quality system since 2007, seeking to achieve qualitative differences in improving and developing continuous performance which is one of its strategic objectives. This organization is dedicated to providing the best and fastest service to its public.

### **1.2.1 The objective of the study**

The main objective of the study is to identify compliance with standards and principles of Total Quality Management (leadership, quality assurance, quality of customer service, management of operations, training and education of employees) and its role in the performance of Saudi Post.

By achieving the following objectives:

1. To recognize reality of total quality in Saudi Post from point of view of employees in the institution.
2. Identifying the improvement and development of performance in Saudi Post from point of view of employees.
3. Studying the relationship between standards and principles of total quality in Saudi Postal Corporation as an independent variable and the level of improvement and development of performance as a dependent variable.
4. Identify if there're statistically significant differences in opinion of the study sample members of commitment implement standards and principles of TQM according to different regions of Saudi Arabia.

### **1.2.2 The research questions**

1. How well committed is Saudi Post to implementation of TQM standards and principles (leadership, quality assurance, quality of customer services, training and education of staff, and operations manager) in the Saudi Postal administration?
2. What is the level of improvement and development of performance in Saudi Post?
3. Does commitment to the application of TQM standards and principles (leadership, quality assurance, quality of service to clients, training and education of staff, and management of operations) affect performance?
4. Is there a difference in extent of commitment to apply standards and principles of TQM according to the region?
5. Is beneficiary satisfied with quality of service provided in relation to extent of Saudi Post commitment in application of TQM?

## **1.3 The scope of the study**

This research evaluates the level of improvement and development of performance in Saudi Post within Postal offices (West - Central - North - South - East) regions of the Kingdom by employees.

## **1.4 The relevance of the study**

Total Quality Management is one of the most important administrative approaches, which has been and continues to be of great interest for those interested in this field. The progress of societies and development of their organizations depends mainly on contemporary focus in their plans and policies, and adopting this approach for improvement. The importance of this study is linked to one of the necessary aspects namely that all organizations seek to achieve high levels of performance. The relevance of the study for the community is that it highlights essential element of success of Saudi Postal corporation through studying the standards and principles of total quality contributing to the development and improvement of performance. It also gives them more power and effectiveness in providing everything that is best for their customers, while preserving the objectives of their financiers and the security of their employees, and this is reflected in the welfare and prosperity of society as a whole. The usefulness of study to provide Saudi Postal a model for the development and improvement of its

performance by clarifying the impact of applying the standards and principles of total quality to all its activities and departments.

## 2. Literature Review

The topic of total quality management has received attention of distinguished authors and researchers. There are many studies and different views on topic of quality, but the role of quality in improving and developing performance in Saudi Post has not found enough attention. I'll discuss previous studies that have investigated the role of quality management in improving and developing the performance in organizations.

The main objective of study by Malik and Oberoi (2017) is to understand perceived and actual level of service quality and performance provided by banks online, and understand factors determining the level of customer satisfaction in online banking services, by quality dimensions to know has direct impact or no on customer satisfaction. The researcher uses SERVQUAL model to measure the level of service quality in online banking sector as dependent variable, and five dimensions: tangibles, reliability, responsiveness, assurance and empathy as independent variables. The study is descriptive in nature, conducted in India. The findings indicate that respondents evaluate online banking positively, but still there is scope for improvement. This study is consistent with the current study in terms of online customer service to maintain customer satisfaction and develop relationships and loyalty to the organization in the current study can benefit from the role of online services.

The objective of study by Modarres (2017) to discuss the impact of organizational learning and innovations on the TQM-performance relationship. The researcher chooses learning and innovating as independent variables, and organizational performance as dependent variable, as supposes quality management is positively associated with organizational learning, and learning performance is positively associated with organizational performance. The study data collected by survey method from "Food Industry in Iran", by top executives and senior managers. The study concludes that TQM has a positive and significant relationship with both organizational learning and innovations with organizational performance, also a weak and non-significant relationship between TQM and performance. This study gives a clear idea about the importance of educating and training employees with the latest technologies which creating an environment of innovation and creativity.

The key purpose of study by Madanat and Khasawneh (2017) is to investigate the extent to TQM implementation and HRM effectiveness in the banking sector varies according to bank type Commercial vs. Islamic banks. This research uses a quantitative and a descriptive analytical approach to detect the impact of TQM dimensions as an independent variable on the HRM practices as the dependent variable. A structured questionnaire has been developed and distributed in 15 commercial and Islamic banks' headquarters in Amman. The point of weakness is that this study is limited and only focuses on the banking industry in Jordan, therefore, the findings are generalizable only to this sector. The study concluded that banks benefit from focusing on TQM principles as they have a strong and positive impact on HRM practices, which indicates that it will reinforce my current study in terms of quality assurance that all planned activities and methodology are implemented within a quality system that can be shown to provide confidence that the service will meet the quality requirements.

An objective of the study by Panuwatwanicha and Nguyenb (2017) is to know the impact of TQM on performance, and the level of organizational culture in Vietnamese construction industry. The researchers study TQM practices are; leadership management, training, employee relation, quality data and reporting, supplier quality management, project design, and process management as independent variables and organisational performance improvement as dependent variable. Type of study is quantitative research, data collected by an online questionnaire method by all levels of management and experienced employees working at construction Project Management Units or construction contractors. The results show that Vietnamese construction firms are dominated by clan and hierarchy cultures rather than adhocracy and market cultures according to Competing Value Framework of organizational culture classification, means this unfavorable culture for use of TQM. As findings confirmed the significant and positive relationship between TQM implementation and organisational performance improvement. This study agree with the current study in terms Saudi Post achieves a marked change in its performance after applying TQM.

The study by Karakasnaki (2016) aims to evaluated impact of quality management systems ISO standards, ISM Code, TQM on the management and performance of shipping companies. The study identifies independent variables are systems ISO standards, ISM Code, TQM, and performance as dependent variable. Data collects through a questionnaire from shipping companies located in Greece, and data analyzes by factor analyses, and regression analyses. The study results indicate that ISM Code effectiveness consists of two dimensions are continuous improvement and customer satisfaction focus, as well that applicability of TQM concept in shipping industry with level top management commitment is well. This study confirms for current study that the role top management in Saudi Post in terms commitment is important and essential in applying the principles of TQM.

The essential goal of study by Al-Smadi (2015) is to evaluated performance quality evaluation of faculty members at Al-Qassim University. The study variables are Al Qassim University Faculty members and students as independent variables, and Responses of Faculty members and students to the Instrument as a dependent

variable. Type of study is analytical-descriptive method, data collected by a questionnaire from faculty members and students, using statistical methods to data analysis. The results reveal to that performance quality of faculty members at Al-Qassim University is high from their point of view, as build a model to develop the performance, quality of faculty members in the light of the total quality standards. This study agrees with the current study in terms evaluate performance in Saudi Post and work on promoting quality culture among employees.

The main objective of study by El-Tohamy and Al Raoush (2015) to is investigated the impact of applying TQM on hospital effectiveness in governmental hospitals in Jordan. The study chooses principles of TQM are: leadership i.e. top management commitment, customer focus, teamwork, continuous improvement, employee involvement, and education and training as independent variables, and organizational effectiveness in the hospital as dependent variable. The study type is quantitative approach, data collected through survey method for all working in accredited governmental hospitals, using multiple regression for data analysis. The result that implementation of TQM principles on health organizations has positive impacts in the overall hospital effectiveness. This study gives us a clear idea about the importance of applying total quality management in all organizations.

The fundamental objective of study by Harool (2015) investigates the role of applying TQM standards in improving the performance of the General Directorate for the passports in Riyadh. The study defines TQM standards as independent variables, while performance as a dependent variable. Type of study is descriptive approach, collected data by questionnaire from all employees of the General Directorate, and sample is random. The results show a positive relationship between the relationship of TQM standards and job performance.

A key target for study by Karimpour and Hosseinpour (2015) is to explored degree of implementation of TQM practices in education department of Dezful city. The researchers choose variables to explore impact total quality management through principles are: leadership and management, strategic planning, customer oriented, education, empowerment, analysis, insurance quality, and quality improvement as independent variables while the level of education improvement is as dependent variable. This study is descriptive, using questionnaire method for data collected from all educational staff, and sample is as stratified. The results show that an observance rate of eight principles of ISO 9000 is performed poorly.

The primary objective of study by Matsoso and Benedict (2015) examines to critical success factors to implementation of TQM in small medium enterprises. The researchers choose factors TQM such as customer focus and satisfaction, Employee training, Leadership and etc.as an independent variable, performance small medium enterprises as dependent variable. Type of study is a descriptive and quantitative approach, data collected by questionnaire in Cape Town. The researchers find that SMEs that implemented TQM in their operations are successful. While, there're SMEs need to adopt TQM approach to enhance their business performances. This study adds to the current study that training of employees has a positive impact on Saudi Post improves its performance and production and thus returns to the satisfaction and loyalty of customers.

An essential goal of study by Ngambi and Nkemkiafu (2015) is to explored degree of effectiveness of TQM practices in organizational performance. The researchers chose variables are: leadership, quality control, inspection, employee training, and customer focus as an independent variable, and financial performance as dependent variable. The data collected from manufacturing firms in the republic of Cameroon, and using multiple linear regression for data analysis. The findings show that some elements of TQM can be significantly impacted on organizational performance as employment training and empowerment, as well TQM practices have a significant effect on customer satisfaction, and commitment of top management is necessary to exist quality management environment. This study does not agree with the current study in terms of sector, but may be consistent in the role of leadership commitment as the basis for enhancing services quality provided by Saudi Post to customers and reaching their satisfaction by training and teaching employees and getting customers' reactions and observing their satisfaction in each services available.

The main objective of study by Salhieh and Abu-Doleh (2015) is to explained the relationship between TQM practices and banks' technical efficiency in Amman. The study sheds light on the TQM Practices are: leadership i.e. top management commitment, human resources management, technical system, employee satisfaction, and customer focus as an independent variable that have strong impact on technical efficiency as a dependent variable.

This study uses a questionnaire is constructed, data collected from managers and assistant managers of different departments at the bank's. The study concluded that there is a relationship between TQM practices and organizational performance which measured by banks' technical efficiency. The previous study demonstrated the positive and strong impact of the practices of TQM on organizational performance, which indicates that it will reinforce my current study in terms Saudi Post in any areas achieves a high level of performance and application of quality principles in an excellent manner.

The major objective of study by Mashagba (2014) is to identified the most TQM principles applied in the Jordan University, requirements TQM, and its relevance to the education system. The researcher chooses the variables of the study of the principles of total quality as an independent variable and the extent of their application and suitability as a dependent variable. Methodology of study is descriptive approach, data collected by a

questionnaire, sample is random on many faculty members. The study finds that the most important focusing senior management on applying TQM principles to improve the system university education and guide process of decision making in Jordanian universities. This is useful for the current study of the results of the performance of the Postal Corporation and its interest in the management of total quality and the preparation of its employees in its capacity as a government institution linked to several government agencies in Saudi Arabia in the sending of documents and documents important.

The essential purpose of study by Sabella and Kashou and Omran (2014) is to promoted critical management practices to guide organization resources to improving quality and performance in Palestinian hospitals. This study determines leadership, HRM, customer focus, strategic planning, information and analysis, and process management as an independent variable that have strong influence on performance as a dependent variable. The study uses a questionnaire are of 51 hospitals in the West Bank of Palestine, statistical techniques are correlations and regression by SPSS and Windows Excel to data analysis, and sample is a random of employees. The finds of study that TQM principles have positively related to hospital performance and is significant, and Palestinian hospitals in the West Bank are operating at relatively acceptable performance levels. The previous study demonstrated the positive and strong impact of the practices of TQM on organizational performance, which indicates that it will reinforce current study in terms levels of Saudi Post performance, and programs aimed at improving services quality.

A main target of study by Moghadam and Sharifian and Mosthfeziant (2013) is a better understand of vital factors of success of TQM in sector of Iranian industry of sport lodging. The study chooses TQM factors are: leadership, strategy and policy, focus on customer, information's analysis, focus on human resources, management process and business results as an independent variable, and success level Iranian industry of sport lodging as a dependent variable. Methodology of study is descriptive analytic, data collects by a questionnaire, the descriptive statistical techniques to analyze data by SPSS, and sample from all sport lodgers. The results indicate that focus on customer factor is the best, while leadership factor is the worst conditions which requires more efforts. For implementation of TQM requires integrated efforts to increase the level of performance. In this study shows that efforts must be made in all factors TQM, that will improve application of TQM, thus the higher the Saudi Post performance will be at a high.

A major contribute of study by Mohammeda and Tibek and Endot (2013) is to determined defects in departments World Islamic Call Society and correct it by adopting concept TQM. The study chooses ISO international quality in seven criteria are: leadership, customer focused organization, involvement of people, process approach, system approach to management, continual improvement, and factual approach to decision making as independent variables, and World Islamic Call Society performance as a dependent variable.

The type of study is descriptive approach, using questionnaire, sample is a random from employees and managers, and statistical means to analyze the collected data by SPSS. The study finds that TQM is basic for improvement, and for applying in World Islamic Call Society requires change in design and processes of the organization, and culture in long term strategy.

The key objective of study by Alamutu and Hotepo and Oyeobu and Nwatulegwu (2012) is to developed a model for applying TQM practices to better delivery of services in the Nigerian telecommunication sector, to assess impact of Top management commitment, and to assess impact of continuous training in quality on customer satisfaction. The study uses questionnaires in Lagos State, using descriptive statistics and regression to data analysis. The results reveal that employee's satisfaction can be trace to the policy and commitment of top management, as customer satisfaction can be attributed to continuous training in quality. This study is consistent with the current study on the subject of the application of quality management standards and we benefit the theoretical framework of the current study, especially in relation to the application of quality standards in terms of concept and performance and continuous training in quality.

A primary goals of study by Abusa (2011) are to investigated of TQM elements are implemented in Libyan manufacturing companies, and measure performance and study the relationship between them. The researcher chooses elements are: top management commitment, customer focus, supplier quality management, people management, continual improvement, and process management of the total quality as an independent variable, and the organizational performance as a dependent variable. The study uses a questionnaire which covers 65 Libyan manufacturing companies, and descriptive statistics and regression to data analysis by SPSS. The study results show that relationship among TQM elements are positive and very important. The level of TQM implementation affected by elements it, whereas that process management show as the most important TQM element followed by Top Management Commitment, and then People Management and Customer Focus. This study is consistent with the current study on the subject of in relation to impact the application of quality management in Saudi Post offices, and operations management is an important component of total quality management.

The key purpose of study by Samat and Ramayah and Saad (2006) is to explored relationship between TQM practices and service quality, and market orientation in Malaysian service organizations. The researcher

determines that management support and commitment, employee Involvement, employee empowerment, information and communication, training and education, customer focus, and continuous improvement as an independent variable, and service quality and market Orientation as dependent variable. The study methodology is questionnaires by manager's. The results reveal that employee empowerment, information and communication, customer focus, and continuous improvement had a significant effect on service quality whereas only employee empowerment and customer focus that's a significant effect on market orientation, as TQM implementation isn't an easy, and requires full commitment from many parties in the organization also some changes restructuring. This study is consistent with the current study in terms the importance of TQM practices in service organizations. It also provides some theoretical contributions to the TQM development.

The major target of study by Warwood and Roberts (2004) is to ranked TQM success factors by reviewing literature. There are key factors are strong leadership, economic survival and global competition as independent variables, and success of its implementation as a dependent variable. The researcher adopts methodology which used parts of the Oppenheim 1992 and Fink 1995 approaches through two surveys in organizations of the European. The study found that there are 5 main factors to the successful implementation for TQM, in order of importance, are: effective leadership, application of best practice, economic survival, market orientation and employee involvement. Apparently, leadership is a point of strength and a success to achieve goals, as well classified success factors according to relevance. In general, the focus on leadership variable is that supporting and supporting senior management of TQM is one of the most important factors in the success of the TQM project in any institution or establishment. In no case can we envisage the implementation of any program or initiative to improve performance without the full and effective support of senior management.

A Key goal of study by Kaynak (2003) is to revealed the relation of TQM practices to firms' performance. The researcher selects TQM practices are: management leadership, training, employee relations, quality data and reporting, supplier quality management, product and service design, and process management as independent variables, and firm performance as dependent variable. The data collected by mail survey from firms operating in the US that have implemented TQM and JITP techniques. The study results show the positive effects of TQM practices on firms' performance, also no top management commitment to implementation of TQM as a possible reason for failure of TQM systems in some organizations. Although TQM is learning oriented, there're many learning failures in organizations implemented TQM. The effectiveness of the organizations depends on their ability to satisfy their employees. This study highlights the point that supports the current study is the impact of learning on the performance of institutions.

An essential objective of study by Chartrunguang (2002) is TQM staff selection and training are linked to guest orientation quality. The researcher determines that TQM, human resource performance as an independent variable and guest satisfaction as dependent variable. Type of study is exploratory, data collected by questionnaire from guest and employees, sample in Thailand to represent hotels in the Asian countries. The findings confirm that relationship staff in Western hotels in Australia and the USA a more positive in terms of TQM staff selection and training approaches and guest orientation quality than is the case with the staff of the Thailand hotels. Though guest satisfaction levels in Thailand hotels are higher than Western hotels, while guest orientation and guest satisfaction in service quality is found better in the Western hotels than Thailand hotels. This study is consistent with the current study in terms in the logistics industry in Saudi Post and how orientation shipments to customers in the highest satisfaction levels, that's customer satisfaction is dependent on level of service quality in Post.

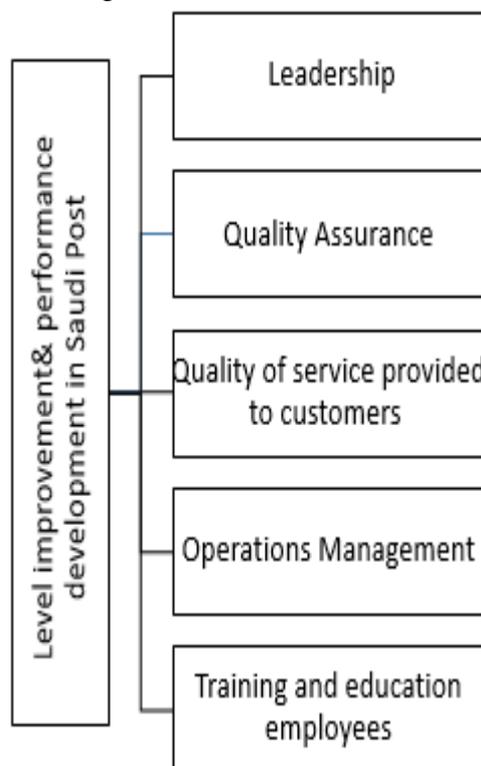
A major target of study by Boselie and Wiele (2001) is to discussed effects relationship between HRM and TQM on the performances of an organization. The dependent variables are employee satisfaction and intention to leave the organization, while Independent variables are HRM and TQM. The data collected by questionnaire in Netherlands, sample size about 200 from HRM or the quality manage in Dutch company called Ernst & Young. The findings show that a positive perception of individual employees on HRM and TQM concepts, that's mean a higher level of satisfaction and less intentions to leave the organization. In addition, cooperation within units, leadership, and salary have strong significant impact on employee satisfaction, as a satisfied employee has less intentions to leave the organization and change employer. This study is consistent with the current study on the subject a strong positive relationship between employee satisfaction and improvement and development of performance, which leads to the commitment of the leadership of the Saudi Post and provide the possibilities, motivations, training, and developing skills employee will certainly lead to a high level of performance.

### **3. Methodology and Data**

#### **3.1 Theoretical Framework**

The theoretical framework focuses on the relationship between the dependent and independent variables. It can be shown as follows:

Figure 1. Theoretical framework



**Equations:**

$$(L\ I\&\ D) = \sum (L, AQ, QSC, OM, T\&E)$$

Where L I&D is level improvement& performance development in Saudi Post, L is leadership, AQ is quality assurance, QSC is quality of service provided to customers, OM is operations management and T&E is training and education of employees.

**3.2 Definition of the variables**

Table 1. Definition of variables

<b>Improvement&amp; development performance</b>	Continuous improvement of an organization’s performance is a constant objective. (Dale,2003)
<b>Leadership</b>	leaders to unite of purpose and direction of the organization, that create and keep internal environment for people can become fully involved in achieving an organization’s objectives. (Dale,2003)
<b>Quality Assurance</b>	Providing enough confidence to satisfy a product or service that customers’ needs i.e. assurance of customer’s interest quality assurance. (Dalsgaard et al. 2002) This means quality management in Saudi Post must build quality into services during design and planning processes and in this way give confidence to a customer that a service performs as they expect.
<b>Quality of service provided to customers</b>	Customer judgement and results from liking by customers of expectations of service with their perceptions of actual service delivered. (Dale,2003)
<b>Operations Management</b>	Get an expected result more efficiently when activities and related resources are managed as a process. (Dale,2003)
<b>Training and education employees</b>	Helping develop appropriate attitudes and values relating to quality, skills, and techniques of quality improvement include teamwork. In addition, education encompassed skill enhancement, competency training and both on- and off-the-job learning opportunities. (Dale,2003)

**3.3 Hypothesis**

The hypotheses can be formulated as follow:

1. H10: There is no relationship between leadership and performance in Saudi Post.

- H1A: If leadership is improved and developed, then the performance in Saudi Post will also improve and evolve.
2. H20: There is no relationship between quality assurance and performance in Saudi Post.  
 H2A: Better quality assurance it will improve and evolve in performance Saudi Post.
3. H30: There is no relationship between the quality of service provided to costumers and improving and developing performance in Saudi Post.  
 H3A: If improving and developing performance in Saudi Post, will also improve and evolve quality of service provided to Costumers.
4. H40: There is no relationship between operations management and Performance in Saudi Post.  
 H4A: Operations management and performance in Saudi Post. are positively correlated.
5. H50: Training of employees have no influence on the level of performance in Saudi Post.  
 H5A: Training of employees all have a positive influence on the level of performance in Saudi Post.
6. H60: There is no differences between the opinions of the sample members due to the different region.  
 H6A: Only those who work on offices of the central region have the level of performance in Saudi Post is high?

### 3.4 Type of study

To carry out this research, a quantitative and a descriptive analytical approach is used to detect the impact of TQM dimensions and principles on the level of improvement and development of performance in Saudi Post.

### 3.5 Data collection methods

This study posts the questionnaire online through online google drive site, which allows the participant to answer the online survey easily. It provides the researcher with access to the results and replies, with the option of a full report to calculate results. The study planned to collect 30 responses from each region in Saudi Post within Postal offices (West - Central - North - South - East) to employees, so it will become total 150 of surveys.

### 3.6 The sampling design

The research population more than 13,000 employees, as mentioned in Saudi Post website, and sampling technique will be simple random.

### 3.7 Statistical analysis technique.

The researcher will discharge and analyze the questionnaire through the statistical analysis program SPSS (Package for Social Sciences) these statistical techniques will use to analyze the results are mediator, average, correlations, factor analysis, and multiple regression.

## 4. Interpretation of Results

In this section, the results of the data analysis are presented. In the following tables, we elaborate the demographic profile and descriptive and correlation analysis that give description how TQM standards and principles influence improvement and development of performance.

### 4.1 Frequency of demographic profile

Table 2. Demographic data of the respondents

Table 2.1. Region

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Eastern	40	22.9	22.9	22.9
	Central	40	22.9	22.9	45.7
	West	32	18.3	18.3	64.0
	North	32	18.3	18.3	82.3
	South	31	17.7	17.7	100.0
	Total	175	100.0	100.0	

Table (2.1) Region shows that 40 of the study sample is from the Eastern region representing its percentage 22.9%, 40 of sample from the Central region its percentage 22.9%, 32 of sample from the Western region percentage 18.3%, 18.3% from the Northern region for 32 employee of sample, 31 of the study sample from the Southern region representing its percentage 17.6%. Where we note that frequency of the study sample from the Eastern and Central regions is equal, also equal for the Western and North regions.

Table 2.2. Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary and less	53	30.3	30.3	30.3
	Diploma	56	32.0	32.0	62.3
	Bachelor	56	32.0	32.0	94.3
	Master and above	10	5.7	5.7	100.0
	Total	175	100.0	100.0	

Table(2.2)Qualification shows that 53 of the study sample has a secondary qualification and less percentage 30.3%, representing its percentage 32.0% for 56 of the study sample has a diploma qualification, also 56 employee has a bachelor's degree percentage 32.0%, only 10 of the study sample has a master's degree and above percentage 5.7%. The highest percentage was 32.0%, which indicates that the category that was answered in the questionnaire is between a category of diploma and bachelor degree.

Table 2.3. Number of years' work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	19	10.9	10.9	10.9
	6-10	43	24.6	24.6	35.4
	11-15	20	11.4	11.4	46.9
	16 and above	93	53.1	53.1	100.0
	Total	175	100.0	100.0	

Table(2.3)Number of years' work shows that 19 employee of the study sample worked in the institution for a period of 1-5 years' percentage 10.9%, 43 of employee worked for 6-10 years' percentage 24.6%, as 20 employee worked for 11-15 years' percentage 11.4%, the highest number is 93 employee worked for 16 years and more percentage 53.1%, where we note that it's the highest ratio.

#### 4.2 Descriptive Statistics

Table 3. The descriptive statistics of variables

	N	Minimum	Maximum	Mean	Std. Deviation
Leadership	175	1.00	5.00	2.3669	1.02925
Quality	175	1.00	5.00	2.3337	.95373
Service	175	1.00	5.00	2.0206	.86651
Operation	175	1.00	5.00	2.4126	1.03261
employee	175	1.00	5.00	2.4366	.96920
performance	175	1.00	5.00	2.3154	.92036
Valid N (list wise)	175				

The descriptive statistics in table (3) displays the mean and standard deviation of the variables: leadership, quality assurance, quality of customer service, management of operations, training and education of employees, and level improvement& performance development in Saudi Post. The results exhibited the mean varying from 2.4366 to 2.0206. The training and education of employees took the highest value is 2.4366, while quality of customer service give the lowest value is 2.0206. The mean exhibited level improvement& performance development is 2.3154. The standard deviation exhibited 1.02925 for leadership. The minimum of standard deviation (SD) for quality of customer service is .86651, while the maximum of for management of operations 1.03261. The level improvement& performance development gives for standard deviation(SD) 0.92036.

### 4.3 Correlations

Table 4. Pearson Correlation

		Leadership	Quality	Service	Operation	Employees	Performance
Leadership	Pearson Correlation	1	.861**	.724**	.748**	.745**	.636**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	175	175	175	175	175	175
Quality	Pearson Correlation	.861**	1	.754**	.815**	.787**	.667**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	175	175	175	175	175	175
Service	Pearson Correlation	.724**	.754**	1	.815**	.722**	.638**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	175	175	175	175	175	175
Operation	Pearson Correlation	.748**	.815**	.815**	1	.824**	.729**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	175	175	175	175	175	175
Employee	Pearson Correlation	.745**	.787**	.722**	.824**	1	.780**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	175	175	175	175	175	175
Performance	Pearson Correlation	.636**	.667**	.638**	.729**	.780**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	175	175	175	175	175	175

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table (4) represents the Pearson correlation matrix. It indicates a statistically significant, strong positive relationship between leadership and performance  $r=0.636$ ,  $p<0.100$ . This means that If leadership is improved and developed, then the performance in Saudi Post will also improve and evolve. Also, it indicates a statistically significant, strong positive relationship between quality assurance and performance  $r=0.861$ ,  $p<0.100$ . This support the second hypothesis, H2, "Better quality assurance it will improve and evolve in performance Saudi Post". There is also a statistically significant, positive relationship between quality of service provided to costumers and improving and developing performance  $r=0.724$ ,  $p<0.100$ . This means that improving and developing performance also associated with improve and evolve quality of service provided to costumers. There is a statistically significant, positive relationship between operations management and performance  $r=0.748$ ,  $p<0.100$ . Lastly, there is influence training of employees on performance  $r=0.745$ ,  $p<0.100$ . This means that an influence positive.

Table 5. Spearman's rho Correlation

			Leadership	Quality	Service	Operation	Employees	Performance
Spearman's rho	Leadership	Correlation Coefficient	1.000	.865**	.718*	.726**	.730**	.632**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000
		N	175	175	175	175	175	175
	Quality	Correlation Coefficient	.865**	1.000	.736*	.782**	.770**	.657**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000
		N	175	175	175	175	175	175
	Service	Correlation Coefficient	.718**	.736**	1.000	.819**	.700**	.629**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000
		N	175	175	175	175	175	175
	Operation	Correlation Coefficient	.726**	.782**	.819*	1.000	.823**	.743**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000
		N	175	175	175	175	175	175
	Employee	Correlation Coefficient	.730**	.770**	.700*	.823**	1.000	.791**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000
		N	175	175	175	175	175	175
	Performance	Correlation Coefficient	.632**	.657**	.629*	.743**	.791**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.
		N	175	175	175	175	175	175

\*\* . Correlation is significant at the 0.01 level (2-tailed)

Table (5) represents the correlation Coefficient matrix. It indicates a statistically significant, strong positive relationship between leadership and performance  $r=0.632$ ,  $p<0.100$ . This means that If leadership is improved and developed, then the performance in Saudi Post will also improve and evolve. Also, it indicates a statistically significant, strong positive relationship between quality assurance and performance  $r=0.865$ ,  $p<0.100$ . This support the second hypothesis, H2, "Better quality assurance it will improve and evolve in performance Saudi Post". There is also a statistically significant, positive relationship between quality of service provided to costumers and improving and developing performance  $r=0.718$ ,  $p<0.100$ . This means that improving and developing performance also associated with improve and evolve quality of service provided to costumers. There is a statistically significant, positive relationship between operations management and performance  $r=0.726$ ,  $p<0.100$ . Lastly, there is influence training of employees on performance  $r=0.730$ ,  $p<0.100$ . This means that an influence positive.

#### 4.4 Factor analysis

Factor analysis used to reduce the number of variables to underlying dimension, and to analysis and interpretation of the correlated variables. In the following table, we will able to know if the variables are suitable for factor analysis.

Table 6. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	1020.541
	Df	15
	Sig.	.000

Table (6) indicates that the value of KMO test, which equals 0.897, it is an acceptable value where the minimum value is 0.50. Thus, the sampling adequacy is acceptable for factor analysis. According to Bartlett's Test of Sphericity, which is below 0.05 and equals 0.00, the data that have been gathered is suitable and the suitability

and validity are high.

Table 7. Anti-image Matrices

		Leadership	Quality	Service	Operation	Employee
Anti-image Covariance	Leadership	.239	-.122-	-.042-	.005	-.028-
	Quality	-.122-	.184	-.023-	-.049-	-.033-
	Service	-.042-	-.023-	.302	-.104-	-.006-
	Operation	.005	-.049-	-.104-	.193	-.065-
	employee	-.028-	-.033-	-.006-	-.065-	.225
Anti-image Correlation	Leadership	<b>.880<sup>a</sup></b>	-.581-	-.155-	.025	-.122-
	Quality	-.581-	<b>.873<sup>a</sup></b>	-.095-	-.261-	-.161-
	Service	-.155-	-.095-	<b>.924<sup>a</sup></b>	-.433-	-.023-
	Operation	.025	-.261-	-.433-	<b>.891<sup>a</sup></b>	-.310-
	employee	-.122-	-.161-	-.023-	-.310-	<b>.905<sup>a</sup></b>

The Measures of Sampling Adequacy (MSA) must be above 0.5. Table (7) points that the value of each individual variable is well above 0.5, so the MSA overall and for each variable is sufficiently large. The MSA for leadership value is equal to 0.880 while quality is 0.873. The service MSA value is equal to 0.924, operation 0.891, and employee is 0.905.

Table 8. Communalities

	Initial	Extraction
Leadership	1.000	.781
Quality	1.000	.841
Service	1.000	.759
Operation	1.000	.856
employee	1.000	.829

Extraction Method: Principal Component Analysis.

Communalities represent the extent of the variance. As table (8) indicates, the communalities are high due to their values which are above 0.5 in all variables. 78.1% of the variance is accounted for leadership, 84.1 % of the variance is accounted for quality, 75.9% of the variance is accounted for service, while 85.6% of the variance is accounted for the operation. The last variance is accounted for employee variable is 82.9%.

Table 9. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.071	56.283	56.283	14.071	56.283	56.283	7.126	28.504	28.504
2	1.372	5.489	61.772	1.372	5.489	61.772	6.528	26.110	54.615
3	1.246	4.983	66.755	1.246	4.983	66.755	3.035	12.140	66.755
4	.943	3.772	70.527						
5	.865	3.460	73.987						
6	.737	2.946	76.933						
7	.664	2.654	79.587						
8	.573	2.291	81.878						
9	.540	2.160	84.037						
10	.458	1.830	85.868						
11	.442	1.768	87.636						
12	.410	1.638	89.274						
13	.352	1.409	90.683						
14	.307	1.228	91.911						
15	.287	1.149	93.060						
16	.248	.992	94.051						
17	.237	.948	95.000						
18	.211	.846	95.845						
19	.201	.803	96.648						
20	.171	.682	97.330						
21	.167	.668	97.998						
22	.148	.593	98.592						
23	.132	.528	99.120						
24	.125	.502	99.621						
25	.095	.379	100.000						

Extraction Method: Principal Component Analysis.

Table (9) shows that factor 1 explains a large amount of variance, as well as the other first few factors, while the next factors interpret only small amounts of variance.

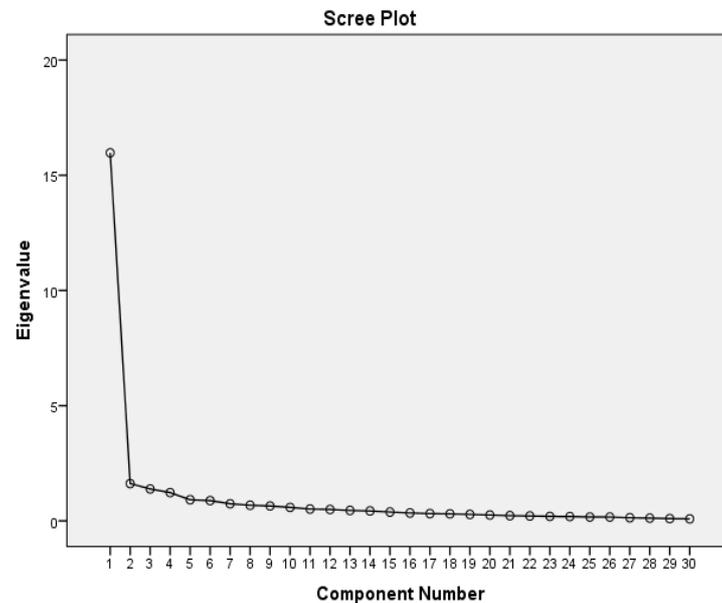


Figure 2. Scree plot

Table 10. Component Matrixa

	Component		
	1	2	3
Q18	.873		
Q4	.859		
Q6	.834		
Q13	.833		
Q19	.832		-.322-
Q17	.831		-.320-
Q8	.814		
Q10	.798		
Q3	.791	-.339-	
Q23	.783		
Q7	.771		
Q16	.771		
Q14	.759		
Q5	.755		
Q2	.754		.304
Q9	.749		
Q24	.733		
Q20	.722		
Q22	.720		-.340-
Q25	.700		
Q1	.677		.357
Q12	.626		
Q11	.600	.359	.416
Q15	.506	.490	
Q21	.511	.588	.329
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

Table (10) shows that all the variables values are above 0.3, which mean it is significant. This mean all the data are valid to interpretation.

Table.11 Reproduced Correlations

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	
Reproduced Correlation	Q1	.619	.668	.638	.638	.573	.623	.617	.527	.536	.488	.441	.488	.430	.347	.504	.422	.524	.417	.338	.354	.338	.451	.556	.493	
	Q2	.668	.733	.722	.716	.641	.687	.674	.693	.595	.619	.483	.463	.550	.492	.332	.559	.492	.600	.484	.390	.328	.399	.527	.629	.549
	Q3	.638	.722	.754	.748	.665	.700	.679	.724	.631	.681	.400	.440	.600	.550	.265	.585	.574	.667	.564	.456	.242	.480	.605	.663	.571
	Q4	.638	.716	.748	.774	.685	.738	.700	.742	.664	.711	.478	.509	.683	.624	.364	.648	.668	.736	.663	.557	.354	.569	.663	.674	.611
	Q5	.573	.641	.665	.685	.607	.654	.622	.657	.585	.624	.428	.450	.595	.542	.322	.569	.576	.642	.572	.479	.314	.489	.577	.597	.538
	Q6	.623	.687	.700	.738	.654	.717	.676	.705	.633	.667	.524	.525	.667	.603	.417	.636	.643	.705	.641	.547	.422	.547	.626	.635	.591
	Q7	.612	.674	.679	.700	.622	.676	.647	.671	.594	.623	.485	.480	.598	.539	.367	.582	.564	.639	.560	.469	.367	.473	.566	.607	.552
	Q8	.617	.693	.724	.742	.657	.705	.671	.712	.634	.679	.446	.477	.640	.585	.330	.612	.623	.694	.617	.515	.319	.528	.626	.648	.581
	Q9	.527	.595	.631	.664	.585	.633	.594	.634	.575	.619	.407	.444	.610	.560	.322	.570	.608	.653	.605	.515	.314	.523	.592	.575	.529
	Q10	.536	.619	.681	.711	.624	.667	.623	.679	.619	.680	.372	.444	.657	.610	.288	.604	.671	.713	.667	.564	.268	.582	.656	.621	.562
	Q11	.488	.483	.400	.478	.428	.524	.485	.446	.407	.372	.662	.521	.485	.407	.591	.484	.416	.453	.427	.397	.654	.345	.358	.378	.421
	Q12	.441	.463	.440	.509	.450	.525	.480	.477	.444	.444	.521	.465	.525	.463	.466	.496	.499	.520	.506	.456	.500	.429	.444	.417	.436
	Q13	.488	.556	.600	.683	.595	.667	.598	.640	.610	.657	.485	.525	.730	.670	.444	.683	.756	.754	.761	.675	.482	.668	.683	.574	.574
	Q14	.430	.492	.550	.624	.542	.603	.539	.585	.560	.610	.407	.463	.670	.620	.375	.594	.704	.698	.707	.625	.376	.624	.637	.527	.522
	Q15	.347	.332	.265	.364	.322	.417	.367	.330	.322	.288	.591	.466	.444	.375	.568	.422	.403	.399	.418	.404	.634	.348	.315	.272	.345
	Q16	.504	.550	.585	.648	.569	.636	.582	.612	.570	.604	.484	.496	.653	.594	.422	.600	.654	.676	.657	.577	.433	.570	.604	.548	.537
	Q17	.422	.492	.574	.668	.576	.643	.564	.623	.608	.671	.416	.499	.756	.704	.403	.654	.813	.785	.818	.729	.402	.728	.723	.561	.566
	Q18	.524	.600	.667	.736	.642	.705	.639	.694	.653	.713	.453	.520	.754	.698	.399	.676	.785	.794	.786	.686	.393	.691	.726	.628	.605
	Q19	.417	.484	.564	.663	.572	.641	.560	.617	.605	.667	.427	.506	.761	.707	.418	.657	.818	.786	.825	.737	.420	.734	.723	.555	.565
	Q20	.338	.390	.456	.557	.479	.547	.469	.515	.515	.564	.397	.466	.675	.625	.404	.577	.729	.686	.737	.667	.413	.657	.628	.460	.487
	Q21	.354	.328	.242	.354	.314	.422	.367	.319	.314	.268	.654	.500	.452	.376	.634	.433	.402	.393	.420	.413	.714	.346	.301	.256	.347
	Q22	.338	.399	.480	.569	.489	.547	.473	.528	.523	.582	.345	.429	.668	.624	.348	.570	.728	.691	.734	.657	.346	.657	.640	.476	.487
	Q23	.451	.527	.605	.663	.577	.626	.566	.626	.592	.656	.358	.444	.682	.637	.315	.604	.723	.726	.723	.628	.301	.640	.672	.570	.542
	Q24	.556	.629	.663	.674	.597	.635	.607	.648	.575	.621	.378	.417	.574	.527	.372	.548	.561	.628	.555	.460	.256	.476	.570	.592	.524
	Q25	.493	.549	.571	.611	.538	.591	.552	.581	.529	.562	.421	.436	.574	.522	.345	.537	.566	.605	.565	.487	.347	.487	.542	.524	.493
Residuals	Q1		.075	-.084	-.018	-.108	-.048	-.084	-.053	-.026	-.068	-.012	-.013	.074	.049	-.045	-.045	.039	-.027	-.011	.075	-.036	.081	.050	-.010	-.115
	Q2	.075		-.048	-.032	-.081	-.087	-.126	-.046	.011	.004	-.037	.023	.000	.011	-.026	-.045	-.013	-.012	.005	.009	.030	.068	.031	.014	-.020
	Q3	-.084	-.048		.052	.013	.022	-.020	.034	-.074	-.026	-.048	.035	-.005	-.005	.062	-.062	-.001	.002	.033	.031	.027	-.028	-.041	-.071	-.057
	Q4	-.018	-.032	.052		.051	.033	-.051	-.003	-.060	-.010	-.044	-.031	.002	-.027	.071	-.045	.003	-.009	.010	.013	.009	.019	-.039	-.073	-.075
	Q5	-.108	-.081	.013	.051		.050	-.041	-.079	-.075	-.020	-.045	-.073	-.038	-.021	.092	.076	.010	-.005	.042	-.040	.004	-.055	-.047	-.007	-.011
	Q6	-.048	-.087	.022	.033	.050		.071	-.005	-.078	-.008	-.039	-.054	-.025	-.037	.009	-.042	.004	-.052	.064	.005	.020	.008	-.051	-.055	-.037
	Q7	-.084	-.126	-.020	-.051	-.041	.071		.013	.040	-.062	.017	-.013	-.029	-.045	-.028	.021	.039	.020	.014	-.043	-.022	-.030	.016	-.080	.031
	Q8	-.053	-.046	.034	-.003	-.079	-.005	.013		-.055	-.002	-.001	-.003	-.008	-.045	.038	.066	-.028	.010	-.022	-.017	-.002	-.003	.014	-.092	-.052
	Q9	-.026	.011	-.074	-.060	-.075	-.078	.040	-.055		.054	.086	-.056	-.011	.011	-.032	-.001	-.036	.001	-.067	.049	-.014	.014	-.054	-.011	-.012
	Q10	-.068	.004	-.026	-.010	-.020	-.008	-.062	-.002	.054		.036	-.066	.003	.019	.007	.021	-.059	-.031	-.021	-.021	.058	-.016	-.050	-.020	-.034
	Q11	-.012	-.037	-.048	-.044	-.045	-.039	.017	-.001	.086	.036		-.039	.043	.064	-.163	-.007	-.006	-.019	-.008	-.008	-.123	.006	.021	-.020	-.015
	Q12	-.013	-.023	.035	-.031	-.073	-.054	-.013	-.003	-.056	-.066	-.039		.043	-.030	-.128	-.076	-.020	.034	-.012	.010	-.097	-.006	.021	.012	.023
	Q13	.074	.000	-.005	.002	-.038	-.025	-.029	-.008	-.011	.003	.043	.043		.087	-.059	-.005	-.018	-.036	-.033	-.018	-.059	-.062	-.034	-.064	-.054
	Q14	.049	.011	-.005	-.027	-.021	-.037	-.045	.045	.011	.019	.064	-.030	.087		-.020	.157	-.004	.008	-.069	-.043	-.082	-.130	-.098	-.117	-.143
	Q15	-.045	-.026	.062	.071	.092	.009	-.028	.038	-.032	.007	-.163	-.128	-.059	-.020		.016	.026	-.016	.027	-.075	-.119	.001	.002	.018	-.069
	Q16	-.045	-.045	-.062	-.045	.076	-.042	.021	.066	-.001	.021	-.007	-.076	-.005	.157	.016		-.019	.044	-.046	-.122	-.038	-.100	-.054	-.055	-.011
	Q17	.039	-.013	-.001	.003	.010	.004	.039	-.028	-.036	-.059	-.006	-.020	-.018	-.004	.026	-.019		-.001	.021	-.046	-.025	-.078	-.025	.016	.013
	Q18	-.027	-.012	.002	-.009	-.005	-.052	.020	.010	.001	-.031	-.019	.034	-.036	.008	-.016	.044	-.001		-.010	-.020	.015	-.074	-.058	.007	.001
	Q19	-.011	.005	.033	.010	.042	.064	.014	-.022	-.067	-.021	-.008	-.012	-.033	-.069	.027	-.046	.021	-.010		-.041	-.009	-.019	-.034	.001	-.009
	Q20	.075	.069	.031	.013	-.040	-.005	-.043	-.017	.049	-.021	-.008	.010	-.018	-.043	-.075	-.122	-.046	-.020	-.041		.030	-.027	-.064	-.004	.000
	Q21	-.036	.030	.027	.009	.004	.020	-.022	-.002	-.014	.058	-.123	-.097	-.059	-.082	-.119	-.038	-.025	.015	-.009	.030		.035	.018	.053	.056
	Q22	.081	.068	-.028	.019	-.055	.008	-.030	-.003	.014	-.016	.006	-.006	-.062	-.130	.001	-.100	-.078	-.074	-.019	-.027	.035		.106	.054	-.048
	Q23	.050	.031	-.041	-.039	-.047	-.051	.016	.014	-.054	-.050	.021	.021	-.034	-.098	.0										

Table 12. Rotated Component Matrixa

	Component		
	1	2	3
Q2	.797		
Q3	.789	.349	
Q4	.717	.463	
Q1	.714		.304
Q8	.709	.419	
Q7	.681	.332	
Q6	.660	.427	.315
Q24	.656	.383	
Q5	.649	.383	
Q10	.608	.548	
Q9	.575	.458	
Q25	.509	.415	
Q19	.326	.808	
Q17	.345	.799	
Q22		.745	
Q20		.734	
Q18	.509	.695	
Q23	.454	.670	
Q13	.425	.669	.320
Q14	.382	.646	
Q16	.471	.519	.330
Q21			.809
Q11	.349		.717
Q15			.700
Q12	.352	.331	.481
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 6 iterations.			

Table (12) presents the loadings of the four variables on the four factors extracted.

Table 13. Component Transformation Matrix

Component	1	2	3
1	.674	.641	.366
2	-.620-	.222	.753
3	.401	-.734-	.547
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			

The table (13) shows the amount and strength of the correlation between factors before and after recycling.

#### 4.5 Reliability

Table 14. Case Processing Summary

		N	%
Cases	Valid	175	100.0
	Excluded <sup>a</sup>	0	.0
	Total	175	100.0
a. Listwise deletion based on all variables in the procedure.			

Table 15. Reliability Statistics

Cronbach's Alpha	N of Items
.947	6

Table (15) shows that the Cronbach's Alpha coefficient is above 0.7 and equals 0.947. Thus, the reliability of the scale is good and acceptable.

Table 16. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Leadership	11.5189	18.108	.829	.938
Quality	11.5520	18.351	.877	.932
Service	11.8651	19.453	.815	.940
Operation	11.4731	17.673	.886	.931
employee	11.4491	18.294	.868	.933
performance	11.5703	19.413	.761	.946

#### 4.6 Multiple Regression

Table 17. Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	employee, Service, Leadership, Operation, Quality <sup>b</sup>	.	Enter
a. Dependent Variable: performanc			
b. All requested variables entered.			

Table 18. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.795 <sup>a</sup>	.633	.622	.56602	2.130
a. Predictors: (Constant), employee, Service, Leadership, Operation, Quality					
b. Dependent Variable: performance					

This table (18) shows the correlation coefficient between the dependent variable and the independent variables in the second column is 0.795, as well as R square in the third column 0.633, and the adjusted R square in the fourth column 0.622 is less than R square with a very small difference, the standard error in the estimate 0.566 is medium, because original range of possible satisfaction value is 10. This explains (Leadership, quality, service, operation, and employee) 63.3% of the variance of the dependent variable (performance) which is a significant percentage. As Durbin-Watson is equaled 2.130.

Table 19. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.244	5	18.649	58.208	.000 <sup>b</sup>
	Residual	54.145	169	.320		
	Total	147.388	174			
a. Dependent Variable: performance						

ANOVA table (19) above is highly significant F = 58.208 and Sig. = 0.000 is less than 0.05. This means that we reject null hypothesis and accept the alternative hypothesis, the overall regression model explains a significant amount of the variance in performance.

Table 20. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.425	.122		3.474	.001
	Leadership	.038	.085	.043	.448	.654
	Quality	-.008	.105	-.008	-.076	.939
	Service	.037	.090	.035	.414	.680
	Operation	.208	.093	.233	2.224	.027
	employee	.510	.085	.537	6.022	.000
a. Dependent Variable: performance						

Table (20) shown that standardized coefficients Beta of the variable of the employee is the highest value among the other variables and is equal 0.537, meaning that the employee has a higher impact than other variables. Whereas, the standard standardized Beta for the quality variable shows a negative value i.e. there is a reverse correlation with a performance. If Sig. = 0.000 is below 0.05 i.e. that significant predictor, and vice versa, thus, this indicates that employee is a significant predictor of performance, where t value for the employee is equal 6.022, which is also highest value among variables. While, variables are leadership, quality, and service is greater than 0.05 i.e. it has no effect in the regression equation. Thus, there is a correlation but insignificance.

Table 21. Coefficient Correlationsa

Model			employee	Service	Leadership	Operation	Quality
1	Correlations	employee	1.000	-.040	-.150	-.426	-.175
		Service	-.040	1.000	-.157	-.445	-.095
		Leadership	-.150	-.157	1.000	.020	-.582
		Operation	-.426	-.445	.020	1.000	-.263
		Quality	-.175	-.095	-.582	-.263	1.000
	Covariances	employee	.007	.000	-.001	-.003	-.002
		Service	.000	.008	-.001	-.004	-.001
		Leadership	-.001	-.001	.007	.000	-.005
		Operation	-.003	-.004	.000	.009	-.003
		Quality	-.002	-.001	-.005	-.003	.011

a. Dependent Variable: performance

Table 22. Residuals Statisticsa

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2100	4.3502	2.3154	.73204	175
Residual	-1.78027	1.75890	.00000	.55783	175
Std. Predicted Value	-1.510	2.780	.000	1.000	175
Std. Residual	-3.145	3.107	.000	.986	175

a. Dependent Variable: performance

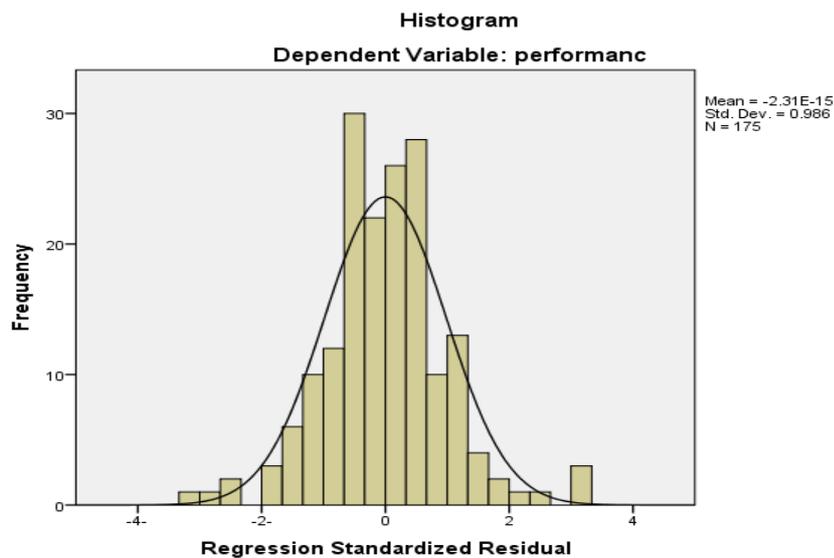


Figure 3. Regression Standardized Residual

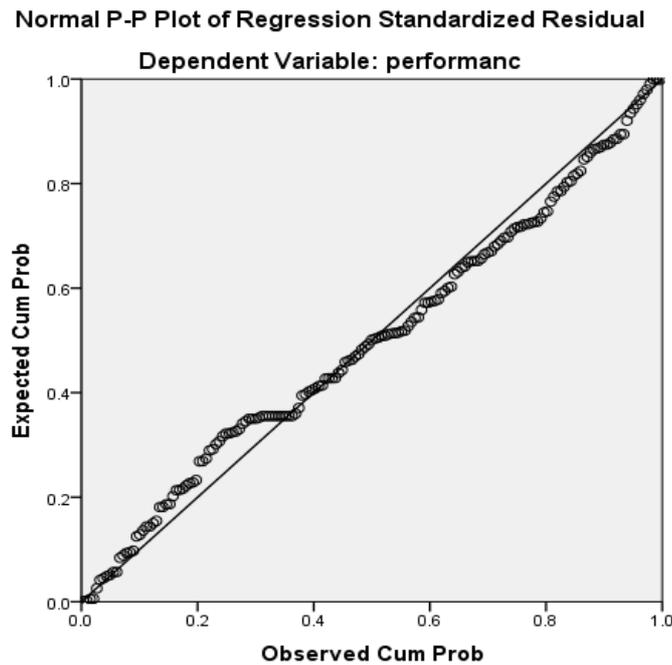


Figure 4. Observed Cum Prob

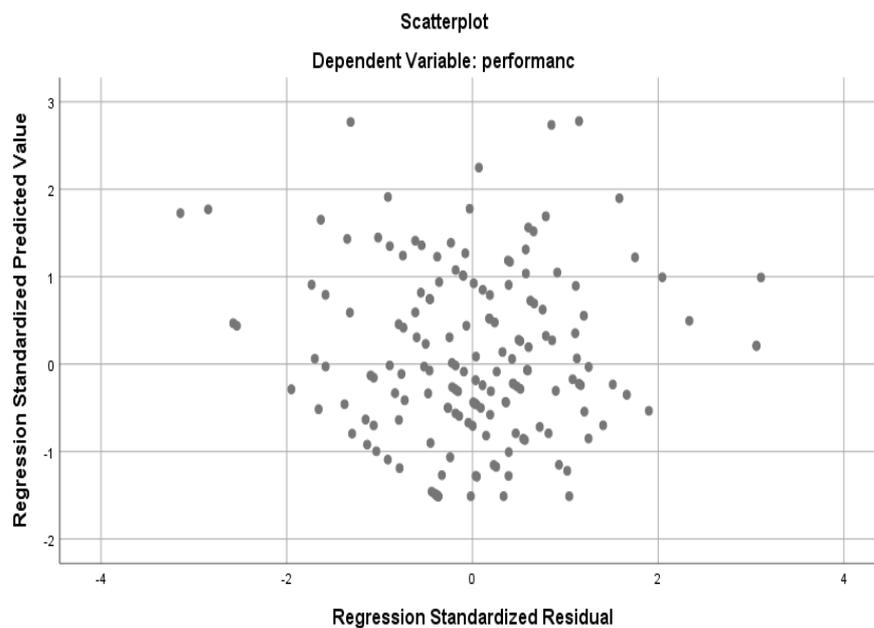


Figure 5. Regression Standardized Predicted Value

## 5. Conclusion

Total Quality Management is the integration of all functions and processes within the organization in order to continuously improve the quality of goods and services. The concept of total quality is considered a modern management concept and has become the focus of organizations and seeks to apply it to improve their performance and eliminate problems before they occur. This is what Saudi Post has sought since 2007 to apply total quality standards and establish an independent quality management.

The study aimed to identify complying with standards and principles of total quality management and its role in the performance of Saudi Post. In addition to investigating statistical differences from the point of view of employees to standards and principles total quality management due to region, qualification, and number of years' work. To achieve the objectives of this study, the researcher designed a questionnaire consisting of 30 paragraphs to gather the primary information from study sample. The statistical package for social sciences SPSS program

was used to analyze. The study sample consists of 175 employees in Saudi Post. The researcher planned each region for 30 responses, and the total number of sample 150, the result got on 175 responses.

Nevertheless, the results study conducted that Saudi Post interested the total quality management, and implements its principles and standards at a different level between regions. Also, showed that level improvement and performance development in central region the highest than other areas.

The study used many statistical methods after executing the analysis, the study concluded that:

1. There is statistically significant strong positive relationship between management of operations training and education of employees, and performance, whereas leadership, quality assurance, and quality of customer service have negative relationship with performance in Saudi Post.
2. The performance level improves and develops if there is improved and developed for leadership, quality assurance, quality of customer service in future.

most important are recommendations with suggestions for their implementation:

1. Promote and ensure the implementation of total quality management in Saudi Post.
2. Attention in customer complaints, work on improves and develops leadership, quality assurance, and quality of customer service to solve problems: delay, loss of Postal material, distributing mail to clients, and address inaccuracy.
3. Also, necessary to develop front-line services such as internet, packaging of parcels, and payment via the Visa.

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