

**ST. MARY'S UNIVERSITY COLLEGE**  
**FACULTY OF BUSINESS**  
**DEPARTMENT OF MANAGEMENT**

**The Assessment of Total Quality Management Practice:  
The Case of Ethiopian Telecommunications Corporation**

**BY**  
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**June, 2011**  
**SMUC**  
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**A SENIOR ESSAY SUBMITTED TO**  
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**BACHELOR OF ART IN MANAGEMENT**

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Approved by the committee of examiners

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1. Background of the Organization**

The introduction of telecommunication in Ethiopia dates back to 1894. Ethiopian Telecommunications Corporation is the oldest public telecommunications operator in Africa. In those years, the technological scheme contributed to the integration of the Ethiopian society when the extensive open wire line system was laid out linking the capital with all the important administrative cities of the country.

After the end of the war against Italy, during which telecommunication network was destroyed, Ethiopia re-organized the Telephone, Telegraph and Postal services in 1941. In 1952 the Imperial Board of Telecommunications (IBTE) was established by proclamation No. 131/52 in 1952. The Board had full financial and administrative autonomy and was in charge of the provision and expansion of telecommunications services in Ethiopia. The Imperial Board of Telecommunications of Ethiopia, which became the Ethiopian Telecommunications Authority in 1981, was placed in charge of both the operation and regulation of telecommunication services in the wake of the market reforms.

In 1996, the Government established a separate regulatory body, the Ethiopian Telecommunication Agency (ETA) by Proclamation 49/1996, and during the same year, by regulation 10/1996, the Council of Ministers set up the Ethiopian Telecommunications Corporation (ETC). Under the supervision of the ETA, the principal duty of ETC is maintaining and expanding telecommunication services in the country and providing domestic and international telephone, telex, and other communicate on services. In this respect, currently ETC is the only operator of any telecommunication related service. ([etc.commun@telecom.net.et](mailto:etc.commun@telecom.net.et))

## **Present status**

At present, the total numbers of exchanges are 306 with a total exchange capacity of 780,000 lines; out of this 171 are automatic Digital exchanges with 760,368 capacities of lines. The remaining lines are connected to manual exchanges. Local Network: By the end of June 2004, 91 Microwave, 43 UHF, 242 DRMASS, 281 VSAT, 78 VHF and 8 HF stations have been operational.

Fixed Telephone Subscription & Traffic: The total number of fixed telephone subscribers has reached 484,368. These subscribers had generated 2,225.14 million urban metered calls and 17.7 million outgoing minutes. Internet Services: The Corporation has been providing internet services since 1997. The number of subscribers has reached 12,155 by the end of June 2004. The current server capacity is about 20 Mb. Ethio-internet renders Domain name, web designing and web hosting service .Metro Ethernet, Wireless internet, ADSL and GPRS services are planned to be provisioned. The broadband internet project /40,000/ is also under way and expected to be commissioned soon. (<http://www.telecom.net.et>)

## **Background of the Study**

The world has passed through different ages, from the early stone and hunting age to the present information age. The present information age is characterized by continuous flow of information among the different members of the society. This flow of information enables the world to be considered as a small village creating *Globalization*. Though globalization has numerous advantages to different elements of the society through quick flow of information, qualitative and standardized products and services, product differentiation which will result in bargaining power of customers and many more, it has brought a challenge to business organizations creating tough competition among them.

In order for organizations to generate huge amount of return, they should generate huge amount of sales through provision of quality service or product. The quality of a product or service has a pivotal



impact not only on the growth and development of organizations but also on the mere survival. In today's technological world, quality of a product or service is viewed from a different angle which brought into attention the concept of *Total Quality Management (TQM)*. (James Stoner,2003:196)

Total Quality Management (*TQM*) is a concept which states that the quality of a specific product or service can not only be linked to that product, but it needs the integration and commitment of each and every individual in the organizational structure so that an overall organizational excellence will be created. (Nancy, 2008:209)

This study, therefore, tries to show how total quality management is applied to those for profit organizations by taking *Ethiopian Telecommunication Corporation* as a basis for the analysis.

## **1.2. Statement of the Problem**

Organizations become complex in their operations so that they could be able to satisfy the ever increasing demand of customers for a quality product or service. In order to ensure the provision of a quality product or service the overall organization should strive for creation of a suitable environment so that each product to be produced.

*Total Quality Management (TQM)*: is a measure of evaluating the overall organizational commitment towards ensuring a total quality in the organization. This would enable organizations to evaluate their commitment towards quality so that possible measures could be taken for improving their future performance regarding quality.

This study was conducted as a result of preliminary observation, in order to improve the problem on line, poor network connection and not to get a standard quality. In order to ensure this problem, organizations are now adopting a system which enhances their quality measures-*Total Quality Management (TQM)*.

### **1.3. Research Questions**

This study tries to reveal the importance of total quality management considering the operations of *Ethiopian Telecommunication Corporation*. In doing so, the study tried to answer the following basic questions:

1. What is the importance of total quality management in ETC?
2. How can the quality management of ETC be evaluated using the different quality measuring techniques?
3. What kinds of standards, internal and external, are available to evaluate the quality management of ETC?
4. What are the challenges on the acceptability by evaluating quality management of ETC?

### **1.4. Objectives of the Study**

The overall objective of the study is to reveal the application of total quality management in those service provided by the organization. The study will have the following specific objectives:-

- ⊕ Evaluate the importance of total quality management to ETC,
- ⊕ Reveal the different ways of quality measures that will be used to evaluate the eminence of a product/service,
- ⊕ Find out standardized quality measures, if any, which will be used in evaluating the quality management of ETC.
- ⊕ Identify whether total quality management on the acceptability and marketability of a product/service,

### **1.5. Significance of the Study**

In addition to demonstrating the importance of total quality management for those service providing organizations, the study has the following importance:

- ⊕ Serve as a stepping stone for conducting further and detailed studies on the subject matter.
- ⊕ Alert organizations to be more careful in providing quality service to their customers and produce a total quality product.

- ⊕ Enable the reader to have a better understanding regarding the subject under study.
- ⊕ Could add to the existing literature and serve as an additional reference material.

## **1.6. Limitation of the study**

The following are the limitations which hindered the success of the study:

- ⊕ There was a shortage of time as compared to the requirement of the study for detailed investigations.
- ⊕ Similar studies were not obtained so that getting a reference could be difficult.
- ⊕ Capital constraint is also a problem as it requires a lot of money for conducting the survey, and processing the study. The capital constraint limited the size of the study unwillingly.

## **1.7. Delimitations of the Study**

Total quality management is a broad and difficult concept that needs the integration of each and every member of an organization starting from the work labor up to the top management.

## **1.8. Research Design and Methodology**

The following research methods were used in collecting and analyzing the data:

### **1.8.1. Research Design**

The collected data has been analyzed in a descriptive way. The quality management of *Ethiopian Telecommunication Corporation* is described and its commitment evaluated. The comparative analysis was made by considering the quality management of other public enterprises.

### **1.8.2. Population & Sampling Techniques**

A *random sampling* technique was used as it is the simplest and most convenient way of taking samples. In the process, questionnaires were distributed to 50 staffs of the organization out of 150 staff members residing at Haya Hulet Mazoria branch, the base which was selected by the organization to implement Total Quality Management.

### **1.8.3. Types of Data Used**

Two basic types of data were used, primary and secondary data. Primary data includes information from respondents, which were collected through questionnaire, interview, and observation, in order to get original information to the study. On the other side, secondary data was obtained from related literature; it includes different kinds of published and unpublished books, journal, internets and other relevant available materials.

### **1.8.4. Methods of Data Collection**

The primary data was collected through questionnaires, interviews and observation. The questionnaires were distributed to the target respondents found in the branch office. The questions were both closed and open ended in type. The second tool of collecting information that was used in gathering the desired data was semi-structured interview. This might help the researcher to get a chance to dig out and raise some main questions and based on the interviewees responses.

### **1.8.5. Data Analysis Method**

Descriptive statistics were applied to analyze the collected, organized and presented data. Furthermore, the qualitative methods of data analysis were also implemented to identify the differences in perception among different respondents.

## **1.9. Organization of the Study**

The study had four major chapters. The first chapter, being an introduction, provides different concepts regarding the subject and provides general information on the overall study. The second chapter reviewed the related literature. The finding & analysis is in the third chapter. The last but not the least chapter, is chapter four it includes conclusions and recommendations.

# **CHAPTER TWO**

## **REVIEW OF RELATED LITERATURE**

### **2.1. Introduction**

Following recent developments in the world, emphasis has been given in each and every aspect of a product which gave rise to the idea of quality. Quality is a complex concept that has become one of the most universally appealing in all of management theory. A quality revolution is truly afoot in business today. While this concern with quality has historical roots, suffice it is to say that every business today wants to have quality products and services, and by that they mean products and services that are better than average, perform to the level needed, and are affordable.

Quality is a sense of appreciation that something is better than something else. It changes in a lifetime, and it changes generation to generation, and it varies by facets of human activity. (Richards, 2010:222)

Many people perceive attention to quality as one of the most important competitive issues of today and tomorrow. In fact, quality may be one of the most important ways a manager can add value to products and service to set them apart from those of a competitor. At one time, managers believed that there was an inevitable trade-off between productivity and quality. They thought that the two were diametrically opposed that increasing one meant decreasing the other. Today, however, effective managers consider productivity and quality as two sides of the same coin- one that can increase profits and build customer loyalty. (James Stoner, 2003:213.)

Quality management is a principle that ensures quality in a company's products and services. There are various types of quality management programs which include but are not limited to Six Sigma, Theory of Constraints and TQM (Total Quality Management). Although the approach to solving quality issues vary with the different quality

management programs, the goal remains the same--to create a high quality, high performing product or service that meets and exceeds the customers' expectations. Quality management is important to companies for a variety of reasons.

## **2.2. Definition of TQM**

Various scholars have tried the concept of quality and total quality management in different ways. However it is difficult as the concept could vary from individual to individual or from organization to organization. Thus the definition of total quality management given by different scholars is presented here under:

*Total Quality Management (TQM)* is a set of management practices throughout the organization, geared to ensure that the organization consistently meets or exceeds customer requirements. TQM places strong focus on process measurement and controls as means of continuous improvement. (James Stoner, 2003:323.)

⊕ *Total Quality Management (TQM)* is approach to the art of management that has become steadily more popular in the West since the early 1980's. in a couple of sentences, total quality can be summarized as a description of the culture, attitude and organization of a company that aims to provide, and continue to provide, its customers with products and services that satisfy their needs. The culture requires quality in all aspects of the company's operations, with things being done right first time, and defects and waste eradicated from operations. (<http://www.johnstark.com>)

⊕ *Total Quality Management (TQM)* means that the organization's culture is defined by and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques, and training. This involves the continuous improvement of organizational processes, resulting in high quality products and services. (Nancy, 2009: 368).

Though other different definitions could be provided for the concept *Total Quality Management (TQM)*, all the explanations have the following key points in common: ([www.bexcellence.org](http://www.bexcellence.org))

- Customer – driven quality
- TQM leadership from top management
- Continuous improvement
- Fast response to customer requirements
- Actions based on data and analysis
- Participation by all employees

### **Customer – driven Quality**

TQM has a customer-first orientation. Customer satisfaction is seen as a company's highest priority. This demands constant sensitivity to customers and fast response to their requirements. Each part of the company is involved in Total quality, operating as a customer to some functions and as a supplier to others. Vendors are seen as partners in the process of providing customer satisfaction.

Many early attempts to improve quality systematically failed precisely because managers became enamored of the tools of quality. They spent a great deal of time creating diagrams, doing statistical process control and bench marking. If customer needs are not the starting point, though, using the tools of quality may result in products and services that no one wants to buy. Joseph Juran defined quality as "*fitness for use*" – the ability of a product or service to satisfy a customer.

Quality management ensures customer satisfaction. Conduct customer satisfaction surveys to understand the qualities of the product important to the customer. Also conduct surveys with those who are not the company's customers. This will also provide insight into why these businesses use the services of the competitor. Use customer surveys to target those features of a product or service that need improvement. The

quality management program provides a methodology to use to create the type of product the customer desires.

### **Leadership from Top Management**

Top management commitment and involvement is required in creating and deploying clear quality values and goals consistent with the objectives of the company, and in creating and deploying well defined systems, methods and performance measures for achieving those goals. Such systems and methods guide all quality activities and encourage participation by all employees. The development and use of performance indicators is linked, directly or indirectly, to customer requirements and satisfaction, and to employee remuneration. Quality management professionals can benefit from the use of a variety of tools. Quality Management is important for any organization. Unfortunately, small organizations in particular may feel somewhat threatened by the thought of all of the measurements, numbers and bits of data that they feel quality management will entail. But while it's true that numbers and data are important elements of the quality management system, there are a number of tools that can help businesses use those numbers effectively (Richards, 2010:334)

Many managers begin with the assumption that were there is quality problems, the workers or some individual (*manager or worker*) is to blame. One of the hall marks of a TQM approach is the questioning of that assumption. TQM implies that when there is a quality problem is begins in the boardroom and in the offices of the senior managers and others who do not take quality seriously enough. For instance, Deming believes that until the system that is the cause of a particular failure in quality can be identified, management cannot do its job. It is every manager's job to seek out and correct the causes of failure, rather than merely identify failures after they occur and affix blame to someone, probably the most famous of all Deming's sayings is that *85 percent* of



an organization's problems come from the systems and *15 percent* from the workers. (James Stoner. 6th ed. 2003:425.)

### **Continuous Improvement**

Continuous improvement of all operations and activities is at the heart of TQM. Because customer satisfaction can only be achieved by providing a high-quality product, continuous improvement of the quality of the product is seen as the only way to maintain a high level of customer satisfaction. As well as recognizing the link between product quality and customer satisfaction, TQM also recognizes that product quality is the result of process quality. As a result, there is a focus on continuous improvement of the company's processes. This will lead to an improvement in process quality. In turn this will lead to an improvement in product quality, and to an increase in customer satisfaction. Improvement cycles are encouraged for all activities from design and development of products, through routine support and administrative services, to customer relationship management. To achieve continuous improvement the company has to measure and analyze its own performance and that of other companies.

Elimination of waste is major component of quality improvement approach. There is also a strong emphasis on prevention rather than detection, hence an emphasis on quality at the design stage. The customer-driven process helps to prevent errors and get closer to defect-free production. When problems do occur within the product development process, the aim is to identify and solve them rather than hide them. As a result, they are generally discovered and resolved before they can get to the next internal customer.

### **Fast response to customer requirements**

Fast response is required in the form of ever shorter product and service introduction cycles and more rapid response to customer needs. This means that all activities should include measurement and monitoring of

cycle time and responsiveness as a basis for identifying opportunities for improvement. Among the main benefits of customer-driven and process-oriented product development are the resulting simplicity and efficiency that greatly reduce the time involved. Simplicity is gained through the concurrent efforts of design teams, and efficiencies are realized from the elimination of non-valuable-added effort such as re-design. The result is a dramatic reduction in the elapsed time from product concept until first shipment.

### **Actions based on data and analysis**

At the heart of TQM is the statistical analysis of engineering and manufacturing information. Facts, data and analysis support the planning, review and tracking of performance, improvement of operations, and comparisons of quality performance with competitors. TQM is based on the use of objective data, and provides a rational rather than an emotional basis for decision making. The statistical approach to process management recognizes that most problems are system-related, and are not caused by particular employees. The approach ensures that data is collected and placed in the hands of the people who are in the best position to analyze it, and then take the appropriate action to reduce costs and prevent non-conformance. If the right information is not available, then the analysis, whether it be of shop floor data, or engineering test results, cannot take place, errors cannot be identified, and consequently errors cannot be corrected.

### **Participation by all employees**

A successful TQM environment requires a committed and well-trained workforce that participates in quality improvement activities. Such participation is reinforced by reward and recognition systems emphasizing the achievement of quality objectives. On-going education and training of all employees supports the drive for quality. Employees are encouraged to take more responsibility, communicate more

effectively, act creatively, and innovate. Their knowledge and skills are respected by management.

Without a TQM approach, Engineering and product development are usually carried out in a confliction atmosphere with individual department reacting to problems. Changes, scrap, delays, work-around, waste, and rework are seen as normal behavior. Management focuses on supervising individuals.

In a TQM environment, Engineering and product development are customer-driven. They are focused on quality and on preventing problems rather than reacting to them. Teams are process-oriented, and interact with their internal customers to deliver the required results. Management's focus is on controlling the overall process, and rewarding teamwork.

Quality management systems force company departments to work as a team. Different areas of the company become reliant upon one another to produce a quality product that meets and exceeds the customers' expectations. A quality system incorporates measures that affect sales, finance, operations, customer service and marketing. The balanced scorecard is a one-stop-shop for evaluating how various departments are operating against

their performance expectations. Use the balanced scorecard to show how close the company is to the financial, operational, customer service and learning/growth targets.

Having the support and attention of senior management remains a necessary condition for marking TQM work in an organization, but without empowered employees it won't go very far. Empowerment stands for a substantial change that businesses are implementing. It means letting employees make decisions at all levels of an organization without asking for approval from managers. The idea is quite simple: the people, who actually do a job, whether it is running a complex machine or

providing a simple service, are in the best position to learn how to do that job the best way. Therefore, when there is a chance to improve the job or the systems of which a job is a part, people should make those improvements without asking for permission.

### **2.3. A systems Approach to Total Quality Management**

The TQM approach depends on understanding organizations as systems. Dobyns and Crawford-Mason delineate three main systems for which managers are responsible: the social or cultural system, the managerial system, and the technical systems. Nancy, 2008:124)

A system is “*a series of functions or activities within an organization that work together for the aim of the organization.*” Parts of the system must work to support each other. People must cooperate for the good of the whole system or else “*sub optimization*” occurs. When parts of an organization do not support other parts, then the organization cannot focus on total quality management. A task of management involves having everyone focus on total quality management. A task of management involves having everyone focus on the system aim.

The cultural system, also referred to as the social system, is the set of beliefs and the resulting behaviors that are shared throughout the organization.

The technical system is composed of such factors as the technologies used and the physical infrastructure (*including ergonomic considerations, computer software, and hardware configurations, and capital investments needed to accomplish the company’s mission*).

The management system “*defines the effectiveness of those processes by which an organization manages its human and physical assets.*” Continuous quality improvement and worker empowerment translate into smaller, not larger, quality departments. The responsibility for improving quality is given to everyone from workers on the factory floor

to senior executives. (B. Bendet, 1992:151) Total Quality Management (TQM) is a business paradigm that puts customer satisfaction as a company's highest priority and implements a variety of specific measures to ensure that the company succeeds at satisfying customers. Total Quality Management targets such areas as error reduction, process streamlining, and increase in employee satisfaction to improve business performance. In a small business environment, it can be challenging to implement a TQM system, but with the right strategy and goals, a company of any size can draw upon its principles (Nancy, 2008: 421)

#### **2.4. Deming's Fourteen Points**

Deming's fourteen-point system of thinking about total quality management has a remarkable role in explaining the concept of TQM. Deming believed that to try for quality in everything that an organization does requires a change in philosophy. Consequently, it is useful to look at his system as a total and encompassing philosophy of management. (James Stoner, Op., Cit, 1962:442)

A key imperative that underlies Deming's approach to transforming management is that of learning to live without enemies. Fear erects barriers to improving companies says Deming. He questions the basic assumption that high quality means higher prices, and asserts that constancy of purpose an unwavering focus on an organization's mission coupled with statistical quality control and "*joy in work*" will drive ever-improving quality forward and lower cost. Moreover, Deming believes that the manager's job is to seek out and correct the cause of failure, rather than merely identify failures after they occur. The goal of Deming's fourteen points therefore lies in altering the behavior of managers and employees so that companies can become low-cost, high-quality, and highly productive suppliers of goods and services and places of work that honor and support the contributions of all organizational members.

### **1. Create constancy of purpose for improvement of product and service**

Management must maintain an unwavering commitment to quality and shift its focus from the short term to the long term. Quality, not profit, should lie at the heart of the organization's purpose. According to Deming, profit is a consequence that naturally follows when an organization targets quality.

### **2. Adopt the New Philosophy**

The recognition that we are in a new era in which ever increasing quality is necessary for corporate survival is based on maintaining a constancy of purpose. Management must reject inferior materials, poor workmanship, defective products, and slack service. It is not enough that defects are minimized; they should be eliminated. "*Reliable service reduces costs,*" Deming notes. "*Delays and mistakes raise costs.*" The traditional system should be dismantled and replaced. The new culture must be supported by all employees, and should reflect commitment to quality.

### **3. Cease Dependence on mass inspection**

He recognizes that once errors occur, efficiency and effectiveness have already been lost. Mass inspections to catch errors after they have occurred therefore need to be replaced by building in quality from the start. Continuous process improvement reduces costs incurred when errors are made and then corrected. The completion of high quality products also enhances employee satisfaction, because it enables employees to feel a sense of accomplishment and enables them to take pride in their work-no one enjoys producing junk.

### **4. End the practice of awarding business on price tag alone**

Encourages companies to end adversarial relationships with their suppliers, and instead develop long-term relationship with them. He argues that price is not relevant until it is linked to a measure of the

quality being purchased. Statistical tools are very important in enabling companies to evaluate the quality of vendors and purchased parts.

*General motors (GM)*, for example, use information technology to maintain close relations with its suppliers. GM and many of its suppliers operate as nearly a single business. GM brings its suppliers into its internal organization through computer data linkups that blur the boundaries between GMA and its suppliers. GM requires that its supplier interact through a computer network. While remaining separate legal entities, GM and its supplier has become virtually a single corporation through the computer link up. In addition, the link-up improves productivity by saving time, reducing errors, and eliminating paper transaction such as purchase orders and invoices. The system therefore reduces the need for administrative personnel.

One way Deming urges companies to improve relationships with suppliers are by developing partnerships based on trust with single sources. *Procter and Gamble (P&G)* used the single-source method to improve quality. Batches of the company's experimental drugs must be determined to be free of microbiological contamination before they can be released for use in clinical studies. The clearance service is performed by independent contractors. Before instituting total quality management, P&G contracted with five or six suppliers; the company now negotiates with a single "preferred" contractor and saves shipping and administrative expenses, in additional to other costs.

## **5. Constantly and forever improve the system of production and service**

Management's obligation to seek out methods for quality improvement is never-ending. He believes that improvement follows from studying the process itself, not the defects, and that process improvement is the responsibility of management. In this regard, the recent focus on corporate reengineering is consistent with Deming's teachings.

## **6. Institute modern methods of training on the job**

Training encompasses more than merely teaching employees how to use tools, such as statistical quality control, for improving quality. Training also translates into making sure that workers get adequate knowledge and skills for the jobs for which they are responsible. Motorola University is built on this idea.

## **7. Institute Leadership**

The traditional actions of supervisor are not adequate, says Deming. He contends that supervisors merely tell workers what to do and make sure they do it. They administer rewards and penalties, and provided discipline when necessary. They do not see their jobs as providing leadership. Leaders, on the other hand, began with the assumption that workers aim to do the best job they can, and endeavor to help workers reach their full potential. For lower-level managers, this entails coaching and arranging for training. Top managers must, in turn, help design and implement a strategic vision that grounds a TQM culture, and make sure their own behavior exhibits the values that support such a culture.

## **8. Drive out fear**

It is important to Deming that fear not prevents employees from being able to ask questions, report problems, or express ideas, employees must feel secure in order for quality to be pursued successfully in the workplace. A culture of openness, where people are not afraid of telling the truth, remains essential.

Driving out fear of speaking up can have an ethical component. Many analysts are recommending that, especially in these competitive times, open communication of ethical standards and decisive action that reinforces those standards is needed to communicate a company commitment to ethics that involves openness. As Kenneth Andrews argues: "The practice of management requires a prolonged play of judgment. Executives must find in their own will, experience, and



intelligence the principles they apply in balancing conflicting claims. Wise men and women will submit their view to others, for open discussion of problems reveals unsuspected ethical dimensions and develops alternative viewpoints that should be taken into account.

### **9. Break down Barriers between Staff Areas**

Considers the barriers between functional departments to be counterproductive. Employees can improve productivity by learning from one another and coordinating efforts, regardless of their functional expertise. The tendency of traditional organizational structures is to encourage competition between departments. According to Deming, employees recognize that, regardless of their expertise, they all share the same overriding goals. Competitions should be with other organizations.

### **10. Eliminate slogans, exhortations, and targets for the workforce**

Continual improvement as a general goal, says Deming, should replace supposedly motivational or inspirational signs, slogans and like. He criticizes companies that attempt to motivate employees through speakers and inspirational tracts; for it merely frustrates employees to be encouraged to do things the existing management system prevents them from doing.

### **11. Eliminate numerical quotas**

Advocates the removal of quotas, because they end up encouraging people to focus on quantity often at the expense of quality. Companies should focus on quality issues instead of blindly pursuing numbers.

### **12. Remove Barriers to pride of workmanship**

Deming maintains that annual rating or merit systems should be eliminated. If people inherently want to perform well, as Deming assumes, then they do not need such incentive systems. What they need is assistance in overcoming obstacles imposed by inadequacies in materials, equipment, and training. Systems that endeavor to remove

such obstacles should replace systems that attempt to coerce performance by making workers feel that they are always being judge, ranked, and rated.

### **13. Institute a vigorous program of education and training**

Deming emphasizes training. This includes a thorough foundation in the tools and techniques of quality control, as well as additional instruction in teamwork and the philosophy of a TQM culture.

### **14. Take action to accomplish the transformation**

According to Deming, the entire organization must work together to enable a quality culture to succeed. As top managers' design and implement the strategy, workers can then cooperate in the pursuit of a TQM culture.

## **CHAPTER THREE**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

This study is aim to provide information regarding the application of total quality management in Ethiopian Telecommunication Corporation, so that, this chapter deals with analysis and interpretation of the study based on the data gathered from the respondents. All the data were obtained through questionnaire containing close ended and open-ended questions, through interview with the management body of the corporation and observation.

#### **3.1. General Characteristics of Respondents**

Table 1 below shows the general characteristics of respondents, which include their sex, age distribution, and education status and work experience.

**Table 3.1.1:** Sex Distribution, Age, Education and Work Experience

S.N	Item	Frequency	
		No	%
1	Sex		
	Male	32	65
	Female	18	35
<b>Total</b>		<b>50</b>	<b>100</b>
2	Age		
	18-25	24	48
	26-33	20	40
	34-43	-	-
	44-50	6	12
	Above 50	-	-
<b>Total</b>		<b>50</b>	<b>100</b>
3	Educational status		
	Certificate	-	-
	Diploma	14	31
	Degree	36	69
	2 <sup>nd</sup> degree	-	-
<b>Total</b>		<b>50</b>	<b>100</b>
4	Work Experience		
	< 3 years	19	38
	4-6years	25	49
	7-9 years	-	-
	above 10 year	6	13
<b>Total</b>		<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be observed in Table 3.1.1, majority of the respondents i.e. 32(65%) are male. While the rest 18(35%) of them are female.

Item 2 of the same table indicated that, majority of the respondents i.e. 24(48%) of them replied that they are under the age category of 18-25. While the remaining 20(40%) and 6(12%) of them categorized under the age group of 26-33 and 44-50 respectively. This shows that, respondents are good enough to express this idea to the study.

Item 3 of the same table indicated that, majority of the respondents i.e. 36(69%) of them replied that they are degree holders. While the remaining 14(31%) of them categorized as diploma holder. This shows that, the cooperation has strong staff in respect of educational status.

Item 4 of the same table signifies that, 25(49%), 19(38%) and 6(13%) them respondents have work experience of 4-6 years, less than 3 years, and above 10 years respectively. This indicated that, employees working within the corporation well informed about the practice of TQM in the organization under study.

### 3.2. Analyses of the Major Findings

This section contains analysis of primary data directly related to the study. All the data gathered form respondents are presented, analyzed and interpreted in detail hear in the upcoming section.

**Table 3.2.1:** Effectiveness of the System

Item	Alternatives	Frequency	
		No	%
How do you see the effectiveness TQM practice in ETC?	Very high	-	-
	High	16	32
	medium	-	-
	low	34	68
	Very low	-	-
<b>Total</b>		<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be seen in Table 3.2.1 above, majority of the respondent's i.e.34 (68%) of them replied that the total quality management practice of the corporation is low. While the rest 16(32%) of the respondents replied, the total quality management practice rated high. This implies that, there is somehow gap in implementing the system in the operation of the corporation.

**Table 3.2.2:** Design of the System

S.N	Item	Alternatives	Frequency	
			No	%
1	Total quality management of the ETC is well designed?	Strongly agree	-	-
		agree	-	-
		disagree	35	71
		strongly disagree	15	29
<b>Total</b>			<b>50</b>	<b>100</b>
2	What kind of service dose the corporation provide to its customer?	Telephone and internet \	45	91
		Other service	5	9
<b>Total</b>			<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be seen in Table 3.2.2 above, majority of the respondent's i.e.35 (71%) of them replied that they are disagreed with the total quality management system is not designed well. While the rest 15(29%) of the respondents replied, they strongly disagreed with the total quality management system is not designed well because as the respondent replied that, other possible considerations does not considered. This implies that, the system of the corporation is not well functioned since not well designed.

Item 2 of the same table indicated that, majority of the respondent's i.e. 45(91%) replied that, the corporation provide telephone and internet

service, while the remaining 5(9%) of them replied that, other service. From this one can easily understand that, the customers of the corporation do not have sufficient knowledge regarding the full services of the organization; this could be attributed to quality as the customer should have the awareness of the type of services before judging the service quality.

### **3.3. Conceptual Definition of Quality by the Corporation**

According to the data obtained from respondents regarding the definition given to quality by the corporation is presented here with the operational meaning of the word.

- ⊕ Quality service is about providing an up-to-date and up-to-the standard Information Communication Technology in the country so that the people will get connected in the very short and convenient method.
- ⊕ Quality service is about winning the vices of time and space in a very comfortable way so that the level of complaint will be kept to a minimum level.
- ⊕ Quality service is about creating a long lasting name and brand within the society so that the organization will be a second to none choice to its customers.
- ⊕ Quality service is all about continuous assessment of the operations so that any updates and inventions could be added in an easy and economical way.

As it is presented above definitions given seem different but they all emphasized on satisfying the customer with the best services that it deserve for the money that the customer is paying. It is about putting the customer first so as to make the corporation the first choice (Willful choice not forceful choice) among every member of the society. From this one can easily understand that, the corporation have clear attachment with customer satisfaction but some difficulties in converting in to practice being their.

### 3.4. Corporation's Attitude of Total Quality Management

Concerning the concept total quality management exercised within the corporation during caring out their day to day service to their customer, the researcher asked the respondents and their response is presented accordingly hear under i.e. let alone the concept of TQM, quality concept has not fully reached in the corporation's surrounding area. However, efforts have been made to improve the service quality of the organization through implementation of various strategies, such as awareness creation, scheduled workshop and training.

**Table 3.4.1:** Commitment made by top management

S.N	Item	Alternatives	Frequency	
			No	%
1	To what extent the commitment made by the top management ensure TQM in the corporation?	To very great extent	-	-
		To great extent	27	54
		To some extent	16	32
		To lower extent	7	14
		To very lower extent	-	-
<b>Total</b>			<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As it is presented in Table 3.4.1 above, majority of the respondent's i.e.27 (54%) of them replied that to great extent the top management of the corporation committed to ensure TQM. While the rest 16(32%) and 7((14%) of the respondents replied, to some extent and to lower extent the top management commitment ensure TQM of the corporation. This implies that, there is high level of commitment by the higher management body to make of the service quality.



**Table 3.4.2:** Ensuring Quality Service Provided to the Customer

S.N	Item	Alternatives	Frequency	
			No	%
1	Dose the corporation ensure that a quality service is being provided to its customer?	Yes	46	92
		No	4	8
<b>Total</b>			<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be seen in Table 3.4.2 above, majority of the respondent's i.e.46 (92%) of them replied that yes the corporation ensure for delivering of the quality service to customer through installation of Fiber Optics and replacing the existing cable system, increasing the number of sub stations so that the network problem will be kept to the minimum. While the rest 4(8%) of the respondents replied that no the corporation does not ensure quality service to customer. This implies that, the service provided to the corporation is somehow ensuring quality service to customer.

### **3.5. Challenges to Provide Quality Service to Customer**

According to the data obtained from respondents indicated that, due to the ever-growing scope of the corporation function, capital constraint contributes to the poor quality of the services provided. The poor network available has been taken as a manifestation of lack of quality. On the other hand, another challenge that hinders the corporation from providing a quality service is lack of awareness in the public regarding the telecom service. The public does not have the necessary information regarding the services of the organization.

Beside this, data obtained from respondent evidenced that, the size of the corporation is difficult to manage as to the number of available branches in different parts of the country with large number of

employees, since the telecom serviced is only and only provided solely by the corporation. The larger size of the corporation is one reason for not delivering that of a quality service to its customers.

**Table 3.5.1:** Effectiveness of TQM implementation

S.N	Item	Alternatives	Frequency	
			No	%
1	Two what extent ETC is effective in implementing the TQM system?	To very great extent	-	-
		To great extent	24	48
		To some extent	26	52
		To lower extent	-	-
		To very lower extent	-	-
<b>Total</b>			<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be seen in Table 3.5.1 above, majority of the respondent's i.e. 26(52%) of them replied that to some extent the corporation is effective in total quality management. While the rest 24(48%) of the respondents replied that to great extent the total quality management system is effective. This implies that, the corporation have capacity to implement the system effectively.

**Table 3.5.2:** Measure Taken to By the Corporation

S.N	Item	Alternatives	Frequency	
			No	%
1	To what extent the corporation take corrective measure to ensure quality service of the customer?	To very great extent	-	-
		To great extent	-	-
		To some extent	32	64
		To lower extent	10	20
		To very lower extent	8	16
<b>Total</b>			<b>50</b>	<b>100</b>

**Source:** Primary data, 2011

As can be seen in Table 3.5.2 above, majority of the respondent's i.e. 32(64%) of them replied that to some extent the corporation take

possible measure to ensure quality service. While the rest 10(20%) and 8(16%) of the respondents replied that to lower extent and to very lower extent the corporation take corrective measure to ensure customer service. This implies that, the corporation can have the possibility to reduce the cause to problem.

### **3.6. Factors that Made the Corporation Ineffective**

As per the data obtained from respondents, the possible reason for the ineffective service of the corporation is existence of the problem; the largest share is those who support the idea of lack of proper management. And also respondents explained that, explained that the existing management in the organization lacks the commitment towards establishing a dependable ICT in the country so that the management should shoulder the responsibility for all the problems. Lack of the required technological equipments in the corporation has also been taken as a reason for the existing service problems. Moreover, lack of skilled employees in the area of customer handling has created in customer disappointment. Other possible reasons include the nature of the telecom service in the country which operates in a monopoly market, and lack of emphasis on the existing service rather 'putting expansion first'.

Finally, data obtained from respondents indicated that, the corporation should have to fulfill all the possible requirements in its service operation in order to fully exploit the benefit of total quality management. (Primary data, 2011)

## **CHAPTER FOUR**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

After all analysis done in chapter three, findings of the study are identified. In this chapter major findings of the study are summarized, conclusions are drawn and possible recommendations are forwarded to the concerned management body of the corporation.

#### **4.1. Summaries of Major Findings**

Findings of the study were made from the analysis of primary and secondary data, interview and observation. Depending on the result of data analysis the following major findings are obtained:

- ⊕ As indicated by the study, 54 (68%) of them replied that the total quality management practice of the corporation is low.
- ⊕ As revealed by the study, 35 (71%) of them replied that they are disagreed with the total quality management well designing of system.
- ⊕ The study indicated that, quality service is about providing an up-to-date and up-to-the standard Information Communication Technology in the country.
- ⊕ According to the study, majority of the respondent's replied that to great extent the top management of the corporation committed to ensure TQM.
- ⊕ The study revealed that, due to the ever-growing scope of the corporation function and its capital constraint contributes to the poor quality of the services provided.
- ⊕ According to the study, the larger size of the corporation is one reason not deliver quality service to its customers.
- ⊕ The study indicated that, 32(64%) of them confirm that, to some extent the corporation take possible measure to ensure quality service

## 4.2. Conclusions

On the basis of the findings presented above the following conclusions are drawn.

- ⊕ There is somehow gap in implementing the system in the operation of the corporation, which is basically hampering its effective operation of ICT service of the corporation.
- ⊕ Total quality management system of the corporation is not well functioned since not well designed, which cause to lacking the calculated advantage in communication service.
- ⊕ The corporation have clear attachment with customer satisfaction but some difficulties in converting it in to practices.
- ⊕ There is high level of effort made by the higher management body service quality, which can assist the corporation attaining it overall goals.
- ⊕ The service provided to the corporation is somehow ensuring quality service to customer, which can help he corporation sustaining to generate its profit.
- ⊕ The corporation can have capacity to effectively implement the system, which might be advantageous.
- ⊕ The poor network available has been taken as a manifestation of lack of quality, this highly sanding against the overall goals of the system as well as the corporation.
- ⊕ Lack of awareness in the public regarding the telecom service and the size of the corporation affect the quality assurance of the corporation, which have adverse effect over the futurity of the corporation.

### **4.3. Recommendations**

Based on the conclusion drawn the following recommended points forwarded to the management of the corporation.

- ⊕ In order to ensure effective ICT service quality to the customers, the management of the corporation advised to improve its quality system implementation practice.
- ⊕ In order to make fully functional system with in the corporation, the management of the corporation strongly advised to revise design of the system.
- ⊕ In order to maximize the level of service consumed by its customer, the management of the corporation recommended creating mechanism in creating awareness regarding its service line to the customers.
- ⊕ In order to attaining the aim of the corporation in quality service delivery, it is recommended that the continuity of support from the higher management officials.
- ⊕ In order to make all the quality service in to all over the districts, The Corporation recommended expanding it quality service delivery in all functional area.
- ⊕ In order to meet the aim of total quality management with in the corporation service, the management of the corporation advised to alleviate all bottle necks related to poor networking system and other problems.
- ⊕ The corporation recommended delegating some agents with necessarily strict requirement, in order to sustainable ensures the quality and accessibility of speedy network to its customer in ICT service.

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# APPENDICES

## A. Questionnaire [English Version]

### The Assessment of Total Quality Management Practice: The Case of Ethiopian Telecommunications Corporation

Addis Ababa, 2011

### For Employees Use only

#### Informed Confidentiality and Consent

I am a prospective graduate of St. Mary's University College from the department of Management. I am conducting a research for the partial fulfillment of my B. A. Degree in management, entitled "**The Assessment of Total Quality Management Practice: the Case of Ethiopian Telecommunications Corporation**"

The general objective of the research is to assess the practices of Total Quality Management, problems related to TQM and its consequences in your organization and to suggest possible recommendations that would help to minimize problems.

Since your honest and timely response is valuable for the success of the research, please try to answer the questions frankly with due attention.

**Thank you in advance for your cooperation**

#### **Note:**

- No need of writing your name since the questionnaire is prepared for academic purpose.
- Please, put a tick mark (✓) in the box or circle choices for your answers
- Discusses briefly open ended questions

#### **PART I: Background Characteristics of the Respondents.**

- |        |                       |                       |                       |                       |
|--------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Sex | Male                  | <input type="radio"/> | Female                | <input type="radio"/> |
| 2. Age | <input type="radio"/> | 18-25                 | <input type="radio"/> | 34-43                 |
|        | <input type="radio"/> | 26-33                 | <input type="radio"/> | 44-50                 |
|        | <input type="radio"/> | Above 50              |                       |                       |



3. Educational Status

- Certificate  Degree  
 Diploma  2<sup>nd</sup> Degree

4. Work Experience

- < 3 years  7-9 years  
 4-6 years  above 10 years

5. Positioned held in the organization. \_\_\_\_\_

**PART II: Questions Related to the Study**

1. How do you see the effectiveness of Total quality management practice in ETC?

- Very high  Medium  
 High  Very low

2. The Total quality management of the ETC is well designed?

- Strongly agree  Disagree  
 Agree  Strongly disagree

3. What kind of service does the corporation provide to its customers?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. To what extent the commitments made by the top management ensure TQM in the corporation?

- To very great extent  To some extent  To very lower extent  
 To great extent  To lower extent

5. Does the corporation ensure that a quality service is being provided to its Customer?

- Yes  No

6. To what extent ETC is effective implementation the TQM system?

- To very great extent       To some extent

To very lower extent

- To great extent       To lower extent

7. To what extent the corporations take corrective measure to ensure quality service of the customer?

- To very great extent       To some extent

To very lower extent

- To great extent       To lower extent

## **DECLARATION**

I, the undersigned, declare that this senior essay is my original work, prepared under the guidance of Ato **Daniel Meread**. All sources of materials used for the manuscript have been duly acknowledged.

Name: **Selamawit Emiru**

Signature: \_\_\_\_\_

Place of submissions: St. Mary's University College  
Faculty of Business  
Department of Management  
Addis Ababa

Date of submission: \_\_\_\_\_

**SUBMISSION APPROVAL SHEET**

This Senior Research Paper has been submitted to the Department of Management in partial fulfillment for the requirement of BA Degree in Management with my approval as an advisor.

Name: Daniel Merread

Signature: \_\_\_\_\_

Date: \_\_\_\_\_