



**THE EFFECT OF TOTAL QUALITY MANAGEMNET ON
ORGANIZATION PERFORMANCE IN ETHIOPIAN FEDERAL
TRANSPORT AUTHORITY**

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**THE EFFECTS OF TOTAL QULITY MANAGEMENT ON
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TRANSPORT AUTHORITY**

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The work is original in nature and is suitable for submission for the award of the Master of Science Degree in Management.

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DECLARATION

I the under signed, hereby declare that the thesis entitled “**The effects of total quality management on organization performance: In the Case of Federal Transport Authority**” is my original work and has not been submitted to any other college, institution or university other than Addis Ababa University for the award of the Degree of Master Science in management at Addis Ababa and that all sources of material used for the study have been appropriately acknowledged.

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Abstract

The broad purpose of this study was to examine the effects of total quality management dimensions on organizational performance and adopted a descriptive research and explanatory research design. Federal transport authority staffs who are working at head office are targeted as the population of this study. This study used a purposive sampling technique to select sample respondents. The sample size of this study was therefore 248 staffs of Federal transport authority. The study used primary data that has been collected by use of questionnaires. Correlation analysis was conducted to know the strength of association between Total quality management dimensions namely: customer focus, employees' management, leadership, training and continuous improvement, and organizational performance. Multiple regression analysis were also conducted to analyze the effect of independent variables on Organization performance. The finding of the study showed that customer focus has the higher influence on organization performance

Keywords: Organization performance, customer focus, leadership, training, continuous improvement.

List of acronyms

TQM – Total quality Management
PM – Performance Management
PMS – Performance Management System
SPSS - Statistical Package for Social Science

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Chapter One: Introduction

1.1 Background of the Study

As it has been hypothesized by Douglas and Judge (2001), the idea of Service Quality is fundamentally very easy, with regard to the provision of goods or services that meet or exceed the expectations of customers. Quality in the process of goods or service delivery is became fundamental issue all fields since it is accepted that only by satisfying its customers can an organization can make loyal its customer base and certainly expand it for the future. It should be noted that quality doesn't refer only business context, it can also applied to public sector for its service delivery to the public.

Service Quality as a philosophy emerged around the world with the intention of establishing and maintaining service standard for organizations that seek to achieve and maintain a considerable market share. Quality standards measurements were began on the 20th century based upon scientific principles and accurate statistical measurements of quality. The term quality refers to consistency or excellence of standards in products or services,(Kehoe 1996).

According to Flexstudy, (2011), the concept of Service Quality goes back to the early 1950s by the time the United States had domination in car manufacturing, electronics and agriculture. Then after concept expanded to various parts of the world and changed the way that business functioned at the global level. Kaynak (2003) suggested that the justification why the concept of quality is accepted at a global level is that understanding was created on the influence of quality management on organizations performance. In other expressions, it is very clear that those who want to receive the product or the service will not willing to pay for poor quality products or services that resulted from a lack of effective quality management (Sila, 2007).TQM is an organizational approach with the intention to enhance quality of products or services to meet or exceed customer expectation (Kevin, Kristal Jia, & Robert, 2011).

From the beginning, quality concept was existed in manufacturing context but through time the concept was expanded to the service sector and its importance towards crating satisfied customers and bringing improved organization performance was realized. Organization

performance can be expressed in terms of reduction in expenditure and errors, improved service, efficient use of resources, increased output and the like (Sajjad&Amjad, 2012).

Even though the idea of service quality began in a business context, it has been also seen in public service sector for instance, health care, hospitality and retail. These sectors have the aim of developing a reputation for quality and excellence of service (Flexstudy, 2011). In reality, it can be seen that quality management is significant for the service sector as it is critical to the manufacturing sector. TQM is crucial equally for both service organizations and manufacturing firms

Because of the influence of globalization, extensive use and ease of use of cutting age technology, almost all firms are rendering like services while the market is the same. It is very straightforward that always customer desires the best choice that provides advanced quality. Total quality management (TQM) is the management philosophy that can advance the quality of service successfully and proficiently through ongoing customer feedback monitoring and continuous improvement process. Moreover, TQM can be also explained as a strategy that wished to create and deliver superior services, through establishing strong cooperation between organizational members or employees (Lakhal et al., 2006).

Hashmi, (2000 & 2004) highlighted that TQM is the new management approach that works to enforce all functions of the organization to concentrate on exceeding customer's expectations and key objective of organization. Over the last a couple of decades, the concept of TQM has become comprehensively applied management philosophy and is recognized a fundamental concept in leading the organization successfully. In today's world where things are changed quickly organizations perceived TQM as innovative management quality approach (Arumugam et al., 2009).

As a quality framework, total quality management has been used as a key factor within the public sector. One view in support of the applicability of TQM to the public sector is that government is itself, a service-driven industry and hence, would respond well to its philosophy, whereas one argument against the use of TQM in this arena is that government has different goals from business and consequently, the approach is inappropriate (Kluse, 2009).

In contrary, total quality management might be perceived as contradictory with other management functions. Here Lopez-Mielgo et al. (2009) argued that there are times at which TQM is viewed as a constraint that influence the organization to be not innovative. However, their research shown that when properly used, the association between TQM and innovation positive or direct proportional than negating it.

In this regard Corredor and Goni, (2011), proved that TQM is still used by various organizations because the organizations that applied the philosophy of TQM have realized remarkable increases in performance (Corredor and Goni, 2011)

Because a customer and the service provider are directly connected one with another, customers are more sensitive about the quality of service in service sector than the manufacturing sector (Safakli, 2004). So care has to taken so as to meet customers' expectation and increase the organization performance. The reality that organizations success and continuation in a highly turbulent situation can be achieved only through delivering excellence service (Wang & Hui, 2003). Vanniarajan, (2007) in his study proved the existence of positive and significant association between internal services quality and organizational performance in a service giving organization.

In addition to continuous process improvement, total Quality Management is based on the fact that all organization employees should work together for the aim of providing high quality products and services in order to exceed customers' expectation. A strategy that could minimize errors is by controlling processes of the service and employees' involvement should be implemented in order to boost customer satisfaction to the expected level. Moreover, TQM is a function of various quality instruments and techniques, on the top of various standards and attitudes that all employees within various functions of an organization shares (Gharakhani et al., 2013).

The basic philosophy of public sector started to change in the 1980's, when reforms and structural changes were being suggested and advocated in this sector around the globe. The new management philosophy was labeled as New Public Management and the major reasons for expansion of this idea were the basic problems of efficiency and effectiveness associated with the public sector (Boston et al. 1996).

The new public management approach involved the idea of quality and Total Quality Management. This idea has gained success in the corporate or business environment and is now being worked upon in the public sector. TQM is about continuous improvement, not just one time change in a system (Ünal, 2011); it is a holistic approach to operations and management.

The Public service sector could not remain isolated from the changing public sector environment and it is also started to adopt quality management practices (Christensen, 2011).

According various reviewed literatures to undertake this study, the researcher has learned that there are several Total quality Management dimensions. As far as this particular study is concerned, Customer focus, employees' management, leadership, training and continuous improvement are taken as dimensions of TQM and their effect on organization performance has been thoroughly examined by taking Ethiopian Federal transport authority as case study.

1.2 Background of the organization

The federal transport authority is public service enterprise which is established as part of ministry of Transport under the proclamation to provide for the regulation of transport number 257/6.

The organization restructured in 2017 GC refers to the way that an organization arranges people and jobs so that its work can be performed and its goals can be met The vision of the organization is "to see truly, fast, reliable and reasonable price transportation distribute for all the people." Its mission is to ensure the provision of modern integrated and safe road transport service to meet the needs of all the communities for strong and unitary economic and political system in Ethiopia.

The authority organized the general manager, three vice general manager, nine core process and seven supportive process managers together with nine special teams which is directly accountable to the general managers and the vertical arrangements are small scale and decentralization of the authority and decision making. The authority has wide span of organizational structure.

The authority issues and renews different categories of driving licenses, conducts vehicles registration and producers ownership certificate, register transport vehicles owners association and control and regulates their dispatches. Issue permit for different categories of garages and parking

operators, collects traffic enforcement penalty fees, register and regulates drivers training and vehicle inspection of privates, companies and firms. These are the main type of services that the authority delivers with its 650 employees which are almost permanently employed. The above diversified types of services indicate that the authority is one of the well-known public service sector and with plenty of customers.

1.2 Statement of the problem

In today's dynamic environment and fast paced world, is not only the business sector that is vastly influenced by total quality management, the public sector is also affected by TQM practices (Amin, 2006) .TQM is an incorporated management approach that is necessary to be practical at each and every organizational levels (Oakland, 2003) . This is to mean that it will not be effective if implemented in bits and pieces.

Due to the ever increasing stiff global competition and leading an organization successfully has became a very challenging task. As such the significance of total quality management is growing not only to satisfy customers but also to exceed their expectation. However, developing countries like Ethiopia in their quality of products and services is yet to improve. It gets worse when it comes to Public service.

TQM is naturally significant to the public sector, because it is a process oriented approach that seeks to increase productivity, reduce costs and improve quality (James and James, 1998). Many public Institutions in Ethiopia have adopted TQM philosophy but there are indicators where the public sector has not improved as the expected level.

It is the hard fact that ensuring TQM to customers is important for any organizations regardless of whether it profit oriented or public service.

Literature review on the topic being studied i.e. TQM, revealed that a bit few studies has been done on the service quality and the degree of association between TQM and organizational performance , but only a limited number of studies on TQM and organization performance in the public sector have been done. Even most of them are concentrated on the manufacturing sectors or business firms. Researchers like (Syed Sohaib, 2013), (Neyer and Eko, 2017) have recommended the importance of taking many more study to dig out the influence of Total quality dimensions towards bringing better organizational performance through delivering high service

quality and meeting customer's expectation. Most empirical studies reviewed and presented in the next chapter have stressed the importance and influence of Total quality management towards achieving the overall organizational performance in different sectors.

However, in spite of all these studies and findings the service industry especially, the public service experience in Ethiopia is in against to the concept of total quality management in its performance. Before Diving to the main the study, the researcher has made discussions with different team members of Ethiopian Federal transport authority on September 2021 and found that TQM is given little consideration.

Hence, there is a need to examine the effect of total quality management (TQM) on organization performance in the public sector. Thus, the very importance of this particular research is to determine the effect of Total quality management on organization performance in Ethiopia Federal transport Authority

In line with its main objective, this study has tried to look into the influences total quality management dimensions in achieving organizational performance in the public sector. The study has also identified Customer focus, employees management, leadership , training and continuous improvement as key dimensions of TQM that affected organization performance in the public sector, specifically in Federal transport Authority

1.3 Research questions

From the context of addressing the research problem and meet the objectives of the study, the researcher has established the following broad general research:

- What is effect of Total quality Management on organization performance in Federal transport Authority?

The specific research questions which are extracted from the main research question of this study are presented as follows:

- How does customer focus influence organizational performance of Federal transport Authority?
- How does employees' management influence the performance of the organization?

- How does leadership influence the performance of Federal transport Authority?
- To what extent training influence the performance of Federal transport Authority?
- How does continuous improvement influence performance of Federal transport Authority?
- Among TQM dimensions which factors have a higher impact on organization performance in Federal transport Authority?

1.4 Objectives of the Study

1.4.1 General Objectives of the Study

With the intention to address the above raised research questions, the study has established the following research objectives:

Accordingly, the main purpose of this study is to explore the effect of Total quality Management on organization performance in Federal transport Authority.

1.4.2 Specific Objectives of the Study

The specific objectives of this research which are cascaded from the general research objective are:

- To determine the effect of customer focus on the organization performance in Federal transport Authority.
- To know the influence of employees management on organization performance in Federal transport Authority.
- To examine the influence of leadership on the organization performance in Federal transport Authority.
- To examine the influence of training on organization performance in Federal transport Authority.
- To examine the influence of continuous improvement on the organization performance in Federal transport Authority.
- To investigate which factor has a higher influence on organization performance in Ethiopian Federal Transport authority?

1.5 significance of the study

This study believed to make significant importance to the academic literature and the transport industry. The primary purpose of this study is to determine the TQM dimensions that would affect the organizational performance in Federal transport Authority.

Most importantly, the Finding of this study is greatly assumed to add knowledge to the existing literature and can also be used as a reference for future researchers. Furthermore, this study will contribute to the limited knowledge available on the application of total quality management in the Ethiopian public sector. Lastly, this research has clearly mentioned its limitation which can be used as baseline for future researcher works.

1.6. The scope of the study

Theoretically, this research is restricted to examine the effects of Total quality Management on organization performance of Federal transport Authority.

With regards to geographical scope, the research is bounded to study within the capital city of Ethiopia, Addis Ababa

In addition to theoretical and geographical scope, the study has a methodological scope. As such adequate sample size was determined and the effect of Total quality Management on organization performance has been analyzed using regression and correlation method of data analysis.

1.7 Organization of the study

The remaining parts of this study are structured under four Major chapters which start from literature review, chapter two to chapter five, i.e. conclusion and recommendation

Where chapter two deals with literature review. In this section of the study theoretical and empirical reviews are thoroughly made, finally, based on empirical evidences and theories reviewed, the conceptual framework was developed.

Following the literature review, research methodology, including research approach, research design, and population of the study. Sample size, method of data collection and analysis are discussed in chapter three to meet the objectives of this study.

Data presentation, analysis and interpretation are discussed in the fourth chapter of the study. Aimed for addressing the research objectives, statistical analysis such as descriptive analysis, correlation analysis and regression analysis were carefully conducted. And also the results of the research finding are interpreted in this section of the study.

The last but not the least chapter of the study, chapter five, clearly illustrates all the research findings; conclusions and recommendations. This chapter also deals with future research directions for future researchers.

Chapter 2: Literature Review

2.1 Introduction

After setting a background, establishing problem statement and research questions, setting objectives and scope, this study highlights past total quality management researches conducted in the domain of service industry, especially the public sector.

Having reviewed literatures in the concept of TQM, The researcher has developed the theoretical frame works for the study and highlighted different frame works used in the past studies.

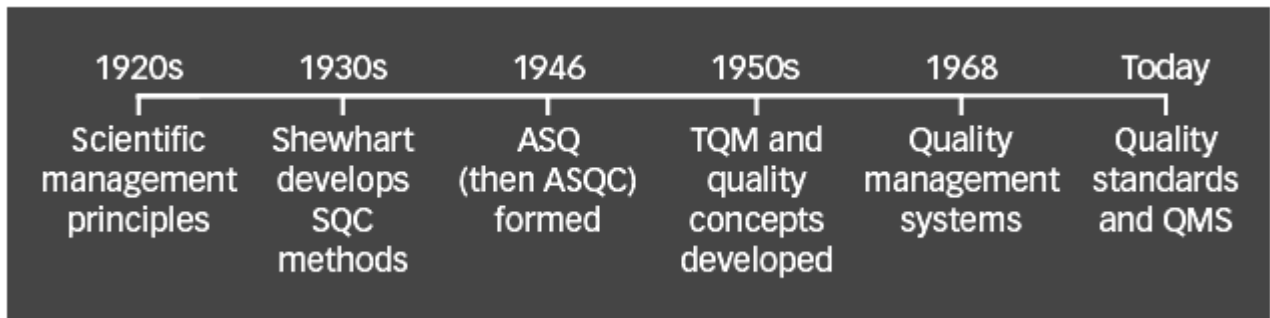
2.2 Theoretical Literature Review

core topics highlighted and presented in this section are: definition of TQM, historical foundation of TQM, TQM implementation and benefits, TQM and its practices in service sector, definition of innovation, innovation theories, innovation typologies, innovation measurements, and the relationship between TQM and innovation.

2.2.1. Historical foundation of the Total Quality Management (TQM) Philosophy

According to quality excellence hand book, fourth edition, the history of total quality management began at the outset as a term coined by the Naval Air Systems Command to describe its Japanese-style management approach to quality improvement. An umbrella methodology for continually improving the quality of all processes, it draws on knowledge of the principles and practices of:

- The behavioral sciences
- The analysis of quantitative and nonquantitative data
- Economics theories
- Process analysis



History of Total Quality Management (TQM)

1920s	During this period some of the first seeds of TQM were planted as the principles of scientific management swept through U.S. industry. Businesses visibly separated the processes of planning and carrying out the plan, and union opposition arose as workers were deprived of a voice in the conditions and functions of their work.
1930s	Walter Shewhart developed the methods for statistical analysis and control of quality.
1950s	W. Edwards Deming taught methods for statistical analysis and control of quality to Japanese engineers and executives. This can be considered the origin of TQM. Joseph M. Juran taught the concepts of controlling quality and managerial breakthrough. Armand V. Feigenbaum's book <i>Total Quality Control</i> , a forerunner for the present understanding of TQM, was published. Philip B. Crosby's promotion of zero defects paved the way for quality improvement in many companies.
1968	The Japanese named their approach to total quality "companywide quality control." It is around this time that the term quality management system arises.
Today	TQM is the name for the philosophy of a broad and systemic approach to managing organizational quality. Quality standards such as the ISO 9000 series and quality award programs such as the Deming Prize and the Malcolm Baldrige National Quality Award specify principles and processes that comprise TQM.

	TQM as a term to describe an organization's quality policy and procedure has fallen out of favor as international standards for quality management have been developed. Please see our series of pages on quality management systems for more information.
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The origins of total quality management go to many years back. Dennis (1997), for instance, has investigated the concept of quality by looking back to 1700 BC by the time King Hammurabi ruled the Babylonian Kingdom and made a very strict measure on product quality and liability in the construction sector by stating; *“If a builder constructed a building then it falls into pieces and the owner is killed then the builder shall also receive the death penalty. If the children of the owner are killed then the builders’ children shall also die.”*

Then by at the end of the 13th century, artisans began to form guilds aimed to develop product quality and organize themselves formally (Juran, 1995). During this time, the products were repeatedly inspected and high quality goods were distinguished with unique symbols (Wolek, 1999). This method was continued until the 19th century which is mostly known in Industrial Revolution.

The Concept of Total quality management theory further improved in the 1920s and 1930s the time at which WA Shewheart established a scientific process for quality management that is establishing quality.

According to Sliwa and Wilcox, (2008) explanation both Taylor and Shewheart can be viewed as the Founding Fathers of total quality management.

The most important moment for TQM appeared just before World War II, during which the surprising growth of manufacturing productivity linked with the notion of quality focus on product and performance. According to the literature attention in total quality management increased to some extent during the Second World War because of the interest to contemplate on improving production of goods to power the military (BPIR, 2011).

2.2.2. Development of TQM Practices

1. The TQM Model

So as to easily realize the importance of total quality management, it is indispensable to look at the history of business practice. The manner in which businesses were structured transformed after the Industrial Revolution, and this change indirectly brought the birth of total quality management. Initially, the attention was on the quality of the product delivered, but through time the concept was also emerged to the quality of the service, since it has been valued that the fabulous success of Japanese companies, motivated by quality-oriented approaches. The basic point why total quality management seems to have more effective in Japan is that TQM provide themselves to cultural norms and values in that they concentrated on the success of the collection over that of the individual (Kull and Wacker, 2010; Mehra, &Ranganathan 2008).

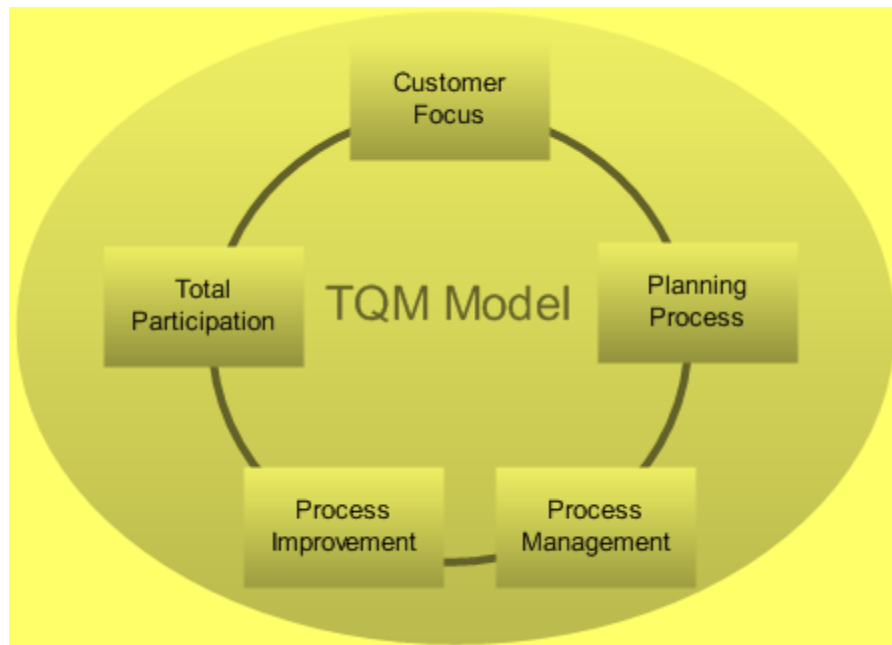
In recent years, the attention has further enhanced to include customer services. This has become even more serious in the United States and Europe since in various cases the economy has shifted from manufacturing-based to service-based to exceed customer expectations.

As mentioned by Rabinowitz and Vilela, 2012, researchers have suggested the following reasons for the importance of TQM for both manufacturing and the service sector;

- The need to guarantee that goods or services are meeting the needs of stakeholders that might include internal and external customers, shareholders.
- The need to uphold acceptance of the idea that the provision of superior quality goods or services is gainful and profitable for a company.
- Moreover, the organization can yield from the positive influence of the acquaintance that it is providing high quality goods and services.

Ghylin et al. (2008) came up with four major dimensions of total quality management which are general quality, product quality, quality of service and quality of life, which can be applicable to general quality, product quality and quality of service and argues that the quality of goods and services influences the customer's life positively or negatively.

Thus, it is rational to conclude that total quality management is beyond a phrase or ideology; it is a course of action in its own right, which founded upon the origins, has been advanced to the point where it can now be broken down into five fundamental and cyclical dimensions (Edwardsoft, 2011). According to him, the five dimensions are: Customer Focus, Planning Process, Process Management, and Process Improvement, and upon reaching this last element the process repeats, beginning with Customer Focus. Figure 1 depicts the entire cycle.



Let us look into each of the five dimensions of Total quality model one by one

- 1. Customer Focus:** Includes digging out what is a customer's expectation from the product or the service. This could be achieved through customer feedback and establishing detailed user specifications. Here customer focus is all about finding an answer for how to shape the service or product so that customers' expectation will be achieved. In other words customer focus is to mean that customers are the central focus of the organization as those are the one who will purchase goods or services being offered by that organization (Edwardsoft, 2011), and hence, their need must be satisfied. Prajogo and Cooper (2010) examined that quality customer service is the key concept of TQM because in any customer-oriented firms customers are building blocks for the success of the organization.
- 2. Planning Process;** is a stage where the framework of the scheme is laid out using information that has been collected from potential customers. Planning process can be

considered as the design phase since any potential barriers that may prevent it from meeting the specifications are identified, and the firm is motivated to discover various techniques of dissolving such obstacles. This is also the stage at which production methods are aligned with available resources, materials needed, and the location of production (Edwardsoft, 2011; Ghobadian and Galleary, 2001).

3. **Process Management:** it is the part of the cycle of TQM presented above, which acts as an oversight in converting the planning into practice. Process management is focused with ensuring the production of goods and or the implementation of services function proficiently, and that any problems that arise are corrected at their inception. At this stage, the interest of the organization is to produce the goods or to implement planned services (Edwardsoft, 2011).
4. **The Process Improvement:** is concerned with 'troubleshooting' and focuses on events that occurred during the process management element of the TQM cycle. Process Improvement focuses how these issues can be addressed quickly to increase quality in the future rather than purely attempting to deal with a problem on a temporary basis, so that the mode of production does not grind to a halt.
5. **Total Participation:** Stands for the involvement of employees to ensure quality of an organization's production/services. It also considers the external customer as a very important feedback means to confirm that the product/service meets their expectation.

2. The Deming Cycle

A second process next to TQM identified in the literature is the Deming Cycle which is relatively simple in terms of the elements in it. According to BPIR, (2011). The first element in the Deming cycle includes planning where the organization concerns on assessing the needs of its customer (Customer Focus), establishing objectives, evaluating outcomes and setting benchmarks that will enable the organization to know when it has reached its objective.

Whereas the second element Deming cycle is the 'Do' where goods are produced and services are delivered as per the standard. The foremost target of this stage is to engage the stakeholders in the production or implementation process. This involves elements of Customer Focus, the Planning Process, Process Management, and Process Implementation (BPIR, 2011). Deming (1986)

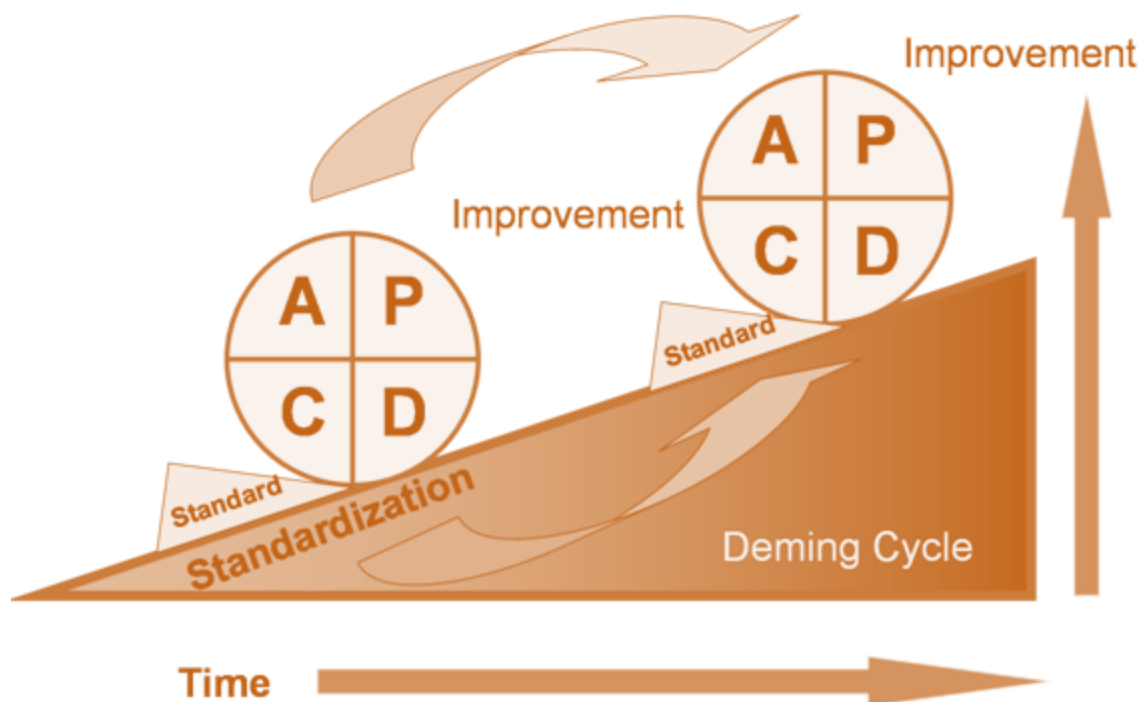
considered employees, managers, and company owners as internal customers and viewed clients, stockholders and vendors as external customers.

Deming's third element is dealing with 'Checking' the quality of goods or services. This implies applying multiple techniques of assessment such as quality checklists to ensure that goods and services meet the specifications (BPIR, 2011).

The fourth element of Deming's cycle is explained as 'Acting', whereby the organization concerned on selling a product or service to the market. This is where the organization starts to understand whether or not a product or service is going to be gainful (BPIR, 2011).

The last but not the least step of Deming's cycle encompasses understanding the process to explore whether there is anything about a product or service that can be improved in future implementations (BPIR, 2011).

Deming's cycle is depicted in Figure 2.



Where p stands for plan, D for Do, C for Check and A refers to action

Figure 2. Deming's Cycle

To sum up with in the Deming Cycle, the stress is on creating a balance between ‘doing’, ‘checking’ and ‘acting’ in an effort to achieve standardization through quality improvement processes. Whereas The TQM Cycle is less complex than Deming cycle because it simply repeats a process until problems are solved and it does not focus on the continuous improvement with time.

2.2.3. Perspective of TQM on public services

Frank, Angel, and Barrie (1999) define public organizations as all institutions which do not look for profits in their establishment which can be categorized into governmental and nongovernmental. The very purpose of public organizations is to address the needs of society with the scope of budget constraints. As it has been mentioned so many times TQM is proven to be adopted in private services than public services

However, bringing TQM in public services has many challenges due to their differences with private services in many ways. D. Parker, Waller, and Xu (2013) distinguished key difference between public and private services. Some of the differences identified are:

- Public services are operated by bureaucracy while private services are driven by market forces or customer requirements.
- Public services are less inventive than private sectors and more standardized.
- Private sectors are most likely fast moving and dynamic decision makers because they need to respond external environment and competitors.
- Usually, there is only one single government who provides public services, whereas there are many private companies competing on the same market environment for customers.
- The government put public services in monopoly positions, allowing them to treat customers like applicant rather than customers.
- Customers in public services are not likely to impose with many marketing campaign and segmentation studies, thus their needs are met less well by the private services

2.2.4. Total quality management in the Public Sector

As far as the concept of TQM is concerned, it has started in the manufacturing sector and has slowly expanded to the service sector, and lately spread into the public sector. In the public sector, TQM is commonly used to implement quality management strategies in government owned institutions such as Education, transport, health, law enforcement agencies.

According to Ho and Shih (2001) suggestion, the basic rationale for adopting total quality management in the public sector is that it is the duty of a government to operate in a proficient and effective way.

On the other hand Koehler and Pankowski (1996) stressed that the key barriers to the effective use of total quality management by the government, is because of mainly government employees are not well experienced in business-related disciplines or HRM. As a result, they are challenged to be aware of the total quality Management process.

Ratney (2006) suggested that a variety of factors ought to be addressed if total quality management practices are achieved in public institutions;

- First, the organization must have indisputable interest for adopting TQM practices.
- Second, it must initiate a clear plan for implementing it.
- Third, it should have support from internal staff members.
- Fourth, management should hold up and appreciate total quality management changes.
- Fifth, the organization must have the support of external customers and stakeholders.
- Sixth, the organization must have both the financial and technological resources to implement TQM.
- Seventh, The organization must actually implement the change; and
- Eighth, the organization shall make more wide-ranging changes in terms of quality.

Based on Ratney explanation the reason why this sequence of steps are very important for the implementation of total quality management in the public sector, is that it enables public sector officials and internal customers (Internal staffs) to easily understand what TQM is about and how it works, thereby making it a more effective method of quality management for the organization involved.

As to the knowledge of the researcher there have been many researches which investigated the influences of TQM on organizational performance. It has been suggested that TQM is strategic resource that yields sustainable benefit and generates economic value. Majority studies reviewed showed a direct association between quality management practices and performance

According to (Manal, Joo, & Shouming, 2013), Private services are not only sector that works with TQM in the process of increasing performance.

More specifically, Younis et al. (1996) argued that public services are currently adapting TQM in their operations for the following reasons.

- First, public services become more difficult in terms of managerial and administrative organization.
- Second, comparable management approach between public and private services.
- Third, the dissimilarity between public and private sectors is becoming undecided with the existence of agencies who delivers public sector services.
- Fourth, the purpose and operations of public services are being examined by political leaders and customers.
- Fifth, public services are now shown an interest to learn management practice from private services to enhance their work process.
- Sixth, TQM can smooth the progress of emerging government strategies.
- Seventh, managers focus on executing strategies with inadequate resources.

Charles and Gary (1990) stressed that managers should focus on the process, not the end result. It is better to have thorough investigation of the process rather than bunch examination of the results. Mass assessment and examination is an old and costly way of quality control to detect defects because it brings additional cost such as rework cost. Rather than taking examination on the final out put it is more efficient to evaluate each step of the process and each employee member in the organization should be involved in the process of improving the existing working procedures. On this regards top management is mainly in charge for support and change activity that will yield improvement. It is obvious that in public sector, reducing cost is more important than improving quality. Frank et al., (1999) stated that quality can be expressed as minimum obligation ordered by government. TQM means to achieve both cost savings and improve

customer services in order to bring customer satisfaction. From this we can understand that failure to put into practice total quality management will result in public services to suffer with unnecessary expenses. Customer complaints, low staff performance, high labor turnover and recruitment cost can be mentioned as unnecessary costs incurred due to quality failure.

Whereas the fruits of successful adoption of TQM are superior product and service quality, efficient process, waste diminution, and advanced productivity (Manal et al., 2013). Sanjay, Matthew, and Damodar (1996) examined study the benefits of TQM increasing organization performance and they established ten fundamentals as comparison scales which includes top management commitment, customer focus, supplier quality management, design quality management, benchmarking, statistical process control usage, internal quality information usage, employee involvement, employee training, and employee empowerment.

Many studies have identified that TQM firms have higher score in all aspects than those who do not implement. In order to realize the fruits of TQM as to the expected level, organizations should understand first how to put into practice elements of TQM and their impact on organization performance. Of course adopting TQM as a new move in public services is not an easy task. It requires commitment from all levels of management.

2.2.5. Dimensions of Total Quality Management

This part is built on various theories and research findings studies within the framework of Customer focus, employee management, leadership, training and continuous improvement on performance of Federal transport Authority.

1. Customer Focus

Customers are the true North Star and barometer of any organization. In the TQM approach, customer sentiments and feedback are closely monitored through call tracking and surveys. Customer focus refers to the degree to which an organization is able to serve its customers' requirements and expectations. This is done by determining the customer's needs, as well as to receive feedback on the extent to which those needs are being met and through involving the customer in the product design and development process, and focusing in

achieving greater customer satisfaction. Organizations rely on their customers, so they must understand the current and future needs, and achieve their needs, and work to exceed their expectations. This is can be done by conducting research and working all the needs and expectations of customers (Djerdjour, M., & Patel, R. 2000).

The widely accepted principle here is customer shall be treated as the 'king'. Ensuring the customer's requirement and expectations is the backbone of organization's success in the 21st century. Understanding what customers really wants and design and avail a product or service to meet this requirement can gain competitive advantage and profit over competitors. For this, TQM enables organizations to continually examine its quality approach to evaluate if it is responsive to ever-changing customer requirements. Modern approaches such as market research, enquiring sales staff and comparing competitors can be used to collect information.

In order to satisfy customer preferences, the organization needs to work on customer segmentation and differentiate products or services in accordance to the segmentation. For the organization to gain advantage over its rivals, it should engage first and foremost towards meeting customer needs, (Narver and Slater, 2011).

2. Employee Management

It is true that the emphasis throughout all stages of TQM implementation should involve all employees in decision-making process, problem solving approach and the success of the organization. That is to mean that, TQM encourages all level of people to become more closely related to the organization's goals and objectives (Collard, 1989). The basic concept is that everyone is accountable for producing quality goods and services so as to exceed customer requirements and achieving the overall company performance. Simply employee involvement means to empower employees through equipping them knowledge and information, increase and finally reward quality performance (Oliver, 1998).

An organization having high employee's involvement in the TQM implementation process would easily meet the TQM goals and organization performance. It shouldn't be just involving them; however, the firm needs to empower them as they are invited over to the decision-making table.

Employees usually do have innovative ideas that if carefully managed by a firm, it will make the difference in creating success. Employees' productivity will be achieved through new-found motivation to work diligently for the firm that is employee involvement, Bester field, Michina and Sacre (2010). According to Bilich and Annibal (2000) explanation, Employees whom get involved in the firms' TQM processes can positively impact on the firm quality drive otherwise, it will result a disoriented workforce.

Therefore, the organization's management needs to develop a favorable working environment that would encourage employees to get involved in the organization's quality activities. The environment should mainly aim at establishing a positive attitude amongst the employees, there should also be a clear and transparent communication on what goals are going to be achieved and the goals should mainly address both organization and individual needs,, the organization should also make work more appealing and challenging and finally there is a need to acknowledge top performance and enjoy it, Mann (2009).

3. Leadership

The other dimensions TQM that greatly contributes for the performance of the organization is Leadership which is basically the responsibility of top management. Leadership is the quality of influencing others to follow (Gilbert, 1992). As far as leadership is concerned a good leader is a one who can build up a clear mission statement and then develop strategies to realize the reason for the establishment. The leader should provide vision to stakeholders where the organization aspired to be through focusing on quality. They must lead in creating work cultural change in organization. TQM philosophy requires that organization move away from 'management by control' to 'management by commitment'. This principle includes participative management where all organization staff members empowered and get focused to achieve total quality management objectives and commitment to organizational systems that are designed to guarantee total quality (Ugboro and Obeng, 2000).

According to Kanji, G., & Moura, P. (2003), the degree of commitment and support that management takes in implementing a TQM is vital to the accomplishment of the organization performance. The quality and impact of leadership is significantly important especially at every organization because the effectiveness of employees' performance is highly dependent on leadership.

Leadership in any sub discipline of management is considered to be an important aspect. Similarly, in TQM commitment of key decision makers or top management has been identified as an important construct for implementation of TQM. Knowledge of any concept, support and involvement of top management helps in implementation of any idea in an organization.

4. Training.

TQM firms should design and avail value adding training to all employees to advance their proficiencies in their tasks. Obviously, Effective training in management and improvement in quality brings success for the firms. Employees' effective knowledge and learning capability will provide sustainability of quality management in the firm. Furthermore, learning organizations adapt rapidly to the changes and develop unique behavior, which distinguishes them from other firms and enables them to obtain better results. Quality does not begin and end with one department or function; it is the responsibility of the whole. Training should be given to all employees based on the results of the training needs assessment (F. Criado and A. Calvo-Mora, 2009).

With effective training, employees can easily know the industry and the structure of the firm. On the top of this, effective training will make employees more loyal; will motivate them for better work performance. If employees are trained on producing reliable and high quality products and/or services, their full participation in the delivery of goods or service will be also increased. Thus, customer satisfactions will raise and customer complaints will trim down. Actually, the central focus of any organization is customer satisfaction and improved performance. Some studies report that training is positively related to operational performance (Abdallah, and Y. Matsui, 2011), employee performance (J. Jayaram, and K. Xu, 2012), innovation performance (V. Kumar, and U. Kumar, 2012), customer results (Abdallah, and Y. Matsui, 2011).

5. Continuous Improvement

Total quality management is mainly concerned with continuous improvements (CI) in all activities, from high level strategic planning and decision making, to detailed operational tasks on the lower level. CI is from the principle that mistakes and defects can be minimized. This could be achieved through integrated people, processes, technology (PPT)

The broad objective of continuous improvement is to achieve improved performance that is much more than the existing performances or achievements (Asif et.al, (2013). This infers that Continuous improvement enables the organization to achieve long term objective. Moreover, Continuous improvement process helps the organization to eliminate errors and unnecessary costs. Vits and Gelders, (2002) believed and argued that Continuous improvement should be a part organization's learning and training processes and are of the opinion that the success of management efforts towards continuous improvement actions definitely have positive influence in meeting organization performance.

Continuous improvement can also take on as possible as many goals, delivering services with no defects or ensuring more than 100% customer satisfaction (Murphy and Elana, 2006). The continuous improvement principles comprises: involvement of employees at all functions of the organization structure, refining the existing processes with minimum cost, end to end assessment of the organization operation (Morgan, 2006).

Continuous improvement demands to organize a team that comprises of delegates from all functions of the organization. The organized team should evaluate the organizations existing practice against other organizations which are engaged on similar activities with the support of evidences. This process is mostly referred as benchmarking (McManus, 2009). After evidence based evaluations; the established team then forwards achievable solutions to management and begins to put into practice the recommended solutions once approval is secured from the management. What comes next after implementation of proposed solution is developing controlling techniques for future process improvement. If the tactics are put into practice in accordance the predetermined objectives the team will certainly come up with tangible result because of the efforts made (Kinni and Theodore, 2005). This can be used as motivating factor for attracting other employees into the process of continuous improvement in the future (Joiner and Brian, 2007).

The focus of Continuous improvement is improving capabilities which mainly includes, operation, people and technology and generate improved performance through minimizing mistakes in the future operation. The sources of mistakes could be people involved in the process, faulty systems and process. And mistakes should be identified and addressed from the

source. Total Quality Management acknowledges the fact that where humans are involved; there is always room for error.

But the rules that control processes should step in to compensate. The three-pronged approach springboards off of mundane, well-defined processes

1. First and foremost, there should be provisions to ensure that mistakes are not made.
2. Second, if they do creep in, there should be a system to detect errors efficiently and swiftly.
3. Third, if an error is somehow propagated down the value chain, there must be authority vested in individuals or processes to shut down the production flow so that more errors aren't added the mix resulting in faulty units or poor service delivery for future clients.

2.3. Organization performance:

According to Evans and Lindsay (2008) Performance refers to the persistent activities which ascertain organizational goals, monitor progress toward the goals, and make adjustments to achieve those goals more effectively and efficiently. Al-Marri, K. et al. 2007 argue that Organizational performance is the product of factors such as work processes; team/group communication and interaction; corporate culture and image; policies; leadership; climate for innovation and creativity; and loyalty. It is the sum of total of the performance of every unit of the organization working towards achieving the same purpose. Various parameters exist for the measurement of performance in organizations. These include; turnover, profitability, cost, quality, financial, innovative, operational and customer service.

Organizational performance comprises the actual output of an organization as measured against its intended outputs (goals and objectives). In recent years, many organizations have intended to deal with organizational performance using the balance scorecard method where performance is tracked and measured in multiple dimensions such as:

- Customer service
- Financial performance

- Corp77 jorateSocial responsibility (CSR)

The major contribution of performance management is its focus on achieving results, producing quality products and services for both internal and external customers. Performance management redirects our efforts away from busyness towards effectiveness.

Everyone and everything in the organization must ensure, strategies are implemented as per the intended purpose.

This situation has put more focus on effectiveness that systems and processes in the organization be applied in the right way to the things to achieve results. All of the results across the organization must continue to be aligned to achieve the overall results desired by the organization for it to survive and thrive. Only then it can be said that the organization and its various parts are really performing.

According to Li et al., (2006), one of the crucial elements to achieve an effective organizational management processes is the performance measurement. The performance of an organization can be measured in its ability to accomplish predetermined objectives. The performance of organizations was largely unnoticed in past research works, whereas some other (Katou, 2008) who were discussing the organizational performance with reference to the financial performance only. Stock et al. (2000) were also discussing the organizational performance through measuring both financial and operational performance which includes achieving company objectives.

Total Quality Management Practices and Organizational Performance

2.4. Empirical review:

Lord & Lawrence (2001) explained that the management of quality process must start at the beginning of the project (the organization founding), and ends after achieving the quality standards. Each individual in the organization structure or function is greatly responsible to the organizational improvements.

Also Lakhal et al. (2002); and Talha (2004) indicated that the practices of TQM is directly contributing in enhancing the performance of organizations by minimizing costs, enhancing the performance of staff members, and increasing the degree of customer satisfaction.

On the same way, Saizarbitoria (2006) showed that total quality management has direct and positive influence on organization performance.

Santos-Vijande, and Alvarez-Gonzalez (2007) studied the association between TQM and firms performance and conclude that performance of TQM correlated positively and significantly with organizational performance

Likewise, Wen et al. (2009) and Letica (2007) suggested the impact of TQM practices on the level of customer satisfaction especially in the sector of public services and from the managers' perspective. This study has established that there is a positive relationship between TQM dimensions, and organization performance.

Shaohan (2009) conducted a study on the importance of customer focus for organizational performance in Chinese companies and suggested that Customer focus has the higher influence on organization performance

Sadikoglu (2009) and Brun (2010) established that TQM dimensions such as training, process management, employee management has an influence organization performance.

Shaohan (2009), examined the importance of customer focus for organizational performance in Chinese companies and argue that organizational customer orientation affected customer organization performance

On the other hand Soltani and Wilkinson (2010) found that there exists positive and significant relationship between dimensions of total quality management and organization performance.

Nganga, S. I. (2010) studied the influence of TQM on organization performance and come up with the results that delivery of high quality goods and services has strong link with organization overall performance.

Brahmet et al., (2011) noted that the effectiveness of process management implementation has been argued as one of the major dimensions of TQM that affected organization performance..

Gharakhani et al., (2013), indicated that TQM greatly influence the whole organizational performance. According to their finding organizations have begun to realize the importance of

applying TQM to their organization performance due to the fact that TQM helps them to minimize costs and to create high quality values to customers.

Jaafreh and Alabedallat (2013) determined that the focus on process management results in the increase in the quality of outputs as well as diminishing unnecessary costs such as rework costs and waste costs. This in turn leads to improved overall organization performance

Soltani, (2015) advocates that an organization must identify customer relationship to measure customer needs and expectations; involve customers in quality improvement and determine customer satisfaction which ultimately enhance performance of the organization.

Asenge et al. (2019) examined the effect of total quality management practices on performance banks in Nigeria and the result of the study showed that there a significant relationship between total quality management practices implementation and performance of banks. The study proved that commitment of senior management results to corporate performance. The study also concludes that the involvement of employees is important in bringing the needed changes in the organization. Finally, the study further concludes that the focus on customers and improvement in services offered to them is fundamental to the accomplishment of organization performance

Avia, (2019), studied the implication of TQM in the public service and found that TQM brings good implications to public services to enhance service quality and then performance though implementing TQM in public services is more difficult than in private services.

2.5. Conceptual framework of the study

The study mostly concerned on the effects of total quality management on organization performance and it has developed theoretical framework after review of related concepts in the area of total quality management and organization performance. As such as many as TQM Dimensions have been identified from the reviewed literature nevertheless, only those that are assumed relevant for the study are incorporated in the framework.

The conceptual framework which shows the association between total quality management dimensions and performance variable is illustrated below.

Dimensions of Total Quality Management

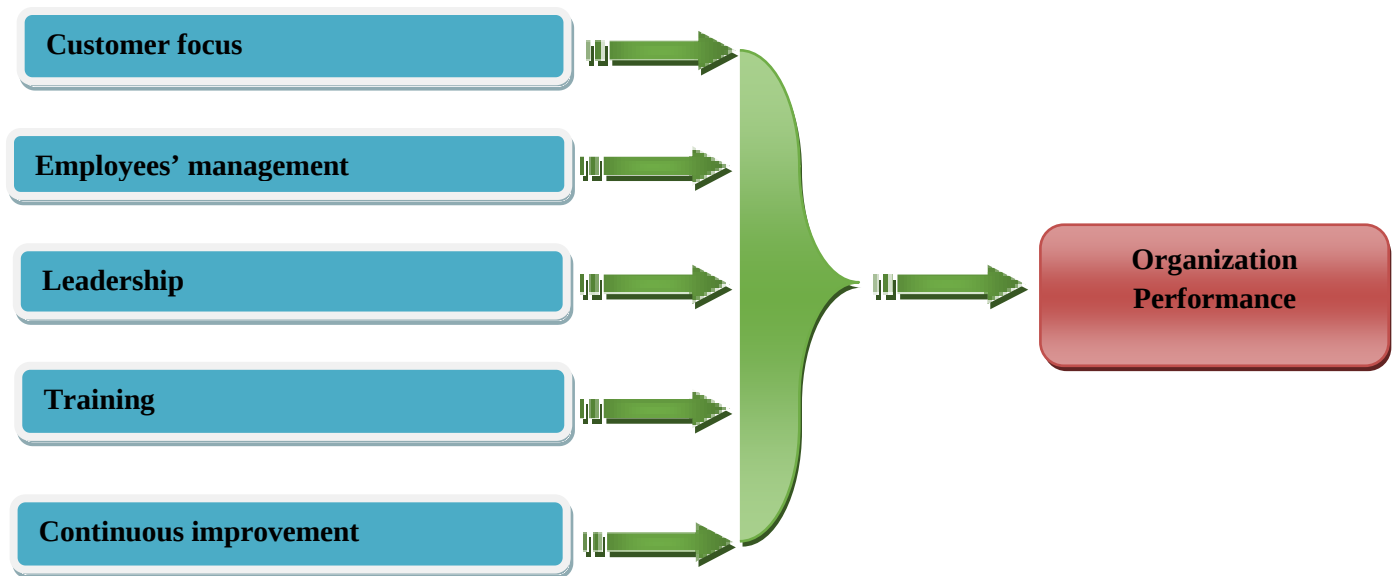


Figure:conceptual framework of the study

2.6 Hypothesis Development

Depending on the reviewed literatures and the aforementioned conceptual framework of the research model, the researcher has come up with the following research hypotheses with justifications.

In order to satisfy customer preferences, the organization needs to work on customer segmentation and differentiate products or services in accordance to the segmentation. For the organization to get advantage over its rivals, it should engage first and foremost towards meeting customer needs, (Narver and Slater, 2011). Hence,

The alternate hypothesis, H1: *There is a positive and significant relationship between customer focus dimensions of TQM and organization performance.*

Null Hypothesis: *There is no positive and significant relationship between customer focus dimensions of TQM and organization performance*

The organization's management needs to develop a favorable working environment that would encourage employees to get involved in the organization's quality activities. The environment should mainly aim at establishing a positive attitude amongst the employees, there should also be a clear and transparent communication on what goals are going to be achieved and the goals

should mainly address both organization and individual needs,, the organization should also make work moreappealing and challenging and finally there is a need to acknowledge top performance and enjoy it, Mann (2009). Thus,

The alternate hypothesis, H2: There is a positive and significant relationship between employees management of TQM dimension and organization performance.

Null Hypothesis:There is no positive and significant relationship between employees management of TQM dimension and organization performance

According to Kanji, G., & Moura, P. (2003), the degree of dedication and hold up that management takes in implementing a TQM is vital to the accomplishment of the organization performance. The quality and impact of leadership on organization performance is significantly important at every organization because the effectiveness of employees' performance and then organization performance is decided on leadership. Therefore,

The alternate hypothesis, H3: leadership has a positive and significant influence on organizationperformance.

Null Hypothesis: leadership has no positive and significant influence on organization performance.

With effective training, employees can easily know the industry and the structure of the firm. On the top of this, effective training will make employees more loyal; will motivate them for better work performance. If employees are trained on producing reliable and high quality products and/or services, their full participation in the delivery of goods or service will be also increased. Thus, customer satisfactions will raise and customer complaints will trim down. Actually, the central focus of any organization is customer satisfaction and improved performance. Some studies report that training is positively related to operational performance (Abdallah, andY.Matsui, 2011), employee performance (J. Jayaram, and K. Xu,2012),innovation performance (V. Kumar, and U. Kumar,2012), customer results (Abdallah,andY.Matsui,2011). Thus,

The alternate hypothesis, H4: There is a positive and significant relationship between training dimensions of TQM andorganization performance.

Null Hypothesis: *There is no positive and significant relationship between training dimensions of TQM and organization performance*

The broad objective of continuous improvement is to achieve improved performance that is much more than the existing performances or achievements (Asif et.al, (2013). This infers that Continuous improvement enables the organization to achieve long term objectives. Moreover, Continuous improvement process helps the organization to eliminate errors and unnecessary costs. Vits and Gelders, (2002) believed and argued that Continuous improvement should be a part organization's learning and training processes and are of the opinion that the success of management efforts towards continuous improvement actions definitely have positive influence in meeting organization performance. Hence,

The alternate hypothesis, H5: *There is a positive and significant relationship between continuous improvement and organization performance.*

Null Hypothesis:*There is no positive and significant relationship between continuous improvement and organization performance.*

Chapter Three: Research Design and Methodology

Introduction

These sections of the study thoroughly discuss about the research approach, research design, target population of the study, sample size and sampling techniques employed, Method of data collection and analysis. Major sections such as model specification, validity and reliability analysis are also included in this chapter.

3.1. Research approach and Design

3.1.1. Research Approach

This research used quantitative approach. Tundui, (2012), established that the quantitative approach committed for exactness by focusing on variables that can be counted into predestined categories and subjected to statistical analysis. Creswell (2009) noted that in quantitative approach data is collected based on predetermined instruments that produces data in numeric value which can be further analyzed using statistical method of analysis such as correlation and regression. It is an approach by which research objectives are tested through examining the associations among variables.

In short, this study used quantitative approach because the data that are used the main questionnaire was quantitative and has been analyzed using correlation and regression analysis.

3.1.2 Research Design

According to Kombo & Tromp, (2014), Research design refers to the way the study is intended to be carried out. It is the theoretical arrangement of conditions for data collection and analysis of in a way that intends to combine relevance with the research purpose.

As framework of collecting and analyzing the data, this study employed explanatory and descriptive research design with the ground of the following justifications:

With the objective of testing the developed hypotheses which are clearly presented in the previous chapter, this study used explanatory research design which is the best suit for such type of research types. In addition to explanatory research design, this study has adopted a descriptive research

design because it wished to obtain information that best describes existing situation by letting respondents about their about prepared instruments.

3.2 Population and sample of the Study

The population of this studyembodies for about 650 Federal transport Authority employees who are working at different directorate at Head office.

3.3 Sampling techniques and sample size

3.3.1 Sampling Technique

According to Toye, (2002) a sample is the smallest proportion of a population under a given study. The sample waschosen from the employees of Federal transport Authority. The researcher hasvigilantlychosen a sample that can provide data representative of the population.

On the other hand, Creswell (2009), explained sampling as the way of drawing representativesthan studying the entire population. The researcher used both probability and non-probability sampling techniques. First by employing purposive sampling method from non-probability sampling technique the researcherchosen Head office staffs and from the variety of probabilistic sampling techniques, the researcher usedconvince sampling to distribute questionnaire for the respondent.

3. 3.2 Sampling Size

A sample size refers to the number of research participants thatchosen from the target population to make up the sample and this addresses how many sampling units should be surveyed, (Kothari, 2004). It is very clear that large sample size gives more accurate results than small samples. This study loved to use Yamane's (1967) sample size is calculation formula with a 95 percent confidence level. The sample size determination for this study looks like the following:

$$n = \frac{N}{1 + Ne^2} \dots \dots \dots 1$$

Where;

- n = the sample size covered
- N = The population size of the study
- e = error estimate/significance level, given as 0.05

Accordingly, sample of this research is calculated as shown below

$$n = \frac{650}{1 + 650(0.05)^2} = 247.6 \approx 248 \dots \dots \dots 2$$

The sample size covered of this particular research is therefore 248 Federal transport Authority staff members who are working at different directorate at Head office. And based on this, a total of 248 close ended questionnaires were printed and distributed to the selected set of respondents.

3.4 Types and sources of data

In this particular study, the relevant data has been collected from two sources, namely primary and secondary data sources.

Primary data and their sources: The basic sources of the first hand data used for this study were Federal transport Authority Staffs who are working at in different directorates at Head office level.

Secondary data and their sources: The basic sources of gathering the secondary data used for this study were from journals, literature review, textbooks, other relevant records from Ethiopian Federal Transport Authority and other research works relating to the topic

3.5 Data collection tools

With the intention to meet research objectives, the researcher has designed and prepared research instrument, which is questionnaire. Accordingly, the study gathered primary data using a structured close-ended questionnaire.

3.6 Methods of data analysis

Once the required data is gathered using questionnaire, the next process which is method of data analysis were accomplished through the help of correlation and regression analysis. Correlation

analysis has been conducted to measure the strength of the association between factors for TQM dimensions and organization Performance. Whereas regression analysis was performed to understand to what extent the independent variable i.e. Total Quality management dimensions explains the organization performance.

Tools like tables and percentages were used to interpret and present the analyzed data. Data analysis was carried out through the help of SPSS software version 22. In order to reduce the possibility of getting wrong answers and to ensure the soundness of this study, the researcher has gone through different actions.

3.7 Model Specification/Assumptions

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_nx_n + \varepsilon$$

Where, Y = Organization Performance

a = y intercept

b₁ = the regression coefficient of Customer focus

X₁ = Customer focus

b₂ = the regression coefficient of employees management

X₂ = employees management

b₃ = the regression coefficient of leadership

X₃ = leadership

b₄ = the regression coefficient of training

X₄ = Training

b₅ = the regression coefficient of continuous improvement

X₅ = continuous improvement

ε = error term

3.8 Validity and Reliability

3.8.1 Validity

As Burns and Bush, (2014) explanation, Validity deals with the accuracy of responses. And in order to generalize the results beyond the limits of the experiment itself, the test should really reflect the circumstances in the real world, and it should hold both internal validity (the extent to which the ideas about cause and effect are supported by the study) and external validity (the extent to which findings can be generalized to populations or to other settings). Internal validity is focused with the extent to which the change in the dependent variable was actually due to the explaining variable.

On the other hand External validity can be compromised by faulty sampling and unnoticed interfering factors.

To conclude with an experiment is valid if:

- The observed change in the dependent variable is due to the independent variable, and
- The results of the experiment can be applied to the “real world” outside the experimental setting.

3.8.2 Reliability

As far as Scale reliability is concerned, reliability stands to the extent to which a scale can replicate the same output results in repetitive tests. According to Burn and Bush (2014) reliability is the degree to which a respondent is consistent in his or her responses.

Hair et al., (2003) described internal consistency as the degree to which the variety of dimensions of a multidimensional construct associates with the scale. In other words, the set of attribute variables that make up the scale must be internally consistent.

Hence, in this particular research the Cronbach's alpha was used to measure the internal consistency of the items used in the constructs, and the details are presented clearly in the next chapter of the study under reliability analysis sub-topic.

3.9 Research Ethics

Professional associations for the marketing research industry have all established rules, standards, or codes of ethical conduct (Burn and Bush, 2014).

Hence, throughout the study all code of conducts has been properly applied. Any pertinent concept in this research has been properly acknowledged. All research participants information are kept not to be disclosed, there information which has been collected via questionnaires are kept in private and are exclusively used for the intended purpose only.

CHAPTER FOUR

Data Presentation, Analysis and Interpretation

Introduction

This section of the study begins with reliability and validity tests followed by correlation and regression analysis software. This chapter of the study also contains Normality test, hypothesis testing and discussion of research findings.

4.1 Reliability Test:

The data collection process was carried out within ten days of time frame. The survey was done through questionnaire. From a total of 248 questionnaires distributed to selected research respondents, for about 227 of them were successfully collected, the rest which is 21 questionnaires were not returned due to the fact that respondents were not capable to fill and return their response within the range of acceptable time frame. Hence, for this particular study 227 questionnaire responses were effectively used for analysis that constitutes 91.5% response rate which is adequate enough to carry out a study.

As per Hair et al. (2006) suggestion, Cronbach's Alpha Reliability is checking on the reliability of the research instrument that allow researcher to accomplish with consistent results. According to him, the measurement of Cronbach's Alpha is between 0 and 1. Hence, Cronbach's Alpha have better consistency within items in the scale if coefficient that closer to 1.

As it was mentioned in the methodology part of the study, this study has gone through Cronbach's Alpha reliability test to measure the internal consistency of the items used. George and Mallery (2003), provides the following rules of thumb: >0.9-Excellent, >0.8-Good, >0.7-Acceptable, >0.6-Questionable, >0.5-Poor, <0.5-Unacceptable (as cited by Gleam and Rosemary, 2003). The results of reliability test analysis of this study are discussed in the below Table (4.1).

Table 4.1 reliability test out puts of the study in accordance with Cronbach's Alpha Value

Variable	Cronbach's Alpha	N of Items	Remark: Evaluation based on Cronbach's Alpha Value
Customer Focus	.899	8	Good
Employees Management	.834	6	Good
Leadership	.80	5	Good
Training	.764	4	Acceptable
Continuous improvement	.728	4	Acceptable
Organization performance	.849	5	Good

Source: Questionnaire survey, (2022)

The above table, 4.1 proved the reliability of the data used for this study based on Cronbach's alpha value evaluation. As clearly shown above, the Cronbach's alpha values for the five variables infers that there is sound full internal consistency among items used in the study—being from 0.728 and 0.899(From a range of acceptable to Good).

According to the results, all variables are considered variable because their value is more than the minimum standard which 0.70. The independent variable, Customer focus has the highest alpha value of 0.899 with 8 items. This implies that customer focus is the most consistent construct. Employees' management and leadership have the second highest alpha value of 0.834 with 6 items and .80 with 5 items respectively, followed by training and continuous improvement, having the alpha value of 0.764 with a total of 4 items and alpha value of 0.728 with 4 items respectively. Besides, the variable with 5 items is organization performance with alpha value of 0.849.

Referring the internal consistency items used in this study, it is logical to generalize that the test is reliable with independent variables achieved and fulfilled the level of internal consistency as it was measured by Cronbach's Alpha value.

4.2 Validity

To verify the validity of questioners and to determine that questioners are valid with respect to content, the researcher has gone through the following primary tasks:

1. Before questionnaires were distributed to respondents, a pilot test was carried out. Accordingly, a total of 7(seven) questionnaires were headed to different individuals who had a previous experience in carrying out a research and better experience in the concept for evaluation.
2. Questioners were submitted to the advisor for with the expectation of receiving valid feedback.

Based on the received feedbacks from evaluators, amendment was done on questionnaires

4.3 Correlation Analysis

On the top of testing the goodness and validity of data, the researcher has performed a correlation analysis to evaluate the degree of association between the entered independent and the dependent variable, then to test the developed hypotheses.

According to Hair (2003), the Pearson correlation coefficient measures the degree of linear association between two variables and its value varies between -1.00 and $+1.00$, with 0 representing absolutely no association between two variables, and -1.00 or $+1.00$ representing a perfect link between the two variables in question, and the higher the correlation coefficient, the stronger the level of association is. Further Sekaran (2003) stressed that the Pearson correlation coefficient is suitable for interval- and ratio-scaled variables, and any bivariate correlation can be obtained.

Accordingly, this study loved to use Pearson correlation coefficient to evaluate the degree of association between TQM dimensions and organization performance.

To evaluate the outcome of Pearson correlation coefficients of each entered variables, the below rules of thumb are used in this study.

Table 4.2 Rules of thumb about the strength of correlation coefficients of variables

Range of Coefficient	Description of Strength
$\pm.81$ to ± 1.00	Very strong
$\pm.61$ to $\pm.80$	Strong
$\pm.41$ to $\pm.60$	Moderate
$\pm.21$ to $\pm.40$	Weak
$\pm.00$ to $\pm.20$	None

Source: Hair (2003)

Table 4.3. Pearson Correlation for the determinants of organization performance

		Correlations					
		CF	EmployeesM GT	Leadership	Training	CI	OP
Customer focus	Pearson Correlation	1	.470**	.379**	.431**	.267**	.687**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	227	227	227	227	227	227
Employees Management	Pearson Correlation	.470**	1	.448**	.384**	.654**	.683**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	227	227	227	227	227	227
Leadership	Pearson Correlation	.379**	.448**	1	.386**	.320**	.620**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	227	227	227	227	227	227
Training	Pearson Correlation	.431**	.384**	.386**	1	.320**	.572**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	227	227	227	227	227	227
Continuous improvement	Pearson Correlation	.267**	.654**	.320**	.320**	1	.513**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	227	227	227	227	227	227
OP	Pearson Correlation	.687**	.683**	.620**	.572**	.513**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	227	227	227	227	227	227

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

Source: Questionnaire survey, (2022)

As tabulated above, Customer focus, employees management, leadership, training and continuous improvement are correlated at .687, .683, .620, .572 and .513 respectively (which are statistically significant at the .000 level). The above correlation table proved that each of the five constructs (Customer focus, employees management, leadership, training and continuous improvement) are moderately and strongly related to organization performance—that is changes either in any of the Five entered will result in a changes in organization performance.

As clearly shown on the above correlation matrix table, all variables are significantly connected to one another variables. There are the five variables within the range of 0.513 - 0.687 which have a moderate and strong relationship. Since, all variables correlation coefficients are less than 0.9, multicollinearity does not exist in these data.

Thus, to test the developed hypothesis, this study used the Pearson correlations coefficients matrix as shown in the above table and the results are presented as follows:

4.3.1 Customer focus and organization performance

Pearson correlation test was checked for customer focus and organization performance. Based on the Pearson correlations coefficient result, customer focus and organization performance are evaluated and their value, .687, is significant at the 0.01 level (2-tailed). As per the rules of thumb on the strength of the associations between the two variables, the coefficient value, .687 falls within the strong strength intensity level. Therefore customer focus and organization performance are correlated with a strong and positive relationship ($r = 0.687^{**}$).

4.3.2 Employees' management and organization performance

Pearson correlation test was also conducted to evaluate the degree of relationship between the independent variable, which is employees' management, and the dependent variable, organization performance. According to the result, there is a significant correlation between employees management and organization performance at significant value of 0.000 lower than 0.05. This means employees management dimension and organization performance are related with a strong relationship ($r = 0.683^{**}$).

4.3.3 Leadership and organization performance

Pearson correlation test was also conducted to see whether there is significant correlation between leadership and organization performance, and the results are shown in the above Table 4.3. There is a positive and a significant correlation between these two variables with a significant value of 0.000 lower than 0.05. The result of correlation analysis prove that leadership and organization performance are correlated with a strong relationship ($r = 0.620^{**}$).

4.3.4 Training and organization performance

For these variables, training and organization performance, also Pearson correlation test was conducted and the results are shown in Table above. There is a positive and a significant correlation between training and organization performance with a significant value of 0.000 lower than 0.05. The result of correlation analysis prove that training and organization performance are correlated with a moderate relationship ($r = 0.572^{**}$).

4.3.5 Continuous improvement and organization performance

In order to see the correlation between continuous improvement and organization performance, Pearson correlation test was conducted, and the results found were like shown in table 4.3. There is a positive and significant correlation between continuous improvement and organization performance with a significant value of 0.000 lower than 0.05. In other words customer improvement dimension and organization performance are related with a moderate relationship ($r = 0.513^{**}$).

4.4 Regression Analysis

So as to make predication, regression analysis uses correlation analysis result of which the degree and type of association between the entered variables, both independent and the dependent. Regression analysis is based on the assumption that the ability of determinant variables to cause changes in the dependent variable must be based on conceptual logic or information other than just statistical techniques.

Assumptions of Simple regression model

- (1) The variables of interest are measured on interval or ratio scales (except in the case of dummy variables);
- (2) These variables come from a bivariate normal population and
- (3) The error terms associated with making predictions are normally and independently distributed.

Based on these assumptions into consideration the linear regression model is developed and briefly discussed in the next sub section.

4.4.1 Regression analysis between the determinant factors of TQM and organization performance

The bivariate regression analysis conducted by using SPSS produced four important tables namely: descriptive statistics, model summary, ANOVA and coefficients of regressions. The first table presents the descriptive statistics:

Table 4.4 Regression analysis: Descriptive statistics

The Descriptive Statistics table displays the mean and standard deviation of the dependent variables (Customer focus, employees management, leadership, training and continuous improvement) and the same measures for the independent variable Organization performance

Table 4.4 Regression analysis: Correlations

Descriptive Statistics			
	Mean	Std. Deviation	N
OrganizationPerformance	4.7604	.38834	227
Customer focus	4.6002	.45725	227
Employees Management	4.5316	.46654	227
Leadership	4.4837	.49336	227
Training	4.4515	.48696	227
Continuous improvement	4.4581	.47899	227

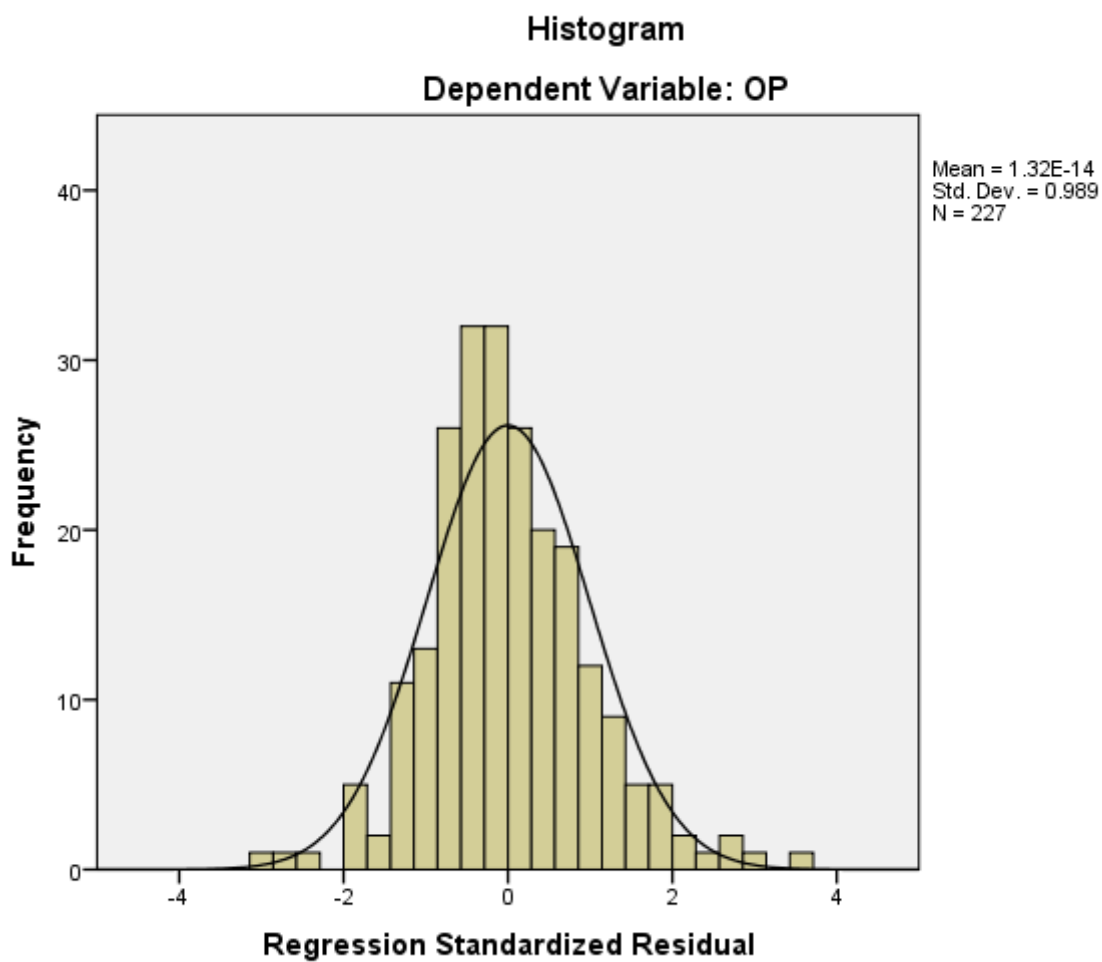
Source: Questionnaire survey, (2022)

4.5 Multiple regression assumption tests

4.5.1 Normality Test

I. Homoscedasticity Check and Normality of Residuals

Homoscedasticity means having the same scatter. For it to exist in a set of data, the points must be about the same distance from the line, as shown in the figure below



Source: Questionnaire survey, (2022)

II. Durbin Watson Test

The Durbin Watson Test that is also referred as serial correlation in residuals that compute the autocorrelation from the regression analysis. According to Field (2009), test statistic believed normal in values that ranges between 1.5 and 2.5. The Durbin-Watson $d = 1.619$, which is between the two critical values of 1.5 and 2.5 ($1.5 < d < 2.5$), thus it can be assumed that there is no first order linear autocorrelation in the multiple linear regression data in this research. Thus, the data is assumed Normal

4.5.2 Multi-collinearity

The characteristic of the data presents situation in which the independent variables are highly connected among themselves is explained as multicollinearity (Hair et al., 2003).

As per Ary et al., (2010) explanation, multiple regressions are a correlational procedure that evaluates the relationships among variables. Specifically, this technique helps researchers to come up with the best possible weighting of two or more independent variables and to yield a maximum correlation with a single dependent variable. This study used both Tolerance limit and Variance inflation factor to check collinearity among used variables.

Both Tolerance limit and Variance inflation factor tell us the extent to which each independent variable is explained by the other independent variables. If the tolerance result of the study is smaller than .10 or the VIF is 10 or larger, it can be concluded that multicollinearity is a problem (Hair et al., 2003).

Table 4.5 Bivariate correlation analysis: Coefficients of the variables

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.426	.175		2.432	.016		
Customer focus	.304	.035	.358	8.706	.000	.683	1.463
Employees management	.214	.042	.257	5.066	.000	.450	2.222
Leadership	.208	.031	.264	6.627	.000	.729	1.372
Training	.146	.032	.183	4.606	.000	.729	1.372
Continuous improvement	.086	.037	.106	2.340	.020	.561	1.784

a. Dependent Variable: Organization Performance

Source: Questionnaire survey, (2022)

As shown in the table above in the, Collinearity Statistics column, the smaller tolerance value is 0.450 which is beyond 0.10 and the maximum VIF value is 2,222 which is much slighter than greatest value that it can. Hence, it is possible to conclude that in this research there are no independent variable which are highly correlated among them, hence multicollinearity is not a problem and will not affect the research findings.

4.6.2 Multiple Linear Regressions

Multiple linear regressions were carried out to recognize the relationship between variables and to find out the most dominant independent variable that impacted Organization performance. Regression analysis was used to determine the extent to which the Total Quality Management dimensions: Customer Focus, employee management, leadership, training and continuous improvement influence organizational performance. For the sake of showing the influence of Each TQM dimensions used in this research, the study looked the Standardized Coefficients. The results of the regression analysis are discussed with the support of the following tables.

Table 4.6 Regression analysis: Model Summary

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.863 ^a	.744	.739	.19852	1.619

a. Predictors: (Constant), Continuous improvement, Customer focus, Leadership, Training, Employees management

b. Dependent Variable: Organization performance

Source: Questionnaire survey, (2022)

Table 4.6 above presents the multiple linear regression model summary which consists of R, R square, adjusted R square and Durbin Waston Result. The adjusted R² of the model is .739 with the R² = .744. This means that the linear regression model with the independent variables explains 74.4% of the variance of the dependent variable while the remaining 25.6% is accounted by other factors outside the regression model.

The model significantly showed the ability to predict the effects of TQM on organizational performance.

Table 4.7 .Regression analysis: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.374	5	5.075	128.767	.000 ^b
	Residual	8.710	221	.039		
	Total	34.083	226			

a. Dependent Variable: OP

b. Predictors: (Constant), Continuous improvement, Customer focus, Leadership, Training, Employees management

The above table is the F-test, or ANOVA. The F-Test is the test of significance of the multiple linear regressions. The F-test has the null hypothesis that there is no linear relationship between the variables (in other words $R^2=0$). The F-test of the Model is highly significant, thus we can assume that there is a linear relationship between the variables in this model

Table 4.8. Regression analysis: Coefficients

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.426	.175		2.432	.016		
	Customer Focus	.304	.035	.358	8.706	.000	.683	1.463
	Employees Management	.214	.042	.257	5.066	.000	.450	2.222
	Leadership	.208	.031	.264	6.627	.000	.729	1.372
	Training	.146	.032	.183	4.606	.000	.729	1.372
	Continuous improvement	.086	.037	.106	2.340	.020	.561	1.784
a. Dependent Variable: Organization performance								

Source: Questionnaire survey, (2022)

The regression Coefficients table above clearly presents the multiple linear regression coefficient estimates including the intercept and the significance levels. Hence, the regression equation would be:

$$OP = .426 + .358 (CF) + .257 (EM) + .264 (L) + .183(T) + .106(CI) + .175 (\text{avg. error in prediction})$$

Where: OP = Organization performance
 CF = Customer Focus
 EM=Employees Management
 L =Leadership
 T= Training
 CI = Continuous improvement

The above regression formula shows that, for every increase in customer focus, the organization performance will also increase by 0.358. Similarly, for every increase in any of the other variables: employees management, leadership, training, and continuous improvement; the organization performance will increase by .257, .264, .183, and .106 respectively.

As a result of all five determining variables are entered in the analysis, the **Beta** weights compare the relative importance of each independent variable in standardized terms. It is therefore imperative that, Customer focus has a higher impact than the other independent variables.

4.7 Hypothesis Testing

The coefficient of correlation matrix table indicates the strength and dimension of association between total quality management dimensions and organization performance. A positive relationship was found between the independent and dependent variables.

To accept or reject a hypothesis, this study checked the Standardized Coefficient β value along with the significant value. This study showed that the formulated hypotheses are supported by the research finding. This has been done by taking the coefficient of correlation table, which signals strength and dimension, along with the coefficient of regression analysis β value. Thus:

- ✓ **H₁, the alternate hypothesis**—Customer focus positively and significantly affects organization performance is supported with the research finding because $\beta = .358$; $p < .000$. Similarly,
- ✓ **H₂, the alternate hypothesis**—employees management positively and significantly affects organization performance is supported because $\beta = .257$ and $p < .000$.
- ✓ **H₃, the alternate hypothesis** - leadership positively and significantly affects organization performance is supported as the $\beta = .264$ and $p < .000$.
- ✓ **The fourth alternative hypothesis, H₄**— training positively and significantly affect organization performance is also supported because the $\beta = .183$ and the $p < .000$.

- ✓ **Finally, H₅, the alternate hypothesis** – continuous improvement positively, but less significantly affects organization performance is supported as a result of its $\beta = .106$ and $p < .000$ values.

4.8 Hypotheses Results

The effects of total quality management on organization performance

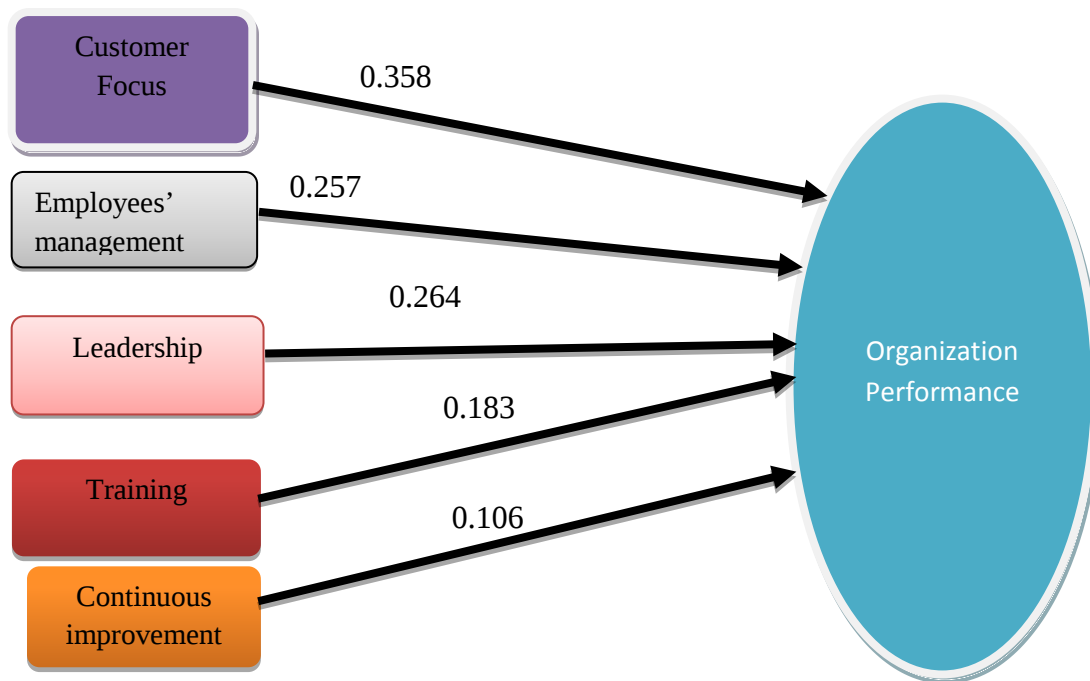


Figure 4.4: findings on the constructs

4.9 Discussion of Findings

With respect to the effect of the total quality management dimensions on Federal transport authority performance which is presented in the Figure above

According to the result, all the developed hypothesis are supported with the research findings meaning TQM dimensions used in this study determined the performance of the organization.

This is further to mean that variables considered as TQM dimensions such as Customer focus, employees management, leadership, training and continuous improvement have strong influences on organization performance.

Findings of the study revealed that there is a positive relationship between customer focus and organization performance of Federal transport Authority. This is in line with the results of Asenge and Adudu, (2019) who examined the effect of total quality management practices on performance deposit money banks in Nigeria and as per their finding customer focus has positive and significant influence on organization performance. Al-Shobaki, (2010) also showed a significant relationship between customer focus and organizational performance.

Findings of the study also revealed that there is a positive relationship between employee management and performance of Federal Transport authority. This result is consistent with Avia, (2019), who studied the implication of TQM in the public service and found that TQM brings good implications to public services to enhance service quality and then performance though implementing TQM in public services is more difficult than in private services. Also Otunga, (2007) emphasized the value of involving employees in affairs of the organization. Al-Shobaki et al., (2010) also agreed that the employee's management in TQM practices leads to increased productivity. Goetsch and Davis (2010) also showed that keeping employees in touch with customers is critical to forming a customer focus which positively affects the corporate performance

Further the findings of this study showed that Leadership or commitment from top management has positive and significant effect on organization performance of Ethiopian Road transport authority. Again the find of this study is in agreement with the findings of Asenge et al. (2019) who proved the positive influence of Leadership on the corporate performance of an organization.

The finding on the fourth specific objectives of this research established that there is a positive and significant relationship between training and organization performance of the studied organization. This result is also in agreement with the research findings of Abdallah, and Y. Matsui, (2011) and (J. Jayaram, and K. Xu, 2012), that revealed training is positively related to organization performance.

Finally, findings of the study show that continuous improvement has a positive and significant effect on performance of the Ethiopian Federal transport authority. This result is in line with Jaafreh and Al-abedallat, (2013) who distinguished that continuous improvement leads to

improved organization performance through the increase in the quality of outputs as well as diminishing unnecessary costs. In addition, Vits and Gelders, (2002) believed and argued that Continuous improvement should be a part organization's learning and training processes and are of the opinion that the success of management efforts towards continuous improvement actions definitely have positive influence in meeting organization performance. Similarly, Talib et al. (2013) indicates that continuous improvement has a positive and significant influence on the organization performance improvement. Moreover, this study is consistent with Abusa (2013) who showed that continuous improvement TQM dimension significantly influences organizational performance in Pakistani Industrial Sector.

With the respect to the effects of identified variables namely: Customer focus, employee management, leadership, training and continuous improvement on organization performance, this study is modeled as:

$$\text{OP} = .426 + .358 (\text{CF}) + .257 (\text{EM}) + .264 (\text{L}) + .183 (\text{T}) + .106 (\text{CI}) + .175 (\text{avg. error in prediction})$$

According to the model, by simply looking the regression coefficients, it is rational to conclude that organization performance has been greatly influenced by customer focus with the highest value of .358, followed by leadership .264. The influence of employees management (.257), training (.183), and empathy (.106) though their influence on organization performance are significant but very minimal as compared to the other three independent variables. Again from the above model it is possible to generalize that customer focus is the highest explaining TQM dimension that affected organization performance significantly among the explaining variables of organization performance used in this research, then leadership is the next higher explaining construct which is again followed by the other three variables.

CHAPTER FIVE

5. Summary, Conclusion and Recommendation

This is the last section of the study which includes basic subsections like the research summary, conclusion, recommendation and further research directions:

5.1 Summary

The intention of this study was to examine the influence of total quality management dimensions on organization performance. The study adopted descriptive and explanatory research design. Also the study used quantitative research approach. The sample size was taken from the population of Federal transport authority employees. From this a total of 650 employees 248 were selected as respondents and the study were conducted in the city of Addis Ababa. Having identified the constructs that are customer focus, employees' management, leadership, training and continuous improvement, the researcher had developed and tested the following hypotheses:

- H1: There is a positive and significant relationship between customer focus and organization performance.
- H2: There is a positive and significant relationship between employees management and organization performance.
- H3: leadership has a positive and significant effect on organization performance.
- H4: Training has a positive and significant effect on organization performance.
- H5: There is a positive and significant relationship between continuous improvement and organization performance.

As it has been discussed in the analysis section of this study, all developed hypotheses were supported by the research findings. The extent of constructs or TQM dimensions influence on organization performance has already been discussed clearly in the previous chapter. In this section of the study, the findings of the respondents are presented in summarized and informative manner.

The respondents were asked to answer the influence of the five TQM dimensions on organization performance. The researcher have tested the questionnaires before he went through to the analysis by using the reliability test and the result showed that, the coefficient alpha for this study's instrument was found to be more than 80% . Since all the dimensions are greater than 70%, it was acceptable for further analysis.

The degree of association between Independent and dependent variables and the level of explanation was checked through correlation and regression analysis.

Accordingly, the following correlation analysis results were found. As it is tabulated in the analysis part of this study and the correlation analysis results stated below, all the constructs have moderate and strong relationship magnitude with organization performance.

Results of correlation analysis

- **Customer focus and organization performance**

Customer focus and organization performance are related with a strong relationship ($r = 0.687^{**}$).

- **Employees management and organization performance**

The construct employees management and organization performance have a strong relationship ($r = 0.683^{**}$).

- **Leadership and organization performance**

The independent variable, leadership has a strong relationship with dependent variable, organization performance ($r = 0.620^{**}$).

- **Training and organization performance**

Similarly, one of the TQM dimension, continuous improvement and organization performance are correlated with moderate relationship ($r = 0.572^{**}$).

- **Continuous improvement and organization performance**

Finally, the construct continuous improvement and organization performance have a moderate relationship ($r = 0.513^{**}$).

In addition to checking the degree of association between variables, the five constructs were also examined their extent of explanation to organization performance jointly using multiple regression analysis, but before the researcher has made the regression analysis, the independent variables were tested Multicollinearity. As per the VIF results all variables correlation coefficients is less than 10. Hence, Multicollinearity does not exist in these data.

In this research the determinant factors affecting organization performance are thoroughly analyzed. The relationship strength and dimensions between TQM and Organization performance were identified. These factors, which are considered as a major component in most literatures, were: Customer focus, employees' management, leadership, training and continuous improvement. Customer focus has been found central to organization performance.

This variable, customer focus found in this study as the strongest association determinant factors on organization performance. Thus, customer focus has been identified as a major constituent to predict organization performance; that is; organization performance can be explained in terms of customer focus as per this research finding, followed by leadership, employees management, training and continuous improvement respectively.

Then after as the multiple regressions analysis shows below and depicted in the tables of the previous chapter all independent variables explain the dependent variable with different extent.

The Multiple regression analysis result showed that:

- ✓ All the five constructs jointly explain 74.4 % of Organization performance
- ✓ Organization performance were explained by Customer focus, leadership, employees management, training and continuous improvement, individually with .358, .264, .257, .183 and .106 respectively

5.2 Conclusions

This study examined the effect of total quality management dimensions on organization performance in the case of Federal transport authority by using customer focus, employees' management, leadership, training and continuous improvement as determinants of organization

performance. Based on the empirical research findings in this study, it can be concluded that total quality management dimensions has positive and significant effect on organization performance and organization performance is affected by the above mentioned determinants.

Therefore, as per this research finding it can be conclude that:

- ✓ All the independent variables used in this study have positive and significant association with organization performance. Customer focus is the most influential factor to the existence of organization performance.
- ✓ Leadership is the next most important factor which can predict organization performance, followed by employees' management, training and continuous improvement.

5.3 Recommendations

Having dealt with the subject of TQM concept primary from different authors' perspectives and then from the findings of primary data source obtained from Ethiopian Federal Transport Authority, the study made the following recommendations:

- ✓ In Ethiopia the issue of TQM practices was found to low in all the system of belief including business performance leadership, customer satisfaction, and impact on society. Among these organizational performance is the most critical problem that must be addressed so as to utilize the benefits of TQM. Comparatively, a TQM practice of the service sector is weaker than the manufacturing sector as evaluated by all the quality measurement criteria. Therefore, the TQM implementers, particularly the government body should give special consideration to the service sector quality to the expected level so that the organization performance will be improved drastically. However, both manufacturing and service sector should be supported with a long term strategy to promote the quality standard and address the root causes of weak quality management practice.
- ✓ Service giving companies generally and the public sector specifically should adopt customer focus as a practice of TQM with the aim of enhancing organizational performance through customer satisfaction. They must understand the current and future

needs, and achieve their needs, and work to exceed their expectations. This is can be done by conducting research and working all the needs and expectations of customers.

- ✓ The organizations, especially Ethiopian Federal transport authority should participate employees in decision making and give them recognition for better performance. Most importantly they should lead them using paternalistic leadership approach Treating employees as a valuable resource increases their loyalty to the firm, motivates them and makes them proud of their jobs, improves their workrelated performances, decreases absenteeism, and reduces intentions to quit.
- ✓ Should work greatly creation of a good leader who can build up a clear mission statement and then develop strategies to realize the reason for the establishment.
- ✓ Provide trainings to employees for using new technology. Allocating firm resources to training on quality pays off as professional employees know concepts of quality, basic characteristics of their industry, and the structure and processes of the organization. Educated employees will increase quality, reliability, and timely delivery of the services. With effective training, employees can easily know the industry and the structure of the organization better. Effective training on quality also increases employees' skills to work effectively and efficiently. Furthermore, it will improve employees' loyalty to the firm, their motivation, and work-related performances. Employees' training on delivering high quality and reliable services reduces customer complaints
- ✓ Organizations in the public sector should embrace continuous improvement as a quality management strategy for excellent organizational performance and they should Continuously Improve their customer service delivery without fail so that the organization performance will be improved as needed.

5.4 Future Research Directions

As a result constraints for example financial and time resource, the study has limited to Federal transport authority However, there are other service providing institutions in the government service sector. Therefore, other researchers are recommended to include and conduct a research on those other governmental organizations.

Furthermore, this research is limited itself only on the five variables namely: Customer focus, employees management, leadership, training and continuous improvement. Nevertheless, there might be other factors. Hence, other researchers are recommended to include other factors which are not covered in this study.

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APPENDIX

Appendix 1

ADDIS ABABA UNIVERSITY

Questionnaire

Dear respondent, I would like to thank you for taking your time to fill the questionnaire. The purpose of this research is to study **the effects of total quality management on organization performance in the case of Federal Transport Authority**. This survey is designed as part of my work for a Master of Science in management at Addis Ababa University. All the information will be kept confidential and used **strictly** for academic purposes only.

CASE No: _____

Instruction:

Please, mark using (☑) selection method based on your convenience in the appropriate box for your choice. Please, also make sure that your choice is visible.

Part I. General Information

1. How old are you?

☐ 18-25

☐ 31-40

☐ Above 50

☐ 26-30

☐ 41-50

2. What is your maximum education level?

☐ Diploma

☐ Doctoral

☐ Degree

☐ Professor

☐ Masters

☐ Other

3. What is your gender?

☐ Male

☐ Female

4. How long have you been working in the organization or total work experience? _____
(Years)

☐ 1-5

☐ 11-15

☐ Above 20

☐ 6-10

☐ 16-20

Part II: The Effects of Total Quality Management on Organization Performance.

Please answer each statement below by putting a circle around the number or mark ((☒) , (☒), or (☐)) that best reflects your degree of agreement or disagreement with each statement.

Key:

1 = SD:- Strongly Disagree

2 = D: Disagree,

3 = N: Neutral,

4 = A: Agree,

5 = SA: Strongly Agree,

1.	Customer Focus	SD	D	N	A	SA
1.1	The Federal transport Authority has the capacity to satisfy customer needs and wants					
1.2	The transport Authority services meet the customer's					

	specific needs					
1.3	The Federal transport authority has embarked on a continuous improvement process to meet customers' needs					
1.4	The company gives priority for customers					
1.5	The Authority values internal customers					
1.6	The Authority values external customers					
1.7	The company designs policy in consideration of customers					
1.8	Strategies and plans are developed and implemented based on the information about customers' requirements and the company's capacities.					
2.	Employees Management	SD	D	N	A	SA
2.1	The human resources management is done in line with the business strategy and/or plans					
2.2	Management is qualified in quality principles.					
2.3	Employees are qualified in team work					
2.4	The experience and capacity building of people are adjusted to current and future needs, or according to the case, specific capacity building plans are developed					
2.5	People are encouraged and supported to take responsibilities and make decisions, with no risk to the organization, get involved in improvement activities, work in teams, etc.					
2.6	The communication amongst the whole staff is down-up, up-down, and horizontal, so that employees are considered to be well informed, and their opinions are					

	valued.					
3.	Leadership	SD	D	N	A	SA
3.1	Employees are stimulated to help implementing changes in the organization.					
3.2	Managers and supervisors motivate their employees and help them performing a high level work.					
3.3	Management recognizes the efforts and improvements attained by the staff					
3.4	Managers keep in contact with customers, suppliers, and this implies the encouragement and participation in alliances and improvement actions					
3.5	Managers identify and stimulate changes that should be carried out to improve, and their effectiveness is reviewed once implemented					
4	Training	SD	D	N	A	SA
4.1	All company's employees are trained in the total quality concepts					
4.2	Employees are qualified to develop team work					
4.3	Availability of resources for staff capacity building within the organization					
4.4	High management has created an environment that helps the continuous education					
5.	Continuous improvement	SD	D	N	A	SA
5.1	Information is managed to support the quality improvement (analysis of business information, costs and financial aspects to support the development of improvement priorities)					
5.2	The organization has developed and published a clear corporate mission, beliefs and objectives					
5.3	Use of customers' requirements as the base for					

	quality					
5.4	Managers and supervisors support the activities that improve the customers' satisfaction.					

Part III- Organization performance related questions

Please, also indicate your agreement or disagreement level for the next statements, using the same method of selection as the previous section.

6.	Organization Performance	SD	D	N	A	SA
5.1	There is improved service delivery in the company.					
5.2	There is improved inventory management in the organization.					
5.3	The organization's quality service delivery is enhanced					
5.4	There is Waste reduction in operations					
5.5	There is Improved employee operation efficiency thus reducing operation costs					

Many Many Thanks for your kind cooperation,

GetuHailemariam

Appendix II

SPSS Data output

1. Reliability Analysis

Reliability

Scale: ALL VARIABLES

Reliability Statistics	
Cronbach's Alpha	N of Items
.838	6

Scale: Customer Focus

Reliability Statistics	
Cronbach's Alpha	N of Items
.899	8

Scale: Employees Management

Case Processing Summary			
		N	%
Cases	Valid	227	100.0
	Excluded ^a	0	.0
	Total	227	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.834	6

Scale: Leadership

Reliability Statistics	
Cronbach's Alpha	N of Items
.800	5

Scale: Training

Reliability Statistics	
Cronbach's Alpha	N of Items
.764	4

Scale: continuous improvement

Reliability Statistics	
Cronbach's Alpha	N of Items
.728	4

Scale: Organization performance

Reliability Statistics

Cronbach's Alpha	N of Items
.849	5

Correlations

Correlations

		CF	Employee esMGT	Leadership	Trainin g	CI	OP
CF	Pearson Correlation	1	.470**	.379**	.431**	.267**	.687**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	227	227	227	227	227	227
EmployeesMGT	Pearson Correlation	.470**	1	.448**	.384**	.654**	.683**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	227	227	227	227	227	227
Leadership	Pearson Correlation	.379**	.448**	1	.386**	.320**	.620**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	227	227	227	227	227	227
Training	Pearson Correlation	.431**	.384**	.386**	1	.320**	.572**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	227	227	227	227	227	227
CI	Pearson Correlation	.267**	.654**	.320**	.320**	1	.513**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	227	227	227	227	227	227
OP	Pearson Correlation	.687**	.683**	.620**	.572**	.513**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	227	227	227	227	227	227

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

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	CI, CF, Leadership, Training, EmployeesMGT ^b		Enter

a. Dependent Variable: OP

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863 ^a	.744	.739	.19852

a. Predictors: (Constant), CI, CF, Leadership, Training, EmployeesMGT

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.374	5	5.075	128.767	.000 ^b
	Residual	8.710	221	.039		
	Total	34.083	226			

a. Dependent Variable: OP

b. Predictors: (Constant), CI, CF, Leadership, Training, EmployeesMGT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.426	.175		2.432	.016
	CF	.304	.035	.358	8.706	.000

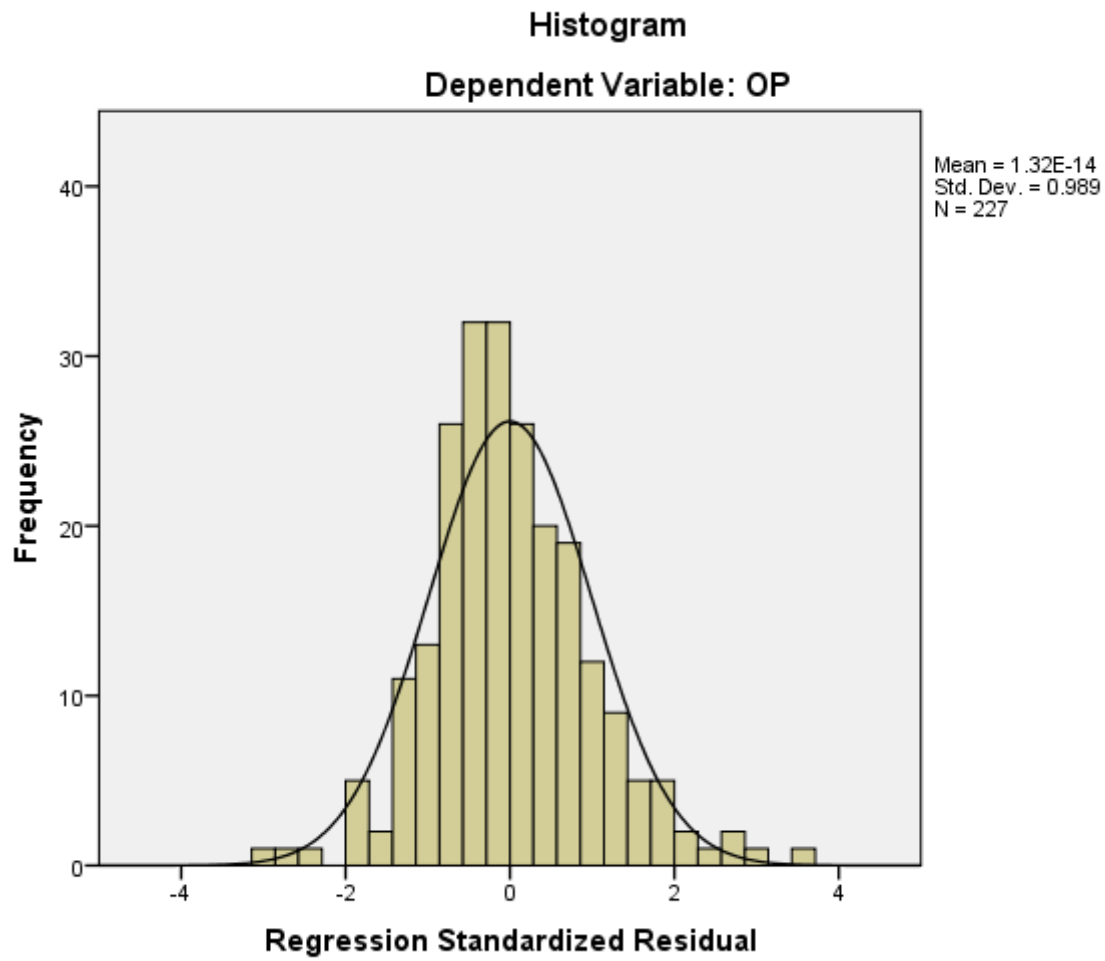
EmployeesMGT	.214	.042	.257	5.066	.000
Leadership	.208	.031	.264	6.627	.000
Training	.146	.032	.183	4.606	.000
CI	.086	.037	.106	2.340	.020

a. Dependent Variable: OP

Descriptive Statistics

	Mean	Std. Deviation	N
OP	4.7604	.38834	227
CF	4.6002	.45725	227
EmployeesMGT	4.5316	.46654	227
Leadership	4.4837	.49336	227
Training	4.4515	.48696	227
CI	4.4581	.47899	227

Charts



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: OP

