

The Effect of Total Quality management (TQM) practices on customer satisfaction, (A case study of NewAman Metal Packaging)

A Thesis Submitted to the college of Business and Economics of Jimma University in partial Fulfillment of the requirement for the Award of the degree of Master of Business Administration (MBA)

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DECLARATION

I declare that the research Report entitled **“The Effect of Total Quality management (TQM) practices on customer satisfaction, A case of NewAman Metal Packaging”** submitted to Research and Postgraduate Studies’ Office of Business and Economics College is original and it has not been submitted previously in part or full to any university.

Date: _____

CERTIFICATE

This is to certify that the proposal entitled “The Effect of Total Quality management (TQM) practices on customer satisfaction, A case of NewAman Metal Packaging) submitted to Jimma University for the award of the degree of Masters of Business Administration (MBA) and the proposal is prepared by TesfayeDeressa under our guidance and supervision.

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LIST OF ACRONYMS

TQM: Total Quality Management

ISO: International Organization for Standardization

QA: Quality Assurance

QC: Quality Control

QI: Quality Inspection

EQA: Ethiopian Quality Award

MBNQA: Malcolm Baldrige National Quality Award

Abstract

The basic aim of this research is to assess the effect of TQM practices on the customers' satisfaction at NewAman metal packaging company. The research also investigates the relationship each of the dependent variable that is customer satisfaction to the independent variables, the practices of TQM. Customer complaints and company needs to produce and sale high in the fierce market competition are the major problems identified by the researcher. In order to meet the objectives of this research, the study adopted a descriptive and explanatory research design. The major findings of the study indicated that the total quality management practices; training practices, customer focus practices, continual improvement practices and leadership commitment are positively related with the level of customer satisfaction and significantly affect customer satisfaction in NewAman metal packaging Company. In addition the management actions undermine leadership commitment to quality and render TQM practices and continual improvement practice to enhance customer satisfaction in the organization were ineffective and implemented in a lower level. Therefore, it recommended that the company management must work to build trust amongst staffs to improve the team work. It is also recommended that the company should carry out training programs for employees and task leaders for successful business operation, establish good lines of communication with its customers, continuously improve their products, services, and processes to remain competitive. The management should work to improve the weaknesses of its leadership.

Key words: TQM Principles, Customer orientation, Training, Contentious improvement, Customer satisfaction, leadership commitment,

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In Today's world, competitiveness in the global market is becoming fierce because of globalization of market place, international trade, rapid technological innovation and economic slowdowns. The main impact of global competition is the ever-increasing enhancement of customer expectations of high product quality along with low cost, timely delivery and best service. Since customer expectations are never ending, the gaps between "what customers want" and "what is being delivered" do ever exist. Therefore the survival of organizations has become a challenging task for the management. It is a well established fact that attaining higher and higher degrees of quality in totality paves the way for facing global competition (Ridgway, 1994). The importance of total quality management is growing to increase customers' satisfaction and as a result to win the market in the long term.

TQM is a management philosophy designed to increase competitiveness, reduce costs, and secure continuous process improvement. Consequently, there has been a change in organizational thinking, from approaches based on production-oriented operations, to a more competitively oriented method that places the achievement of customer satisfaction at the center of business operations (Baidoun, 2004).

(Bon A., Mustafa, E., 2013b) identified the following seven practices of TQM; top management leadership, employee involvement, employee empowerment, customer focus, training, information analysis, and continuous improvement. (Page 53, 516-529)

However, developing economies such as Ethiopia is challenged in their quality of products and services. Different researches done to assess the quality management practice in Ethiopian manufacturing and service industries, justifies that quality will be the future challenges of competitiveness of the Ethiopian firms (Birhanu, Daniel, 2014). Total Quality Management (TQM) is one of the popular modern management concepts with emphasis on quality in the entire organization and from supplier to customer (Ozden, 2003). Total Quality Management is an integrated system of principles, methods,

and best practices that provide a framework for organizations to strive for excellence in everything they do. Total quality management system has been widely implemented throughout the world and effective TQM implementation can improve competitive abilities and provide strategic advantages in the market place. Several studies have shown that the adoption of TQM has led to improvements in quality, productivity, and can allow firms to compete globally (Zairi, 1994). Total Quality Management is a management philosophy with a vision aiming at building a corporate culture characterized by increased customer satisfaction through continuous improvement in which all employees actively participate (SuMiDalhgaard-Park, 2015)

Different definitions of TQM have been presented over the years. Some of these definitions are presented below. (Oakland, 1993) states that TQM is an approach for improving the competitiveness, Effectiveness and flexibility of the whole organization". (Dale, 1999) defines TQM as a management approach of an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society. (Dale, 1999) states further that tools and methodologies are used in TQM in order to improve the organization continuously. (Shiba et al., 1993) argue that Total Quality Management is an evolving system of practices, tools, and training methods for managing companies to provide customer satisfaction in a rapidly changing world.

A baseline technical definition of what TQM is all about has been given by the American Federal Office of Management Budget Circular, TQM is a total organizational approach for meeting customer needs and expectations that involves all managers and employees in using quantitative methods to improve continuously the organization's processes, products and services. (Milakovich, 1990). In addition, the American Federal Office of Management defined TQM as, a total organizational approach for meeting customer needs and expectations that involves all managers and employees in using quantitative methods to improve continuously the organization's processes, products, and services. TQM is not merely a technical system. In fact, TQM is associated with the organization itself, which is also a social system (Morgan, Murgatroyed, 1997). Some people argue that organizations are not only technical systems but also human systems (Pike, Barnes, 1996). In addition (Oakland, 1993), states that TQM is an attempt to improve the whole

organization's competitiveness, effectiveness, and structure. According to (Dale, 1999), TQM is the mutual co-operation of everyone in an organization and associated business processes to produce products and services, which meet and, hopefully, exceed the needs and expectations of customers. TQM is both a philosophy and a set of management guiding principles for managing an organization.

Many organizations have realized that improving the quality of their products and services is vital for their businesses to survive and to compete in a fast-moving environment. Over the last few decades, the development and implementation of effective TQM has made it possible for organizations to occupy advantageous positions, and to be more competitive in the world-market.

Therefore, TQM has frequently been implemented as a means of achieving better product quality, improving the quality of services, and satisfying the needs and the expectations of customers. The primary focus of total quality management (TQM) is customer satisfaction. According to (Ho's, 1999), everyone in TQM organization, including the customers and suppliers is involved in continuous improvement for the purpose of meeting customers' expressed and implied requirements with the full commitment of top management. TQM is a customer focused management philosophy that aims at the continuous improvement of the processes and management of an organization through statistical control, procedure design, policy deployment and human resource management techniques (Au, Choi, 1999).

According to the article by (Aamir, Kee, D.M.H, S M. Irfan 2012) there is strong relationship between TQM practices and internal customer satisfaction. The study also supported that customer participation and continuous improvement can increase customer satisfaction. In addition, the study finds that total quality management can be applied in the developing country. According to (Snezana, 2014), the top management commitment courtesy and responsibility towards their customers is a significant factor of satisfaction. (Das et al. 2000) described a positive relationship between TQM practices and customer satisfaction performance. TQM is a comprehensive management approach, the purpose of satisfying, even encouraging customers. However, customer satisfaction is the main purpose of TQM, and continuous improvement is essentially ensure that it meets the

expectations of the customer, and even ultimately beyond. TQM practices (antecedents) that significantly affect employees'/customers' satisfaction and loyalty (Jun, 2006).

Therefore the aim of this research is to assess the effect of implementing total quality management on Customer satisfaction in the case of NewAman metal packaging company.

1.2 STATEMENT OF THE PROBLEM

Total Quality Management (TQM) practices and variables have influenced customer satisfaction. For instance, the leadership commitment, focus on customer satisfaction, supplier relationship, design of quality, employee's empowerment, involvement and training, benchmarking, and process controls affected customer satisfaction (Dale, Cooper 1994). Total quality management has been widely implemented throughout the world. Many firms have arrived at the conclusion that effective TQM implementation can improve their competitive abilities and provide strategic advantages in the marketplace (Snee, 2016).

Over the years, manufacturing firms over the world, specifically developing countries like Ethiopia have been affected by day to day change in internal and external customer needs and requirements, pressure from regulation authorities as well as customers to adhere to the new rules and need to satisfy customers who demand more from innovative technologies and products. In this regard, TQM is being used for continuous improvement of process, involvement of suppliers, new training of staff to increase efficiency in satisfying Customer needs and achieve the desired organizational performance.

The researcher tried to examine researches conducted in Ethiopia in the same topic area. As per the researcher assessment most of researches are focused on specific organizational context which fit to their organizational settings. According to the study of (Birhanu, Daniel, 2014), there were many researches conducted to alleviate the problems in manufacturing industry in Ethiopia. So far there is no effort to investigate the causes of poor customer satisfaction relating it to the TQM practices. Despite the lack of constructive researches which encourage TQM implementation as tool for customer

satisfaction, it is widely seen that few companies in Ethiopia have begun focusing on its implementation and producing quality products to support their competitive position and to fulfill the needs of both domestic and international consumers by satisfying their customers' needs.

NewAman metal packaging is a factory which is producing crown corks and cans with an automated Italy machines with international standards and supplying for local beverage factories. The company is owned by local investor and is located at the south western skirt of Addis Ababa at Alemgana Sebeta, Oromia. NewAman metal packaging has a manufacturing capacity of 8 million crowns per day. And it is one of these companies to implement TQM in Ethiopia and almost all the products of the company are food packaging products such as crown corks and cans. The customers companies of this company are international companies like Coca Cola, Pepsi Cola, breweries, etc which have vast Western and European experience for the product quality. These customers' require all their packaging material suppliers to be internationally competent not only with regard to cost but also quality of products and after sales services. That is, there are stringent quality requirements from these global customer companies. Therefore to survive in this market the company should identify which TQM practices affect the customer satisfaction to create customer loyalty, to survive and expand its market. In the second year of production Newaman metal packaging enter only three of local customer market from the existing 10 potential customers available. In addition, according to the strategic plan of the company under study, all local packaging companies are facing fierce market competition from importers and foreign manufacturers, since better quality product is being imported with lower price than local manufacturers, Therefore to study the effect of TQM practices on customer satisfaction helps to identify which practices of TQM should be used to win this fierce competition by improving quality product/service and lower price locally. The other gap identified by the researcher was; according to the customer complaint and feedback of customers record of the company; there was increased customer complaint and feed backs from the customers at the startup of the company which was manifested in 10 customer complaints in the year 2019. Therefore this research aims to examine the effect of TQM implementation on the customer satisfaction.

1.3 OBJECTIVES OF THE STUDY

1.3.1 GENERAL OBJECTIVES OF THE STUDY

To assess the effect of total quality management (TQM) on the level of customer satisfaction, case study of NewAman Metal Packaging.

1.3.2 SPECIFIC OBJECTIVES OF THE STUDY

1. To assess the level of implementing TQM principles to enhance customer satisfaction in the company,
2. To examine the effect of Training on the customer satisfaction.
3. To determine the effect of customer orientation on the customer satisfaction,
4. To find out the effect of continual improvement on the customer satisfaction,
5. To examine the effect of leadership commitment on customer satisfaction,

1.4 HYPOTHESES OF THE STUDY

Several statements of supposition can be made in view of the determinants factors of the customer satisfaction in NewAman metal packaging Company. In light of the above research objective the study has designed the following directional hypothesis.

H1: Training has significant positive effect on the customer satisfaction in NewAman metal packaging Company.

H2: Customer orientation has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company.

H3: Continual improvement has significant positive effect on the customer satisfaction in NewAman metal packaging Company.

H4: Leadership commitment has significant positive effect on the customer satisfaction in NewAman metal packaging Company.

1.5 SCOPE OF THE STUDY

This study is delimited to assessment of the effect of TQM practices on customer satisfaction in case of NewAman metal packaging. The research covers the whole company employees and existing customers. This company and its existing customers were selected for the study area of this research because TQM is already implemented in this company and its accessibility to the researcher. Therefore the effect of the TQM practices on customer satisfaction has been assessed with realistic figures since it is already implemented and the study considers only the four major TQM principles; employees Training, customer orientation, continual improvement and leadership commitments.

1.6 SIGNIFICANCE OF THE STUDY

- A. The outcome of the research will help the company to make decisions with regard to TQM, which have increased advantage as a means of competitive advantages in the local as well as global market for the company itself.
- B. Policy development to boost export and growth of manufacturing sector in the country.
- C. The output of this research will assist the Ethiopian government in encouraging organizations to adopt TQM practices to be competent in the local as well as global market and also supporting the export sector which the country favors a lot during GTP2.
- D. This research will also contribute to the research gap of this topic especially in the developing nations such as Ethiopia.

1.7. RELIABILITY OF THE RESEARCH INSTRUMENT

Pilot study (preliminary test) was carried out using convenient sampling method and having the same characteristics with the participants of the main study. The advantage of doing a pilot study include; it helps to detect potential defects in the measurement procedures, it assists in identifying ambiguous items, and it allows the researcher to become aware of nonverbal behavior that may occur due to the wording question. Therefore, the researcher tried to insures the reliability and validity of the questionnaire.

To carried out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Field, 2009); (Cohen and Sayag, 2010) and according to (Cronbach's, 1951), a reliability value (α) greater than 0.600 is also acceptable.

Table 4.8: Reliability Test of Constructs

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
LCS	13.2127	4.916	.524	.508	.630
Training	13.1572	5.817	.330	.251	.708
CO	12.9336	6.051	.278	.176	.726
CI	13.2259	4.824	.624	.466	.689
LS	13.1507	4.806	.574	.622	.608

Source: Survey result, 2020

The results showed on table 4.8, the Level of customer satisfaction (LCS) had a coefficient of 0.636, Effect of Training on CS (ETD) 0.670, the Effect of customer orientation on CS (ECO) 0.726, the Effect of continual improvement on CS (ECI) 0.689, and the Effect of leadership on CS (ELS) 0.608. All of the scales were above the suggested value 0.5 (Nunnally, Bernstein, 1994); (Nunnally, 1974). Therefore, the reliability value (α) for all items were greater than 0.700, then the responses generated for all of the variables' used in this research were reliable enough for data analysis.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1. INTRODUCTION

This chapter focused on the literature review as conducted by the researcher. It includes a review of the various studies that have been conducted by other researchers relating to the concept of total quality management (TQM). Among the areas reviewed include: total quality management practices, customer satisfaction and effect of total quality management practices on customer satisfaction. The chapter also provides the research gaps identified and a comprehensive conceptual framework.

2.2. THEORETICAL FRAME WORK

2.2.1 DEMING'S APPROACH TO TQM

The theoretical essence of the Deming approach to TQM concerns the creation of an organizational system that fosters cooperation and learning for facilitating the implementation of process management practices, which, in turn, leads to continuous improvement of processes, products, and services as well as to employee fulfillment, both of which are critical to customer satisfaction, and ultimately, to firm survival (Anderson et al., 1994a). (Deming, 1986) stressed the responsibilities of top management to take the lead in changing processes and systems. Leadership plays in ensuring the success of quality management, because it is the top management's responsibility to create and communicate a vision to move the firm toward continuous improvement. Top management is responsible for most quality problems; it should give employees clear standards for what is considered acceptable work, and provide the methods to achieve it. These methods include an appropriate working environment and climate for work-free of faultfinding, blame or fear. (Deming, 1986) also emphasized the importance of identification and measurement of customer requirements, creation of supplier partnership, use of functional teams to identify and solve quality problems, enhancement of employee skills, participation of employees, and pursuit of continuous improvement. (Anderson et al., 1994a) developed a theory of quality management underlying the

Deming management method. They proposed that: The effectiveness of the Deming management method arises from leadership efforts toward the simultaneous creation of a cooperative and learning organization to facilitate the implementation of process management practices, which, when implemented, support customer satisfaction and organizational survival through sustained employee fulfillment and continuous improvement of processes, products, and services. The means to improve quality lie in the ability to control and manage systems and processes properly, and in the role of management responsibilities in achieving this. (Deming, 1986) advocated methodological practices, including the use of specific tools and statistical methods in the design, management, and improvement of process, which aim to reduce the inevitable variation that occurs from “common causes” and “special causes” in production. “Common causes” of variations are systemic and are shared by many operators, machines, or products. They include poor product design, non-conforming incoming materials, and poor working conditions. These are the responsibilities of management. “Special causes” relate to the lack of knowledge or skill, or poor performance. These are the responsibilities of employees. (Deming, 1986), proposed 14 points as the principles of TQM which are listed below:

- i. Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs.
- ii. Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change.
- iii. Cease dependence on mass inspection to quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place.
- iv. End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust.
- v. Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.
- vi. Institute training on the job.

- vii. Institute leadership. The aim of supervision should be to help people and machines and gadgets to do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.
- viii. Drive out fear, so that people may work effectively for the company.
- ix. Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service.
- x. Eliminate slogans, exhortations, and targets for the workforce asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the workforce.
- xi. (a) Eliminate work standards (quotas) on the factory floor. Substitute leadership.
(b) Eliminate management by objective. Eliminate management by numbers, numerical goals. Substitute leadership.
- xii. Remove barriers that rob the hourly worker of his right to pride of workmanship. the responsibility of supervisors must be changed from sheer numbers to quality.
- xiii. Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, inter alia, abolishment of the annual or merit rating and of management by objective.
- xiv. Institute a vigorous program of education and self-improvement.
- xv. Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job.

2.2.2 JURAN'S APPROACH TO TQM

Total quality management is the system of activities directed at achieving delighted customers, empowered employees, higher revenues, and lower costs (Juran, Gryna, 1993). Juran believed that main quality problems are due to management rather than workers. The attainment of quality requires activities in all functions of a firm. Firm-wide assessment of quality, supplier quality management, using statistical methods, quality information system, and competitive benchmarking are essential to quality improvement.

Juran's approach is emphasis on team (QC circles and self-managing teams) and project work, which can promote quality improvement, improve communication between management and employees coordination, and improve coordination between employees. He also emphasized the importance of top management commitment and empowerment, participation, recognition and rewards.

According to Juran, it is very important to understand customer needs. This requirement applies to all involved in marketing, design, manufacture, and services. Identifying customer needs requires more vigorous analysis and understanding to ensure the product meets customers' needs and is fit for its intended use, not just meeting product specifications. Thus, market research is essential for identifying customers' needs. In order to ensure design quality, he proposed the use of techniques including quality function deployment, experimental design, reliability engineering and concurrent engineering. Juran considered quality management as three basic processes (Juran Trilogy): Quality control, quality improvement, and quality planning. In his view, the approach to managing for quality consists of: The sporadic problem is detected and acted upon by the process of quality control; The chronic problem requires a different process, namely, quality improvement; Such chronic problems are traceable to an inadequate quality planning process. Juran defined four broad categories of quality costs, which can be used to evaluate the firm's costs related to quality. Such information is valuable to quality improvement.

The four quality costs are listed as follows: Internal failure costs (scrap, rework, failure analysis, etc.), associated with defects found prior to transfer of the product to the customer; External failure costs (warranty charges, complaint adjustment, returned material, allowances, etc.), associated with defects found after product is shipped to the customer; Appraisal costs (incoming, in-process, and final inspection and testing, product quality audits, maintaining accuracy of testing equipment, etc.), incurred in determining the degree of conformance to quality requirements; Prevention costs (quality planning, new product review, quality audits, supplier quality evaluation, training, etc.), incurred in keeping failure and appraisal costs to a minimum.

2.2.3 CROSBY'S APPROACH TO TQM

(Crosby, 1979) identified a number of important principles and practices for a successful quality improvement program, which include, for example, management participation, management responsibility for quality, employee recognition, education, reduction of the cost of quality (prevention costs, appraisal costs, and failure costs), emphasis on prevention rather than after-the-event inspection, doing things right the first time, and zero defects.

Crosby claimed that mistakes are caused by two reasons: Lack of knowledge and lack of attention. Education and training can eliminate the first cause and a personal commitment to excellence (zero defects) and attention to detail will cure the second. Crosby also stressed the importance of management style to successful quality improvement. The key to quality improvement is to change the thinking of top managers-to get them not to accept mistakes and defects, as this would in turn reduce work expectations and standards in their jobs. Understanding, commitment, and communication are all essential. Crosby presented the quality management maturity grid, which can be used by firms to evaluate their quality management maturity. The five stages are: Uncertainty, awakening, enlightenment, wisdom and certainty. These stages can be used to assess progress in a number of measurement categories such as management understanding and attitude, quality organization status, problem handling, cost of quality as percentage of sales, and summation of firm quality posture. The quality management maturity grid and cost of quality measures are the main tools for managers to evaluate their quality status. Crosby offered a 14-step program that can guide firms in pursuing quality improvement. These steps are listed as follows:

- (1) Management commitment: To make it clear where management stands on quality.
- (2) Quality improvement team: To run the quality improvement program.
- (3) Quality measurement: To provide a display of current and potential nonconformance problems in a manner that permits objective evaluation and corrective action.

- (4) Cost of quality: To define the ingredients of the cost of quality, and explain its uses a management tool.
- (5) Quality awareness: To provide a method of raising the personal concern felt by all personnel in the company toward the conformance of the product or service and the quality reputation of the company.
- (6) Corrective action: To provide a systematic method of resolving forever the problems those are identical through previous action steps.
- (7) Zero defects planning: To investigate the various activities that must be conducted in preparation for formally launching the Zero Defects program.
- (8) Supervisor training: To define the type of training that supervisors need in order to actively carry out their part of the quality improvement program.
- (9) Zero defects day: To create an event that will make all employees realize, through a personal experience, that there has been a change.
- (10) Goal setting: To turn pledges and commitment into actions by encouraging individuals to establish improvement goals for themselves and their groups.
- (11) Error causal removal: To give the individual employee a method of communicating to management the situation that makes it difficult for the employee to meet the pledge to improve.
- (12) Recognition: To appreciate those who participate.
- (13) Quality councils: To bring together the professional quality people for planned communication on a regular basis.
- (14) Do it over again: To emphasize that the quality improvement program never ends.

2.2.4 FEIGENBAUM'S APPROACH TO TQM

(Feigenbaum, 1991) defined TQM5 as: An effective system for integrating the quality development, quality-maintenance, and quality-improvement efforts of the various groups in a firm so as to enable marketing, engineering, production, and service at the most economical levels which allow for full customer satisfaction. He claimed that effective quality management consists of four main stages, described as follows: Setting quality standards; Appraising conformance to these standards; Acting when standards are not met; Planning for improvement in these standards. The quality chain, he argued, starts

with the identification of all customers' requirements and ends only when the product or service is delivered to the customer, who remains satisfied. Thus, all functional activities, such as marketing, design, purchasing, manufacturing, inspection, shipping, installation and service, etc., are involved in and influence the attainment of quality. Identifying customers' requirements is a fundamental initial point for Feigenbaum used the term TQC (total quality control) instead of TQM in his book. He claimed that it permits what might be called total quality management to cover the full scope of the product and service "life cycle" from product conception through production and customer service. According to ISO 8402 – Quality management and quality assurance –vocabulary, TQM is sometimes called "total quality", "company-wide quality control", "total quality control", etc. achieving quality. He claimed that effective TQM requires a high degree of effective functional integration among people, machines, and information, stressing a system approach to quality. A clearly defined total quality system is a powerful foundation for TQM.

Total quality system is defined as follows: The agreed firm-wide operating work structure, documented in effective, integrated technical and managerial procedures, for guiding the coordinated actions of the people, the machines, and the information of the firm in the best and most practical ways to assure customer quality satisfaction and economical costs of quality. Feigenbaum emphasized that efforts should be made toward the prevention of poor quality rather than detecting it after the event. He argued that quality is an integral part of the day-today work of the line, staff, and operatives of a firm.

There are two factors affecting product quality: The technological-that is, machines, materials, and processes; and the human-that is, operators, foremen, and other firm personnel. Of these two factors, the human is of greater importance by far. Feigenbaum considered top management commitment, employee participation, supplier quality management, information system, evaluation, communication, use of quality costs, and use of statistical technology to be an essential component of TQM. He argued that employees should be rewarded for their quality improvement suggestions, quality is everybody's job. He stated that effective employee training and education should focus on the following three main aspects: Quality attitudes, quality knowledge, and quality skills

2.2.5. THE CONCEPT OF QUALITY

Quality is a significant element of production or services in keeping the customers satisfied. There are different definitions and competing views of the term quality by different people and the common element of the business definitions is that the quality of a product or service refers to the perception of the degree to which the product or service meets the customer's expectations. Crosby, (1979) defined quality as the conformance to requirements or specifications and also suggested that to manage quality adequately; it must be able to be measured. ISO 9000: (2000) cited in (Vorley, Tickle, 2001) defined quality as the degree to which a set of inherent characteristics fulfill requirements.

2.2.6. QUALITY MANAGEMENT

Quality management involves the formulation of strategies, setting goals and objectives, planning and implementing the plans; and using control systems for monitoring feedback and taking corrective actions. An organization's quality management implementations are of two folds a) Satisfying customer's expectation and b) Improvement in the overall business efficiency (Dale, et al (a), 1994). According to (Juran, 1988), the basic goal of quality management is the elimination of failure; both the concept and in the reality of products, services and processes. This does not only mean that product, services and processes will fail in fulfilling their function but that their function was not what the customer desire. Failure must be prevented in quality management and to handle this there should be planning, organizing and controlling. Four stages of quality management was treated by (Dale et al, 1994), this include inspection, quality control (QC), quality assurance (QA) and total quality management (TQM).

2.2.7. TOTAL QUALITY MANAGEMENT

TQM, while emphasizing "quality" in its name, is really a philosophy of management. Quality and price are central in this philosophy because they are seen as effective methods of gaining the customer's attention and holding consumer loyalty. This is the highest level of quality management. It is concerned with the management of quality principle in all the facets of a business including customers and suppliers (Dale et al, 1994) and (Lockwood et al, 1996).

Total Quality Management (TQM) involves the application of quality management principles to all aspects of the organization, including customers and suppliers, and their integration with the key business processes. It is an approach which involves continuous improvement by everyone in the organization. TQM is a principle which involves the mutual cooperation of everyone that aids the business process of an organization and it involves all the stake holders of an organization. (Dale et al, ((a), 1994) cites BS.4778; part 2(1991) where 'TQM is defined as a philosophy embracing all activities through which the needs and expectations of the customer and the community, and the objectives of the organization are satisfied in most efficient and cost effective way by maximizing the potentials of all employees in a continuing drive for improvement.

According to (Mohammed, 2006), TQM is an effective system for integrating the quality development, quality maintenance and quality improvement efforts of various aspects of a system so as to enable services at most economical level and derive full satisfaction. TQM is aimed at the satisfaction of customer needs in an efficient, reliable and profitable way. It involves a radical direction through which an organization perform its day to day operations in order to ensure that quality is put at the top of mind of every employee and departments in which they operate. (Vorley, Tickle, 2001), defined TQM as the synthesis of the organizational, technical and cultural elements of a company. They opened that TQM is a heart and mind philosophy which recognizes that company culture affects behavior which in turn affects quality (Oakland, 1989), describes TQM as an approach to improve competitiveness efficiently and flexibility for the whole organization.

According to (Hellsten, Klefsjö, 2000), TQM can be defined as a management system which consist of interdependent unit namely core values, techniques such as process management, benchmarking customer focused planning or improvement teams and tools such as control charts. (Dahlgaurd, Kristensen, Kanji, 1999) saw TQM as a corporate culture that is characterized by increased customer satisfaction through continuous improvement involving all employees in the organization. (Oakland, 1989), noted that 'for an organization to be truly effective each part of it must work properly together towards the same goal, recognizing that each person and each activity affects and in turn is affected by each other the methods and techniques used in TQM can be applied throughout any organization. The major principles of TQM are discussed below:

2.2.7.1. LEADERSHIP COMMITMENT

TQM requires effective change in organizational culture and this can only be made possible with the deep involvement and commitment of management to the organization's strategy of continuous improvement, open communication and cooperation throughout the organization. Many studies support that leadership is one of the most important factors that impact a firm's performance (Ooi, 2014). Leadership and top management support is expected to have an integral role in encouraging the practices and behaviors that lead to quality goals establishment, resources allocation, quality performance evaluation and quality improvement (Barouch et al, 2016);(Alidrisi, Mohamed, 2012). Furthermore, the leader of a firm is responsible for creating the appropriate environment and culture for innovation besides cultivating the innovation process, quality, finance management and aligning the current strategy with the innovation strategy in order to achieve innovative and competitive performance (Frolova et al, 2015). (Cooper, Ellram, 1993), identified leadership as being critical in effecting organizational change most especially in the areas of building effecting relationship with suppliers and others involved in the process of value delivery. The commitment of leadership to the TQM strategy as shown in their daily disposition to work will go a long way in motivating employees to deliver quality services that exceeds the expectation of customers. (Andrle, 1994), noted that 'the implementation of TQM requires a clear long term leadership commitment'. To him, long term relationship with satisfied customers is an asset to the organization, thus, management must be committed to it. Andrle also stressed the importance of management in providing a 'customer focused support system' such as measurements, rewards and recognition for satisfying customers with the aim of building a positive relationship with customers.

Leadership role at all levels in the organizations is critical in creating a healthy working environment which motivates the employees for gaining the sustainable advantages. Employee's involvement is a key motivator among employees job satisfaction as it creates an environment in the organization where employees are involved and participate in decision making activities. More involvement of employees in their jobs helps to

increase employee's commitment and performance (Lawler et al., 1998); (O'Driscoll, Randall , 1999);(Rodwell et al., 1998).

2.2.7.2. CUSTOMER FOCUS

TQM is an ideology which is focused on the satisfaction of customer's need. Thus, most organizations try as much as possible to meet or exceed customer's expectation in their daily activity and also their long term plan (Andrle , 1994). TQM require organizations to develop a customer focused operational processes and at the same time committing the resources that position customers and meeting their expectation as an asset to the financial wellbeing of the organization. (Filippini, Forza, 1998) explained that it is necessary for organization to maintain a close link with their customers in order to know their requirements and to measure how it has been successful in meeting up to customers' requirements. According to (Muffatto, Panizzolo, 1995), a high level of customer satisfaction is obtained solely by providing services or products whose features will satisfy customer's requirements or needs. In this case, customer relationship management is defined as the continual and persistent effort in maintaining a close relationship with customers by acquiring constant feedback from customers to ensure customers' needs and requirement are met (Elshaer et al., 2016). An organization should determine the current and future needs of customers and consider their needs as requirements for the whole organization (Yusr et al., 2014). This will result in more loyal customers and higher organizational performance (Barouch et al., 2016).

The process of production is structured in a way where each process have needs and expectation which must be fulfilled by others in the network of production. The effective fulfillment of these needs leads to the production of quality goods and services.

Customer focus is an essential element in the implementation of TQM because the customer dictates the market in the current business environment. According to (Fening et al., 2013) and (Khan, 2010), the satisfaction of the customer is the key focus of the TQM philosophy. It is, therefore, crucial for any organization to prioritize the customer in every decision making process. For example, the customer should be actively involved in the product and service design and development process so as to provide the necessary

inputs that are essential for preventing waste, flaws and quality issues (Fening et al., 2013).

2.2.7.3. TOTAL INVOLVEMENT

In the traditional sense, employee involvement was conceived to mean a ‘feeling of psychological ownership among organizational members’ Harvey, Brown, (1996). Unlike what obtains in the TQM ideology, the traditional employee involvement is narrow-minded; it is job-centered rather than process-centered. The TQM approach involves ‘achieving broad employee interest, participation and contribution in the process of quality management’ (Dale, Cooper, 1993). The concept assumes a companywide quality culture, which gives autonomy or a level of freedom to employees in taking decisions that affect their job. Thus, employees are encouraged to perform function such as information processing, problem solving and decision making (Dimitriades, 2000). This is supported by (Omachonu, Ross, 1994), who noted that intrinsic motivation is at the heart of TQM, where empowerment and involvement in decision making is viewed as essential for sustained result.

The main aim for the total involvement of employee is to boost internal and external customer’s satisfaction by developing a flexible environment which allows for innovation. Total quality management also engages all organization staff members in the process of covering customers' expectation through utilizing problem solving methods to enhance the quality of all organizational products and services. The main focus of total quality management philosophy is to achieve a comprehensive integration among organizational staff and their functions in order to gain better enhancement, progress and preservation of products and services quality to achieve customer satisfaction (Talib, 2013).

2.2.7.4. CONTINUOUS IMPROVEMENT

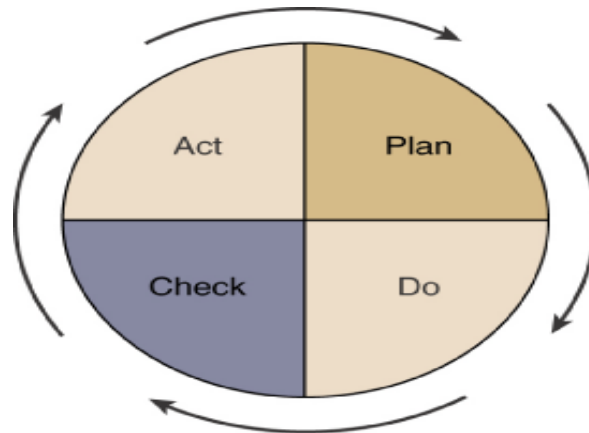
Continuous improvement means ‘a commitment to constant examination of the technical and administrative process in search of better methods’ (Fuentes-Fuentes et al., 2004). (Turney, Anderson, 1989) defined continuous improvement as the relentless pursuit of improvement in the delivery of value to customers. This was supported by (Dean, Bowen,

1994), who argued that customer satisfaction can be attained only through the relentless improvement of processes that create product or service. Total quality management involves the design into the process of production, a system of continuous improvement. This contains regular cycles of planning, execution and evaluation (Muffatto, Panizzolo, 1995). According to (Oakland, 1993), ‘the focus on continuous improvement will lead to the formation of formidable team whose membership is determined by their work on the detailed knowledge of the process, and their ability to take improvement action’. TQM is concerned with the continuous improvement in all the process of production, from the levels of planning and decision making to the execution of work by the front line staff.

The principle behind the idea of continuous improvement is basically the idea that mistakes can be avoided and defects can be prevented. According to (Stahl, 1995), “continuous improvement refers to the constant refinement and improvement of products, services and organizational system to yield improved value to customers”. He further explained that the continuous look for ways in improving quality of product or service in the absence of customers’ complain may prevent a future problem. The continuous improvement process aims to identify and eliminate the cause of a mistake in order to prevent its reoccurrence. (Fuentes-Fuentes et al, 2004) explained that organizations operating in a dynamic environment are liable to carry up continuous improvement in its operation; they explained that the face of competition changes faster in this environment as a result of the changes in customers’ needs, competitors’ activities and service and product innovation.

Deming's theory of Total Quality Management rests upon fourteen points of management he identified, the system of profound knowledge, and the Shewart Cycle (Plan-Do-Check-Act). Deming “14 Points.” are principles that help guide companies in achieving quality improvement (Mokamba, Gakure, Keraro, 2013). The system of profound knowledge consisted; system appreciation - an understanding of the way that the company's processes and systems work, variation knowledge - an understanding of the variation occurring and the causes of the variation, knowledge theory – the understanding of what can be known and psychology knowledge - the understanding of human nature. Plan-Do-Check-Act (PDCA) is a cycle created for continuous improvement (Scudder, 2013).

Figure 1. Shewhart's Plan-Do-Check-Act (PDCA) Cycle



Source: Scudder (2013)

2.2.7.5. TRAINING

Employee management can be described as the extent to which employees in an organization partake in training programs that empowers employees to be proficient in operational procedures to optimize service and production processes (Mosadeghrad, 2014). Employee management also instills a better understanding of importance of the product quality in employees and makes them committed to the quality improvement (Kafetzopoulos et al., 2015). Employees should be aware of how the quality policies of the organization affect their jobs; promote their development and motivation; and continuously improve their work output (Mahmood et al., 2015).

Training helps in preparing employees towards managing the TQM ideology in the process of production. Training equips people with the necessary skills and techniques of quality improvement. It is argued to be a powerful building block of business in the achievement of its aims and objectives (Stahl, 1995). Through training, employees are able to identify improvement opportunities as it is directed at providing necessary skills and knowledge for all employees to be able to contribute to ongoing quality improvement process of production. (Stahl, 1995) argued that Training program should not be seen as a onetime event but a lifelong process.

Training programs help to increase employee's knowledge and skills as well as provide opportunities for the individual growth. It has been observed that training and a

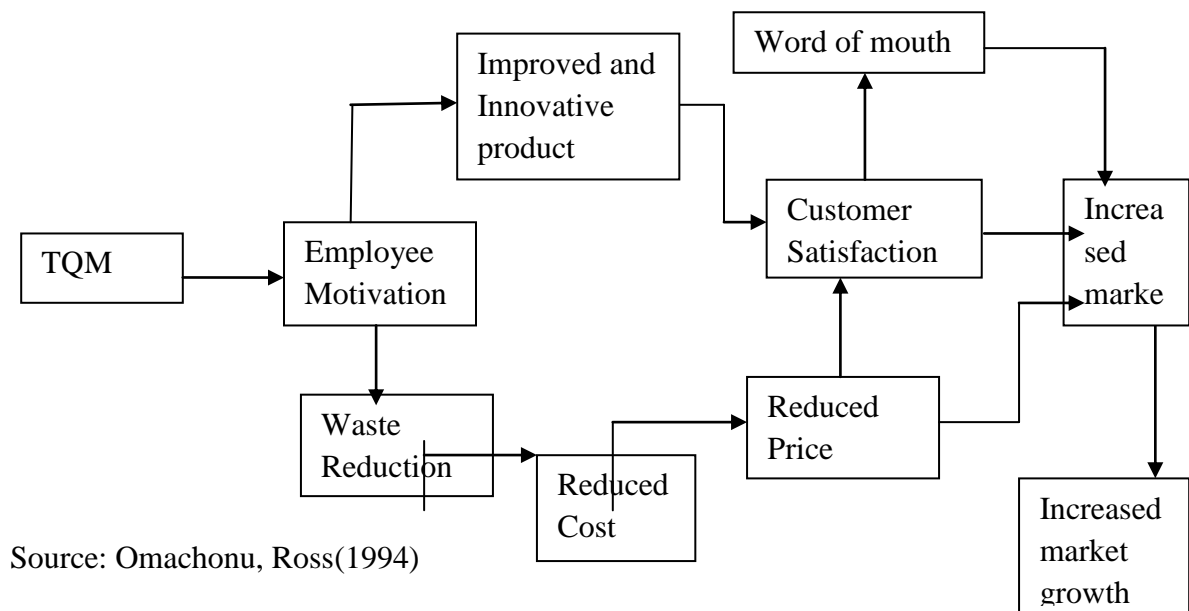
development program increase job satisfaction and has a positive impact on employee's job satisfaction (Marie, 1995); (Saks, 1996). Similarly, it helps to increase employee's ability to perform their duties and tasks assigned by the organization (Choo, Bowley, 2007).

2.2.8. BENEFITS OF TQM IMPLEMENTATION

Employees who are engaged want to contribute, have a sense of belonging, defend the organization, work hard and are not interested in moving to other employers. Employees who are not engaged cause a gap between employees' effort and their organizational effectiveness. This significantly affects an organization's financial performance (Saks, 2017, P-78).

The effective implementation of TQM will increase customer satisfaction with the service offerings (Omachonu, Ross, 1994). Quality enhances customer loyalty through satisfaction; this in turn can generate repeat business and lead to the attraction of new customers through positive word of mouth. The word of mouth communication will help in cost reduction. This (Omachonu, Ross, 1994), noted will provide competitive edge to the company. The improvement in quality will result in increased market share and profitability.

Figure2: Effect of TQM on Customer Satisfaction.



2.3. EMPIRICAL REVIEW

Customer-driven quality, according to the principles of TQM, is a significant strategic structural concern which is essential to be fundamental of total organizational planning. Any organizations that provide quality services can charge more for products or services, with resulting high customer satisfaction. Data shows that improvement in product or service quality has a stronger relationship to increases in market share and customer satisfaction as well (Bayazit et al., 2007).

The TQM component of communication is one of the fundamental parts of all management functions. In order to lead, plan, organize, and control, managers have to communicate with their subordinates (Amal, Y., 2012). The term communication has a wide range of meanings. Bell and Marais define communication as “a two-way process by which certain information is conveyed or transmitted from a communication source to a receiver”. Lowe defines it as “a purposeful process, which involves sources, messages, channels, and receivers”. The importance of communication becomes more visible than merely defining the term (Adler & Elmhorst, 1996).

Total quality management employs management techniques, productivity improvement initiatives, and various problem solving tools with the ultimate objective of achieving customer satisfaction all the time. The primary elements of TQM includes leadership, customer focused, total employee involvement, process centered, supplier relationship management, integrated system, human resource management, continual improvement, fact based decision making and communication are core values and principles on which organization is to operate according to the global voice of quality, (2012). In Successful companies’ TQM systems should only be studied for inspiration and then each company should build up its own TQM system based on the basic principles or generalized value TQM, (Su MiDahlgaard-Park, 2015).

Leadership

The concept of leadership incorporates different procedures and activities. As (Yuqi L., 2007) “The application of the principle of leadership typically leads to: considering the needs of all interested parties including customers, owners, employees, suppliers, financiers, local communities and society as a whole; establishing a clear vision of the

organization's future; setting challenging goals and targets"; creating and sustaining shared values, fairness and ethical role models at all levels of the organization; establishing trust and eliminating fear; providing people with the required resources, training and freedom to act with responsibility and accountability; inspiring, encouraging and recognizing people's contributions (Evans, et al, 2008).

Training

Employee management can be described as the extent to which employees in an organization partake in training programs that empowers employees to be proficient in operational procedures to optimize service and production processes (Mosadeghrad, 2014). Employee management also instills a better understanding of importance of the product quality in employees and makes them committed to the quality improvement (Kafetzopoulos et al., 2015). Employees should be aware of how the quality policies of the organization affect their jobs; promote their development and motivation; and continuously improve their work output (Mahmood et al., 2015).

Employee's Involvement

The participation of employees, according to (Nair, 2006), is required for the success of quality programs and this has achieved through using of work teams, looking for opportunities to raise the level of employee's competence, sharing information and experiences between the teams and groups and focusing on employee's motivation and loyalty. Research focused on the following quality enhancement activities such as: education, employee suggestions, employee commitment, training and teamwork (Ebrahimi, Sadeghi, 2013).

Customer Orientation

Satisfying customer is crucial to TQM in different business activities throughout the world. It is expressed by the organizational attempt to design and deliver products and services that fulfill customer needs. The rationale for this principle is the belief that customer satisfaction is the most important requirement for long-term organizational success. In other words, to realize this satisfaction, it requires that the entire organization should focus on customer needs (Ebrahimi et.al. 2013).

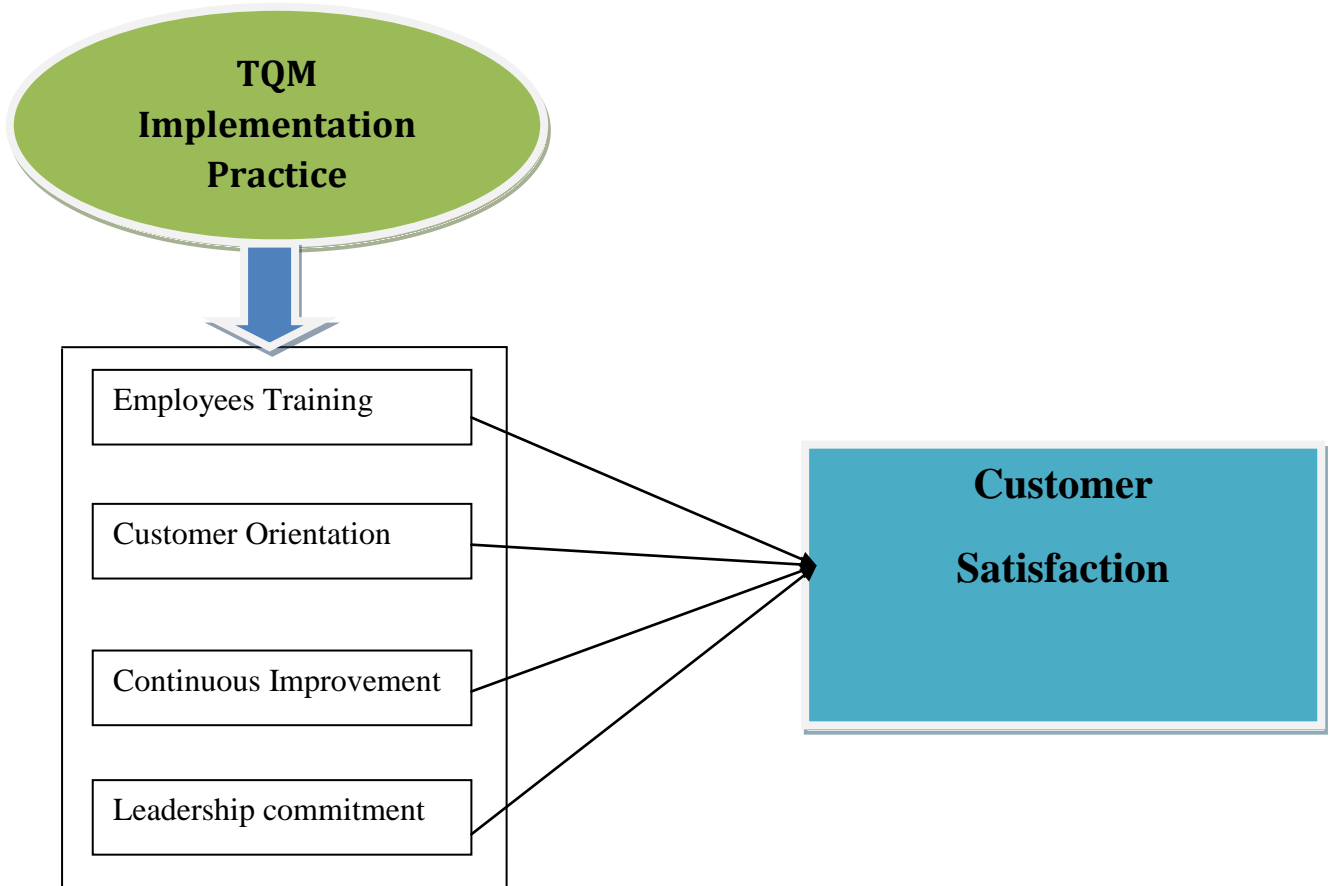
TQM AND CUSTOMER SATISFACTION

The quality effort requires a new way of thinking about the customer, and thinking as well about new customers. The view of quality as the satisfaction of customer needs is often called fitness for use (Evans, 2011). In highly competitive markets, merely satisfying customer needs will not achieve success. To beat the competition, organizations must often exceed customer expectation. The reason for this definition of quality is meeting or exceeding customer expectations. (Aderson, Sullivan, 1993) analyzed the cause and effect of customer satisfaction; they found that the TQM-based product performance did have an impact on the customer satisfaction. Grove, Pickett, (La Band, 1995) believed that the items such as service and product price and quantity, human resources, product performance, quality assurance etc., should be quantified and the above factors will influence the customer satisfaction. A positive relationship between TQM practices and customer satisfaction found by (Parzinger, Nath, 2000). And also, (Das et al., 2000) described a positive relationship between TQM practices and customer satisfaction performance. TQM is a comprehensive management approach, the purpose of satisfying, even encouraging customers. However, customer satisfaction is the main purpose of TQM, and continuous improvement is essentially ensure that it meets the expectations of the customer, and even ultimately beyond. TQM practices (antecedents) that significantly affect employees' and customers' satisfaction and loyalty Jun (2006). In addition, the internal cross-functional communication of TQM is important among departments such as operations, finance, marketing, IT, and customer service (Daghfous, Barkhi, 2009). The past researches proved that TQM practices would impact the customer satisfaction and loyalty.

The focus on customer has become a part of quality movement. According to (Haar et al, 2008) successful implementation of TQM includes customer retention and increase in market share. While according to (Liusar et al., 2009) customer focus leads to customer loyalty which can be achieved by providing customers with reliable, durable product and service. So customer focus in firms incorporates customer satisfaction, confidence, loyalty and reduction in complaints.

According to (Bernhardt et al., 1994), (Eklof, Westlund, 1998), and (Geyskens et al., 1999), customer satisfaction was very vital to the profitability of the organization. (Naumann, 2010) pointed that customer satisfaction is a part of strategic planning of the organization. In addition, (Augus, 2000) said that implementing total quality management could improve the company's customer satisfaction. (Ingram, Chung, 1997) explained that total quality management practices could increase customer satisfaction in health care industry. Moreover, (Haisin, 2001) added that total quality management can improved the competitive of the hospital in Thailand. (Aghazadeh, 2002) also agreed that a total quality management practice is absolutely important for business. Many researchers have studied the impact of total quality management practices on customer satisfaction in the service and manufacturing industries. (Al-Saggarf, 1997) revealed that total quality management practice can improved customer satisfaction in electrical industry in Saudi Arabia. Moreover, (Kanji et al., 1999) reported that total quality management can increased customer satisfaction in UK Universities. However, some researches such as (Elmuti, Kathawala, 1999) indicated that total quality management fails to improved customer satisfaction.

Figure 3: Conceptual framework



Source: (Own made 2020)

Figure 3; illustrates a conceptual framework of the relationship of total quality management practices and customer satisfaction.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. INTRODUCTION

This chapter is organized under the following subheadings; the research design, target population, sampling techniques and sample size, data collection procedures and instruments, data analysis and ethical consideration.

3.2. RESEARCH APPROACH/METHOD

It is possible to categorize different research approaches into two main categories depending on how they are conducted: quantitative and qualitative. (Merriam, 1994) stated that, information brought by words is qualitative while information brought by figures is quantitative. According to (Patel, Davidson, 1991), quantitative research methods are methods for analyzing numeric information in the form of statistical methods. While qualitative research methods, on the other hand, are methods used for analyzing other information, such as interpretations of text. The main objective of the quantitative technique is to find out if a theory can be generalized. Methodology is essential in gathering relevant information thereby giving effective and reliable representation. Therefore this research has adopted both quantitative and qualitative research approach.

3.3. RESEARCH DESIGN

The study adopted a descriptive research design. (Kothari, 2004) recommend that the use of descriptive research design enables the researcher to make certain predictions by narrating data and traits of the target population.

Induction and deduction are two ways in drawing conclusion to a research. According to (Sekaran, 2003) deduction is the process by which we arrive at a reasoned conclusion by logical generalization of a known fact, while induction on the other hand, is a process where we observe a phenomenon and on the basis arrive at a conclusion'. This research

adopted the deductive research design as it studies an established relationship, the effect of TQM on customer satisfaction.

3.4. SAMPLING DESIGN

The researcher adopted the five sampling steps of (Malhotra et al., 2006); these steps are closely interrelated and relevant to all aspects of the research. These are identifying target population, determining the sampling frame, select sampling techniques, determining the sample size and executing the sampling process.

3.4.1 TARGET POPULATION AND SAMPLE SIZE

The study population is the aggregation of element from which the sample is actually selected. It is the aggregation or the totality of all members or units from which information could be obtained (Rubin, Babbie, 2001). (Sekaran, 2003) describes sampling as the process of selecting a sufficient number and the right type of elements for study from a certain population. As population is defined, the entire group of elements that the researcher is interested to investigate. Sample is defined as a portion or subset of the population, the size of which is determined by the type and objective of the study, as well as time and financial constraints (Fink, 1995). Sampling therefore is the method of drawing the sample and it is a vital part of a research as it allows to the researcher to generalize findings, as it is impossible to examine the whole population (Frankfort-Nachmias, Nachmias, 1996).

In the NewAman metal packaging Company all six (6) members of management team, twenty (20) senior staff and thirty two (32) junior workers constituted the population of the study; and this made the total internal employee population of the study a fifty eight (58). With regard to the customer side the company has three existing customers one having six branches and the second has two branches and the last has only one branch. The departments which are assumed to be direct contact with the product and service of the company like purchasing and supplies management, Quality assurance, production and marketing departments are sent two questionnaire for each department one for the department manager and the other for lower level worker who is the direct user of the product. The total of seventy two (72) questionnaires were distributed collect the

customer data. Accordingly the total sample frame constitutes 130 targeted populations within the company and its customers. Due to the fact that the population of the study was relatively small, the study used census or total enumeration to collect data from the whole population. Therefore the sample size of the study was 130 respondents; complete enumeration consists of each and every unit of the population in the study.

3.5. TYPES AND SOURCES OF DATA

For this research purpose, primary data were collected through standardized questionnaires and interview. Primary data collected and originated by a researcher for the specific purpose of addressing the problem at hand (Malhotra and Birks, 2006). In addition, the researcher employed secondary data sources to assess the effect of TQM practices on the level of customer satisfaction in NewAman metal packaging Company.

3.5.1 PRIMARY DATA SOURCES

The primary data was collected from the NewAman metal packaging Company employees and its customers using structured questions.

3.5.2 SECONDARY DATA SOURCES

Secondary data were used which includes NewAman metal packaging Company annual report, TQM implementation reports, TQM books, Articles of TQM, and journals on the subject to obtain additional information related the assessment of TQM practices and its effect on level of customer satisfaction in NewAman metal packaging company.

3.6. RESEARCH VARIABLE

There are different types of variable depending on the type of research and data analysis. For this study purpose, the researcher designed the dependent and independent variables. According to (Neuman, 2007), the variable that is the effect or is the result or outcome of another variable is the dependent variable. The independent variable is the causes of the result, whereas the dependent variable depends on the cause. For this research, TQM practices, i.e. Training, customer focus, continual improvement and the leadership commitment are independent variables, while the level of customer satisfaction is

dependent variable. The dependent variables are the measurements or indicators of customer satisfaction: delivery on time, product quality, compliant handling, product availability, employee's promotion and team works. Each variable has been addressed by valuable questions.

The variables were measured using a 5-point Likert scale to quantitatively measure the variables of TQM practices which affects the level of customer satisfaction in NewAman metal packaging Company and come up with reliable findings. The measurements ranged from strongly disagree to strongly agree (namely strongly disagree, disagree, neutral, agree, and strongly agree).

The numbers in the ordinal scale represented relative position or order among the variables (Mugenda, Mugenda, 2003). The nominal scale of measurement was applied to cases which had some common characteristics such as sex, age, work experience and levels of education, among others. On the other hand, interval scales of measurement were used to capture personal data of respondents.

3.7. DATA ANALYSIS AND DATA PRESENTATION

According to (Kombo, Tromp, 2011), the data analysis procedure has included the process of packaging the collected information putting in order and structuring its main components in a way that the findings can be communicated easily and effectively. After doing the fieldwork and before starting analysis, all the questionnaires were checked adequately for reliability and verification, editing, cleaning, coding, recoding and tabulation. Descriptive and inferential statistics were used to describe the data collected to characterize accurately and to summarize the variables. The researcher has transformed the sets of data into one set under each variable to carry out inferential analysis. Correlation and regression analyses have been used to examine the relationship of the dependent variable and the independent variables. The result has been presented in the form of tables, graphs and percentages with description.

The data analysis plan was attempted to use quantitative and qualitative approach. Quantitative approach included quantitative techniques such as Statistical Package for Social Sciences (SPSS) version 21 software to apply multiple regression analysis in the analysis of primary data to establish a causal effect relating independence variables to the

dependent variable. Multiple regression analysis was used to determine whether independent variables simultaneously impact the dependent variable.

Prior research studies by (Osoro, 2001) and (Muthinji, 2009) on challenges being faced by various public sector institutions in budget implementation recommended the use of multiple regression model since the model is a flexible method of data analysis that may be appropriate whenever a criterion variable is to be examined in relationship to any other predictor variables. In addition the researcher suggested that if the sample size is sufficient, multiple regressions model is undoubtedly a more powerful model to test the correlation between two or more variables than other statistical methods like non-parametric tests. Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into when using multiple regression models.

Based on the reasoning above, multiple regression analysis was used by the researcher to analyze data collected in order to examine the Level of Customer Satisfaction to examine the relationship of dependent variable (Level of Customer Satisfaction) to independent variables (total quality management factors). This can be expressed by the model below to determine the quantitative association between the variables:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Whereby Y= Level of Customer Satisfaction

X1= Training

X2= Customer Orientation

X3= Continuous Improvement

X4 = Leadership commitment

β_1 , β_2 , β_3 and β_4 are coefficients of determination

ε = is the error term

The dependent variable (Y) i.e. Level of Customer Satisfaction was measured by measuring the degree to which the effective implementation of total quality management practices is affected by independent variables (X) such as the Training; (X1), Customer Orientation; (X2), Continuous Improvement; (X3)and Leadership commitment; (X4).

Multiple regression analysis was also used to show the individual effect of each independent variable on the dependent variable. The relationships between the dependent variable and independent variables, and the results of testing significance of the model were respectively interpreted in the next chapter. In interpreting the results of multiple regression analysis, the three major elements considered were: the coefficient of determination, the standard error of estimate and the regression coefficients. These elements and the results of multiple regression analysis were presented and interpreted accordingly.

3.8. ETHICAL CONSIDERATION

Each discipline should have its own ethical guidelines regarding the treatment of human research participants (Vanderstoep, Johnston, 2009). Research ethics deal with how we treat those who participate in our studies and how we handle the data after we collect them. The researcher had kept privacy (that left any personal questions), anonymity (protecting the identity of specific individuals from being known) and confidentiality or keeps the information confidential (Saunders et.al, 2007). In addition, the questionnaire was only distributed to voluntary participants and has a clear introduction and instruction parts regarding the purpose of the research.

3.9. VALIDITY AND RELIABILITY OF RESEARCH INSTRUMENT

According to (Mugenda, Mugenda, 2003) reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. To ensure and enhance reliability of the instrument, pre-testing and a pilot study has been carried out before the actual data collection.

The importance of pre-testing a questionnaire according to (Creswel, 1999) is to help the researcher understand the meaning of the questions to be responded and how they arrive at their response. The researcher was carried out a pilot testing on 25 employees. Multiple indicators of a variable are used to increasing reliability, two or more of indicators of the same construct are better than one (Neuman, 2007). The researcher used at least two or more well designed and theoretically constructed indicators for each of dependent and

independent variables. Statistical validity also used to measure the validity of the research through the use of correct statistical procedure and instruments (Neuman, 2007). To ensure the statistical validity of the study, the researcher had collected quantitative data using survey questionnaire and analyzed the data. The data has been analyzed by using correct statistical instruments like descriptive statistics, inferential statistics, correlation, and regression analysis to see the relationship of the variables and reach a concrete conclusion.

According to (Adams et al., 2007) internal validity used to assure the research validity. To treat the internal validity of this research, a questionnaire had been distributed within the same period and collected within two weeks and questionnaire had been randomly distributed to the reasonable sample taken from the population. The major objective of the pilot test is to get feedback on the questionnaire way of preparation, wording, coherence and any other valuable comment and to incorporate any important comments and finalize the questionnaire.

The reliability of the study had been assessed with Cronbach's Alpha (α); it is the most common measure of scale reliability (Field, 2005). According to (Neuman, 2007), Cronbach's Alpha used to assess the uni-dimensionality. Reliability refers to the extent to which your data collection techniques or analysis procedures will yield consistent findings (Saunders et al., 2007).

According to (Dunn, 2000), defines reliability, as a measure's stability or consistency across time. The Alpha value ranges from a minimum of zero to a maximum of 1.0 for a perfect score, a good measure of the alpha should be 0.70 or higher (Neuman, 2007). According to (George, Mallery, 2003) scales exhibiting a coefficient of alpha greater than 0.90 is considered to have excellent reliability, between 0.80 and 0.90 are considered to have good reliability, between 0.70 and 0.80 are considered to have acceptable reliability, alpha value between 0.60 and 0.70 indicates the reliability is questionable, when the coefficient alpha is between 0.50 and 0.60, the scale has poor reliability and the coefficient alpha is less than 0.50 it is unacceptable.

CHAPTER FOUR

RESEARCH FINDINGS AND INTERPRETATIONS

4.1 INTRODUCTION

This chapter shows the research presentation, findings, discussion and interpretations drawn from the field. The chapter presents the background information of the respondents, findings of the analysis based on the variables of the study. Descriptive and inferential statistics have been used to discuss the findings of the study.

4.1.1 RESPONSE RATE

A total of 130 questionnaires were distributed to the respondents and the response rate is presented in Table 4.1.

Table 4.1: Response Rate

Category	Frequency	Percentage
Response	123	94.6
Non-response	7	5.4
Total	130	100

Source: Research Data (2020)

The results in Table 4.1 show that out of 130 questionnaires administered, 123 were filled in with a response rate of 94.6% while those who failed to respond accounted for 5.4%. According to (Mugenda and Mugenda, 2003), a response rate of 50% is adequate for analysis and 60% is good and a response rate of 70% and above is excellent. Based on this assertion, the overall response rate of 94.6% was considered satisfactory to make conclusions for the study as it may serve as a representative.

4.2 BACKGROUND INFORMATION

The background of respondents' gender, age, work experience, work unit/department and level of education obtained are presented as follows:

4.2.1 GENDER

Table 4.2: Respondents' Gender

Gender	Frequency	Percent	Cumulative Percent
Male	60	48.8	48.8
Female	63	51.2	100.0
Total	123	100.0	

Source: Research Data (2020)

Figure 4.2 shows that majority (51.2%) of the respondents were female and 48.8% male. This finding shows that both genders are roughly proportional or almost equal in representation.

4.2.2 AGE

Table 4.3: Respondents' Age

Age Category	Frequency	Percent	Cumulative Percent
Below 20 Years	15	12.2	12.2
21-30	52	42.3	54.5
31-40	34	27.6	82.1
41-50	15	12.2	94.3
Over 50 years	7	5.7	100.0
Total	100.0	100.0	

Source: Research Data (2020)

The results in Table 4.3 show that majority 52(42.3%) of the respondents was aged between 21 to 30 years old, 34(27.6%) respondents aged between 31 to 40 years, age below 20 years aged between 41 to 50 years old also accounted 12.2% each and very few(7%) respondents was age above 50 years old. The cumulative frequency of 82% indicates that majority of the respondents were aged 40 years and below. These findings show that the respondents who were engaged in the study cut across different age gaps.

4.2.3 DEPARTMENT /WORK UNIT/ OF RESPONDENTS

The study found it essential to establish on the area of operation or work unit of the respondents on their organization. This data was intended for the purpose of establishing on the respondents awareness and level of understanding over the operational and organizational strategies.

Table 4.4: Department of Respondents

Departments	Frequency	Percent	Cumulative Percent
Production	31	25.2	25.2
Quality Assurance	12	9.8	35.0
Marketing	49	39.8	74.8
Administration	4	3.3	78.0
Procurement	27	22.0	100.0
Total	123	100.0	

Source: Research Data (2020)

The tables 4.4 shows that 25.2% respondents was from production department, 9.8% from quality control department, 39.8% from marketing department, few respondents, 3.3% from administration department and 22% from procurement department. This implies that marketing development officers form the largest majority. With this kind of distribution, the researcher was satisfied that all areas were covered.

4.2.4 EDUCATIONAL LEVEL

Table 4.5: Respondents' Educational Level

	Frequency	Percent	Cumulative Percent
Diploma/TVET	17.9	17.9	17.9
Bachelor Degree	71.5	71.5	89.4
Master's Degree	10.6	10.6	100.0
Total	100.0	100.0	

Source: Research Data (2020)

The results in Table 4.5 show that majority (71.5%) of the respondents had attained a bachelor degree level of education, (10.6%) respondents attained a Master's Degree and

(17.9%) respondents were attained a Diploma/TVET level of education. This is an indication the respondents are well educated to understand what is happening in the organization, hence able to provide the right information. The result shows that majority of the employees are well educated and thus understand the effects of total quality management implementation on customer satisfaction in NewAman Metal Packaging company.

4.2.5 WORK EXPERIENCE

Table 4.6: Respondents' Work Experience

Years of Experience	Frequency	Percent
Below 1 year	12	9.8
1-3 years	40	32.0
3-5 Years	48	39.5
5 Years and above	23	18.7
Total	123	100.0

Source: Research Data (2020)

The results in Figure 4.6 show that majority (39.5%) of the respondents had a work experience of between 3 to 5 years, (32.0%) from 1 to 3 years, (18.7%) 5 years and above, and few (9.8%) respondents had 1 year and less than 1 year work experience. This implies that majority of the respondents had worked with the company for a considerable period of time and thus they were in a position to give credible information relating to this study.

4.3 IMPLEMENTATION PRACTICE OF TQM PRINCIPLES

The first research objective sought to examine the implementation practice of total quality management (TQM) principles in NewAman metal packaging Company. The researcher felt it important to establish whether the TQM principles are part of the organizational functional operations. According to TQM experts proper implementation of TQM practice in manufacturing company is a critical determinant enhancing institutional performance (Coff, 1999). The respondents were given a list of statements regarding the implementation practice of TQM principles to indicate the extent to which

they agree. The data related to the TQM principles implementation practice, according to the perception of employees has been analyzed using descriptive statistical methods. An interval class has been developed as follows: Very low=(0,1.4] Low=(1.4, 2.4] Moderate=(2.4-3.4] High=(3.4-4] The interval of level of implementation was applied based on several relevant studies based on four categories of Likert scale (Wu, D. et.al. 2007).

Table 4.7: Implementation Practice of Total Quality Management (TQM) Principles

Items	Mean	Std. Deviation
The extent customer focus is practiced to enhance customer satisfaction in the organization.	2.71	.964
The extent leadership commitment is practiced to enhance customer satisfaction in the organization	2.33	.826
The extent employees involvement is practiced to enhance customer satisfaction in the organization	2.98	.695
The extent process approach is practiced to enhance customer satisfaction in the organization	2.91	.905
The extent system approach to management is practiced to enhance customer satisfaction in the organization	2.45	.960
The extent continual improvement is practiced to enhance customer satisfaction in the organization	2.24	.944
The extent factual approach to decision making is practiced to enhance customer satisfaction in the organization	2.28	.952
The extent mutual beneficial supplier relationships is practiced to enhance customer satisfaction in the organization	2.45	.916
Aggregate average Score	2.544	0.895

Source: Research Data (2020)

The table 4.7 above shows mean and standard deviations of 2.71 and 0.964 with mean approximately 3, meaning that customer focus is practiced, 2.33 and 0.826, mean with

which is approximately 2, meaning that leadership is not practiced well, 2.98 and 0.695, mean with which is approximately 3, meaning that involvement of people is practiced, 2.91 and 0.905 mean with which is approximately 3, meaning that process approach is practiced well, 2.45 and 0.96, mean with which is approximately 2, meaning that system approach is moderately practiced well, 2.24 and 0.944 with mean approximately 2, meaning that continual improvement is not practiced well, 2.28 and 0.952 with mean approximately 2, meaning that factual approach to decision making is not practiced well, and finally the result 2.45 and 0.916 with mean approximately 2, meaning that mutual beneficial supplier relations is not practiced well. The aggregate score indicated mean 2.544 with a standard deviation 0.895, meaning the implementation practice of TQM principles in NewAman Metal Packaging Company was moderate level.

The descriptive analysis result indicated that the management leadership could not ensure conducive atmosphere which people can become fully involved in achieving the organization's objectives. (Pheny, Teo, 2003) observed that top management must communicate TQM to the entire organization to create awareness interest, desire and action. The management should recognize employees for quality achievement, delegating authority to subordinates to make them more responsible. According to the result the management leadership not ensured to create conducive atmosphere which employees can become fully involved in achieving the organization's objectives.

The practice of TQM concerning continual improvement the leadership possible actions to improve employee's involvement in the company are not well practiced. This is because employees are organization's human resources; they should be involved less in top management's resource management procedures. Chandler and McEvoy (2000) pointed out that because employees are prime source of human resources, their education, skills and experience needed for a job need to be assessed and matched with the job requirements. Employees at all levels are the essence of an organization and their full involvement enables their abilities to be used for the company benefit. This is because giving the employees the responsibility for improvements and the authority to make changes to accomplish them provides a strong motivation for employees. This puts decision making into the hands of those who are closest to the job and have considerable insights into problems and solutions. Atmosphere must be created where employees feel

they are encouraged to participate. Generally the aggregate result indicated that the total quality management principles are practiced well in NewAman Metal Packaging Company.

4.4 EMPIRICAL RESULTS OF THE STUDY

4.4.1 ASSESSMENT OF ORDINARY LEAST SQUARE ASSUMPTIONS

Before using multiple regressions, part of the process involves checking to make sure that the data can actually be analyzed using multiple regressions. Therefore, it is important to do because it is only appropriate to use multiple regressions if the data "passes" five assumptions that are required for multiple regressions to give us a valid result.

Assumption 1: There needs to be a linear relationship between (a) the dependent variable and each of independent variables, and (b) the dependent variable and the independent variables collectively. Whilst there are a number of ways to check for these linear relationships, here creating scatter plots and partial regression plots using SPSS software 21 version statistics has been implemented. Consequently, visually inspected these scatter plots and partial regression plots to check for linearity. Consequently, the relationship displayed in the scatter plots and partial regression plots are linear. Therefore, it is possible to run multiple regressions.

Assumption 2: The data has showed homoscedasticity, which is, where the variances along the line of best fit remain similar as move along the line. The regression output of Park Glejser test for detecting the existence of heteroscedasticity showed that significance of employees Training (0.104), customer orientation (0.534), continual improvement (0.758), and leadership commitment (0.144), are higher than alpha ($\alpha = 0.05$). It indicated that there were no heteroscedasticity in this model.

Assumption 3: Multicollinearity exists when there are strong correlations among the predictors and the existence of r value greater than 0.80, tolerance value below 0.10 and Variance Inflation factor (VIF) greater than 10 in the correlation matrix are the causes for the multicollinearity existence (Field, 2009; Myers, 1990; Pallant, 2007). Tolerance is a

statistics used to indicate the variability of the specified independent variable that is not explained by the other independent variables in the model.

Table 4.9: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	Effect of Training on CS	.692	1.144
	Effect of customer orientation on CS	.665	1.504
	Effect of continual improvement on CS	.724	1.214
	Effect of leadership on CS	.755	1.324

Source: Survey result, 2020

As shown in the Collinearity table 4.9, the tolerance levels for all variables are greater than 0.10 and the VIF value are less than 10, and also the correlation matrix of all the variables have the paired values among the predictors are less than 0.80 (see table 4.10 below) indicated that there were no multicollinearity problems that alters the analysis of the findings, rather it leads to the acceptance of r value, tolerance and VIF values.

Assumption 4: There is no significant outlier, high leverage points or highly influential points. Outlier, leverage and influential points are different terms used to represent observations in data set that are in some way unusual. Thus, it was possible to perform a multiple regression analysis.

Assumption 5: Finally, residuals (errors) were checked. Autocorrelation is adjacent residuals of any two observations not being independent of each other or correlated. For any two observations the residual terms should be uncorrelated (or independent). This eventually is sometimes described as a lack of autocorrelation. This assumption can be tested with the Durbin-Watson test, which tests for social correlation between errors. Specifically, it tests whether adjacent residuals are uncorrelated. The test statistics for this can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated (Field, 2009). In this model the value of the test is closer to 2 (1.951). So it can be safely

assumed that there was no problem of autocorrelation, the output presented in the model summary table, (see table 4.11 Durbin-Watson test value).

On the other hand, multivariate analysis has done to calculate the influence variables level of customer satisfaction (x) Employee's Satisfaction (y). The 0.05 level of significance was used to determine the strength of the relationship between the independent and dependent variables.

Table 4.10: Pearson Correlations Matrix

		LCS	ETD	ECO	ECI	ELSC
Pearson Correlation	LCS	1.000				
	ETD	.529	1.000			
	ECO	.593	.488	1.000		
	ECI	.544	.377	.290	1.000	
	ELSC	.686	.345	.455	.293	1.000

Source: Survey result, 2020

As showed in table 4.10, Pearson product moment correlation coefficient (r) was used to determine the strength of relationship between the dependent (LCS) and all the independent variables (ETD, CO, CI, & LSC).

It is a parametric technique which gives a measure of the strength of association between two variables. As it can be shown in the above correlation matrix, each variable is perfectly correlated with itself and so $r=1$ along the diagonal of the table. Enhancing level of customer satisfaction is positively related to employees Training (ETD) with a Pearson correlation coefficient of $r = 0.529$, $p < 0.01$, Effect of customer orientation on CS (ECO) with $r = 0.593$, $p < 0.01$, continual improvement on CS (ECI) positive significantly with $r = 0.544$, $p < 0.01$, and leadership commitment (ELSC) also positive significantly with $r = 0.686$, $p < 0.01$. This result implied a strong support for the all hypothesis developed in this study. The correlation analysis was utilized to reject or accept research hypothesis in previous research in addition to the regression analysis (Cohen, Sayag, 2010).

4.4.2 THE REGRESSION RESULTS AND HYPOTHESIS TESTING

The multiple liner regression result that were obtained by regressing enhancing level of customer satisfaction (LCS) by implementing the total quality management principles those comprises four independent variables, effect of employees Training practice (ETD), effect of customer orientation practice (ECO), effect of continual improvement (ECI), and the effect of leadership commitment(ELSC) were analyze and reported. Finally, the hypothesis tests were undertaken based on the proposed hypothesis and the regression output results.

4.4.3.1. Regression Results for Enhancing LCS

In this study, multiple regression analysis was carried out to get the predictive value of the constructs practiced. Since the model is developed in such a way that each construct is being affected by other constructs, it is necessary to carry out a separate regression analysis against each variable which are practiced to be affected by other variables. This was basically made to determine the linear combination of the constructs. Regression of enhancing the level of customer satisfaction (LCS) on practice of employees Training (ETD), customer orientation practice (ECO), practice of continual improvement (ECI), and the leadership commitment (ELSC), and the regression results are presented on table 4.11, 4.12 and 4.13.

Table 4.11: Regression Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.844 ^a	.654	.639	.39031	1.951
a. Predictors: (Constant), Effect of leadership on CS, Effect of Training on CS, Effect of customer orientation on CS, Effect of continual improvement on CS					
b. Dependent Variable: Level of customer satisfaction					

Source: Survey result, 2020

Table 4.12: ANOVA Output SPSS

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.015	4	7.254	47.616	.000 ^b
	Residual	14.625	96	.152		
	Total	43.640	100			
a. Dependent Variable: Level of customer satisfaction						
b. Predictors: (Constant), Effect of leadership on CS, Effect of customer orientation on CS, Effect of Training on CS, Effect of continual improvement on CS						

Source: Survey result, 2020

Table 4.13: Coefficients Output SPSS

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.043	.264		-3.955	.000
	Effect of Training on CS	.231	.075	.210	3.089	.003
	Effect of customer orientation on CS	.223	.072	.223	3.077	.003
	Effect of continual improvement on CS	.247	.061	.265	4.067	.000
	Effect of leadership on CS	.372	.065	.405	5.702	.000
a. Dependent Variable: Level of customer satisfaction						

Source: Survey result, 2020

The developed model explores the main determinant factors of the level of customer satisfaction by using the variables identified in the model. As indicated in the model summary (table 4.11) the appropriate indicators of the variable used to identify the determinant factors of LCS were explored. That is, the value of R square used to identify how much of the variance in the dependent variable (LCS) identify by the model. The larger the value of R square, the better the model is.

Table 4.11, the model summary depicted that the multiple R (correlation) value of 0.844(84.4%) indicated a highly positive relationship between the dependent and

independent variables and, the overall contribution of the independent variables, Effects of employees Training(ETD), Effects of customer focus (ECO), Effect of continual improvement (ECI), and Effects of leadership commitment (ELSC) to level of customer satisfaction (LCS) counted for 65.4% ($R^2 = 0.654$) of the variation in the LCS, the rest 34.6% are other variables not included in this study.

The result indicated a highly positive relationship between the dependent and independent variables; the value of R^2 is 0.654, revealing 65.4% variability in enhancing level of customer satisfaction as a result of the independent variables. The value of adjusted $R^2 = 0.639$ means that 63.9% of the changes in Y is explained by the independent variables. This adjusted measure provides a revised estimate, i.e. 63.9 percent of the customer satisfaction is due to the fitted model. Therefore R^2 in the model is at 65.4% which can be practiced to moderate fit to the model.

Table 4.12, presented the ANOVA report on the general significance of the model. As p is less than 0.05, the model is significant by the values of F-statistics ($p = 0.000$) and ($F=47.616$). Thus, the combination of the independent variables, employees Training (ETD), Effects of customer orientation (ECO), Effects of continual improvement (ECI), and Effects of leadership commitment (ELSC) significantly predict and are at best fit to model to predict the dependent variable (Enhancing level of customer satisfaction).

Table 4.13, provided the beta Coefficients that present the contributions or positive or negative relationship of each variable to the model. The t and p values showed the influence of the independent variables on the dependent variable. Beta sign of all the independent variables shows the positive effect of the predicting dependent variable. That means, any increase in the independent variables lead to increase in the dependent variable the level of customer satisfaction.

From this, it is understandable that the effect of leadership commitment (ELSC) and Effects of continual improvement (ECI) had the highest factor positively affecting on the level of customer satisfaction with comparing to the Effect of employees Training(ETD) and the customer orientation (ECO) constructs. According to coefficient results, all predictors are positively related to the dependent variable and also based on the statistical

significances of the independent variable over the dependent variable at 5% level of significance, all of the independent variables are significantly affecting the LCS at (P<0.05) level of confidence. Thus, the model for predicting level of customer satisfaction becomes:

$$LCS = -0.043 + 0.231ETD + 0.223ECO + 0.247ECI + 0.372ELSC + e$$

Where: LCS= Level of Customer Satisfaction, ETD= Employees Training, ECO= Effect of customer orientation, ECI= Effects of Continual Improvement, ELSC= Leadership Commitment.

The b-values (beta coefficient) tell us about the relationship between the outcome and each predictor. If the value is positive we can tell that there is a positive relationship between the predictor and the outcome, whereas a negative coefficient represents a negative relationship (Jensen, M.C., Black, F. and Scholes, M.S., 1972). For these data all predictors, except have positive b-values indicating positive relationships. So, there is a positive relationship between all the predictors, (ETD, ECO, ECI and ELSC) and an outcome enhancing the level of customer satisfaction (LCS) as the value of beta coefficient is positive, (standardized regression coefficient 0.231, 0.223, 0.247 and 0.372 at p < .05, respectively).

The standardized regression coefficient value of training (0.231) indicates that one unit of employees training increases with 23.1% increase on the level of customer satisfaction, the coefficient value of customer orientation (0.223) implies one unit increase of customer orientation will increase 22.3% on customer satisfaction, the coefficient value for continuous improvement of (0.247) indicate a one unit increase leads to 24.7% increase on customer satisfaction and finally the coefficient value (0.372) for leadership commitment indicates that a one unit increase on leadership commitment will increase 37.2% of the customer satisfaction in the case of NewAman metal packaging company. This is also supported by the secondary data review. From the existing three customers before the TQM implementation, now the company has increased its customer range to five and also on the verge of entering two more customers to make its overall customer range to seven. The customer complaint registered during the startup year was 10

according to the quality assurance department report of the company and this number was decreased by 50% during the subsequent year to get a customer complaint of only five in 2019. Therefore the consistence of the result of the research that is the positive effect of the TQM practices on the customer satisfaction was also approved by the secondary data of the company.

4.4.3.2. Hypothesis Test

The regression analysis whose results are in the regression model provides a more comprehensive and accurate examination of the research hypothesis. Therefore, the regression results obtained from the model were utilized to test these hypotheses. The following hypotheses test were conducted based on the regression results of employees Training (ETD), Effects of customer orientation (ECO), Effects of continual improvement (ECI), and Effects of leadership commitment (ELSC) obtained from the regression output.

H1: Employees Training has significant positive effect on customer satisfaction in NewAman Company

The first hypothesis of this research posted that employees training has significant positive effect on the level of customer satisfaction in NewAman Company. From the given table 4.13, unstandardized coefficients and p-value for employees training on the level of customer satisfaction were 0.231 and 0.003 respectively; these values show that an employee training has strong significant influences on customer satisfaction, Since the p-value 0.003 which is less than level of coefficient 0.05. this indicates that from the unstandardized coefficient 0.231 as one unit of employees training increases with 23.1 percent increase on the level of customer satisfaction. In line with previous study, according to (Jehanzeb and Bashir 2012) organizations which are providing training and development programs for their employees are achieving high level of employee satisfaction and low employee turnover. From the result we can conclude that this research hypothesis was accepted.

H2: Customer orientation has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company

The second hypothesis of this research revealed that the customer orientation has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company. From the given table 4.13, unstandardized coefficients and p-value for customer orientation on the level of customer satisfaction were 0.223 and 0.003 respectively; these values show that the customer orientation has strong significant influences on customer satisfaction. Since the p-value 0.003 which is less than level of coefficient 0.05. this indicates that from the unstandardized coefficient 0.223 as one unit of customer orientation increases with 22.3 percent increase on the level of customer satisfaction. These finding is also in line with the findings of (Hawa, 2015) who established that there is a significant statistical effect of customer orientation on customer satisfaction as well as a significant statistical effect of service quality on customer satisfaction. From the result we can conclude that this research hypothesis was accepted.

H3: Continual improvement has significant positive effect on the level of customer satisfaction in NewAman metal Packaging Company

The third hypothesis of this research revealed that the continual improvement has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company. From the given table 4.13, unstandardized coefficients and p-value for continual improvement on the level of customer satisfaction were 0.247 and 0.000 respectively; these values show that the continual improvement has strong significant influences on customer satisfaction. Since the p-value 0.000 which is less than level of coefficient 0.05. this indicates that from the unstandardized coefficient 0.247 as one unit of continual improvement increases with 24.7 percent increase on the level of customer satisfaction. This result supported by Wang and Lo (2013) observe that enhanced customer satisfaction is believed to be significantly associated with greater customer loyalty, increased sales and productivity, high new-product success and innovation leading to a more sustainable competitive advantage. From the result we can conclude that this research hypothesis was accepted.

H4: Leadership commitment has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company

The forth and the last hypothesis of this research discovered that the leadership commitment has significant positive effect on the level of customer satisfaction in NewAman metal packaging Company. From the given table 4.13, unstandardized coefficients and p-value for leadership commitment on the level of customer satisfaction were 0.372 and 0.000 respectively; these values show that the leadership commitment has strong significant influences on customer satisfaction. Since the p-value 0.000 which is less than level of coefficient 0.05.this indicates that from the unstandardized coefficient 0.372 as one unit of leadership commitment increases with 37.2 percent increase on the level of customer satisfaction. The finding supports with (Gashti, Torbehbar, Farhoudnia, 2015) study investigated the relationship between leadership styles, employee satisfaction and loyalty and show that leadership styles are important organizational antecedents of job satisfaction and loyalty. Therefore from the result we can conclude that this research hypothesis was accepted.

As the entire hypothesis we set proved that training, customer orientation, continual improvement and leadership commitment directly positively affect the customer satisfaction in NewAman metal packaging company. This research output was also supported by the decreased customer complaint and increase in market share according to the annual report of the company in the two consecutive years of operations.

4.4.3 Discussion

The purpose of this study was to examine the effect of total quality management practice on the level of customer satisfaction using statistical analysis; both descriptive and inferential statistics.

The first objectives of the study investigated the implementation practice of total quality management principles in NewAman Metal Packaging Company. The descriptive analysis result indicated that the management leadership could not ensure conducive atmosphere which people can become fully involved in achieving the organization's objectives. (Pheny, Teo, 2003) observed that top management must communicate TQM to the entire organization to create awareness interest, desire and action. The management should recognize employees for quality achievement, delegating authority to subordinates

to make them more responsible. According to the result the management leadership not ensured to create conducive atmosphere which employees can become fully involved in achieving the organization's objectives.

The practice of TQM concerning continual improvement the leadership possible actions to improve employee's involvement in the company are not well practiced. This is because employees are organization's human resources; they should be involved less in top management's resource management procedures. (Chandler and McEvoy (2000) pointed out that because employees are prime source of human resources, their education, skills and experience needed for a job need to be assessed and matched with the job requirements. Employees at all levels are the essence of an organization and their full involvement enables their abilities to be used for the company benefit. This is because giving the employees the responsibility for improvements and the authority to make changes to accomplish them provides a strong motivation for employees. This puts decision making into the hands of those who are closest to the job and have considerable insights into problems and solutions. Atmosphere must be created where employees feel they are encouraged to participate. Generally the aggregate result indicated that the total quality management principles are practiced well in NewAman Metal Packaging Company.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. INTRODUCTION

This chapter presents summary of the findings, conclusions and recommendations for policy and practice and further recommendations for further studies.

This chapter summarizes and concludes the entire study. It presents recommendations and the direction for future research. The purpose of the research was to examine the effect of total quality management practice on the customer satisfaction in NewAman Metal Packaging Company. It is noteworthy that some of the recommendations made can help implement the TQM practices which could be employed to bring improvement in the level of customer satisfaction in the company and other manufacturing companies in Ethiopia. Primary data was collected by the use of questionnaire from a population of 130 respondents; however 123 of the questionnaire were retrieved from the respondents and analyzed through descriptive statistics, mean, frequency, correlation and multiple regression analysis.

5.2. SUMMARY OF FINDINGS

The specific objectives of the study were to assess the level of TQM practices to enhance customer satisfaction in the company, to examine the effect of Training on customer satisfaction, the effect of customer orientation on customer satisfaction, the effect continual improvement on customer satisfaction and to examine the effect of leadership commitment on customer satisfaction in NewAman Metal Packaging Company. The summaries of findings and conclusions are presented as follows:

Regarding the overall implementation practice of TQM principles, the findings reveal that the aggregated average value (mean) is 2.544 with a standard deviation 0.895; this implies that the implementation practice of TQM principles in NewAman Metal Packaging Company was at a moderate level. However, the least implementation showed was to the leadership commitment and continual improvement principles whereas the

highest was to employee involvement on quality decision. Consequently, the first research question has been answered.

The findings show clearly that TQM practices which are; customer focus practices, employees Training, leadership commitment to work, employee involvement in quality decisions, process approach, system approach management, system for recognition and appreciation of quality efforts were being practiced. It is perceived that majority of the respondents agreed that TQM practices are in place.

The others specific objectives are analyzed through inferential statistics, multiple regression analysis. Based on the regression model consisting of four core interrelated factors: Training, customer focus, continual improvement and leadership commitment on level of customer satisfaction in NewAman Metal Packaging Company; were positively affect the level of customer satisfaction in NewAman Metal Packaging Company. Therefore, the company should give emphasis to use these factor variables to make their service delivery effective, efficient and profitable through improving the level of customer satisfaction. Moreover leadership commitment and the continual improvement factors were the major determinants of customer satisfaction in the company followed by the employees training and the customer orientation practices.

The study finds that the composite measure of leadership commitment, the continual improvement, employees, training and the customer orientation practices accounts for 65.4% ($R^2 = 0.654$) variance for enhancing the level of customer satisfaction. That means, the effect of these four independent variables contributed for the dependent variable, customer satisfaction, were 65.4%, and the remaining 34.6% were other variables that are not included in this study.

The final portion of this research aims to conclude the finding of the study focusing on the core determinants that have significant effects to the customer satisfaction and to provide recommendations based on the research findings of the study. Conclusions and recommendations are drawn from the findings of the study specifically related to the effect of total quality management practices; the effect of training, customer orientation, continual improvement and leadership commitment on customer satisfaction in NewAman Metal Packaging Company.

5.3. CONCLUSIONS

This research concludes that, firstly regarding the assessment of the implementation practice of TQM principles includes; customer focus practices, employees Training, the leadership commitment to work, employee involvement in quality decisions, process approach, system approach management, system for recognition and appreciation of quality efforts implied that Majority of the respondents agreed on the above mentioned TQM practices were being practiced. Therefore it is possible to conclude that the TQM practices are in place in NewAman Metal Packaging Company. However the TQM principles were being implemented to the moderate level. Again management actions undermine leadership commitment to quality and render TQM practices and continual improvement practice to enhance customer satisfaction in the organization were ineffective or implemented in a lower level.

Secondly, total quality management practices; training practices, customer focus practices, continual improvement practices and leadership commitment practices positively affect customer satisfaction with in NewAman metal packaging Company. Training has positive and significant effect on customer satisfaction in NewAman Metal Packaging Company. The company undertakes training programs to its workforce to strengthen their skills that each requires to improve and development programs are carried out to raise the level of their employees so that they all acquire skills and knowledge that are similar. Customer orientation has positive and significant effect on customer satisfaction in NewAman Metal Packaging Company. Customer orientation is essential for achieving customer satisfaction and customer orientation practices primarily affect time-based efficiency. Continuous improvement has positive and significant influence on customer satisfaction in NewAman Meta Packaging Company. Continuous improvement is an ongoing incremental improvement where the company continues normal business activities, while constantly seeking out new opportunities to add value to their products, services and processes. Finally the study concluded that Leadership commitments have positive and significant effect on the level of customer satisfaction NewAman Metal Packaging Company.

5.4. RECOMMENDATIONS

The study sought to assess the effect of TQM practices on customer satisfaction at NewAman Metal Packaging Company. From the above conclusions, some recommendations are proposed to alleviate the problems encountered.

- NewAman Metal Packaging Company should carry out Training programs for tasks leading to successful business operation do an in-depth understanding of the company environment, an insight regarding Training options and career development approach to link in employees into organizational effectiveness and knowledge sharing to improve customer satisfaction.
- NewAman Metal Packaging Company should ensure that employees to be great at customer service they create an organizational culture focused on caring. Have a good understanding of what their customers want and establish good lines of communication.
- NewAman Metal Packaging Company need to continuously improve their products, services, and processes to remain competitive and be able to maintain a work space that is organized and clean, promoting enhanced functionality, efficiency, and productivity
- NewAman Metal Packaging Company management should build upon the weaknesses of its leadership by becoming more effective and balanced at leading others. Having this knowledge the managers will gain direction to develop goals and a training plan to become better leaders and to enhance their commitment.

5.5. RECOMMENDATIONS FOR FURTHER STUDIES

This study focused on assessing the effects of total quality management practices, such as employees training, customer orientation, continuous improvement and leadership commitment affect the level of customer satisfaction in NewAman Metal Packaging Company. Therefore, further studies should be carried out focusing on other variables not studied in different organizational sector.

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APPENDIX 1

THE QUESTIONNAIRE

The questionnaires consist of five major Sections as shown below, which focus on the areas of interest of the research. The sections include: demographic and related variables, TQM related variables in NewAman as filled by internal employee and employee satisfaction, The effect of TQM practices on customer satisfaction as viewed by internal employee and the effect of TQM practices on external customer satisfaction as viewed by external customers themselves and employees and finally the level of implementation of the TQM practices in the company.

QUESTIONNAIRE

Dear Sir/Madam,

I am a student of Jima University ABH Campus and I am conducting a research as partial fulfillment of my masters in business administration (MBA) program. The aim of this research is to assess the effect of TQM practices on performance and stakeholder satisfaction, a case of newAman metal packaging. Your participation for this research is highly appreciated and your privacy will be kept in secret.

Thank you for your time and consideration.

Section A. Demographic and Related variables,

1. Gender:
Male [1] Female [2]
2. Your Age:
A, Below 20 years B, 21-30 years C, 31-40 years, D, 41-50 years E, Over 50 years
3. Your Department in the company
A) Production and technique B) quality C) marketing D)Admin E)Procurement
4. Highest level of Educational attained
A) Diploma/TVET B) Bachelor degree C) Master's degree D)Above Master's degree
5. Years of service in this company
A) Less than 1Year B) 1-2 years C) more than 3-5years D) more than 5years

Section B. Practices of TQM

The following relates to the extent which principles of TQM are considered to enhance customer's satisfaction in NewAman where:

(1- Not at all, 2 – Low, 3 - Average, 4 – High, 5 – Very High)

To what extent are the following TQM principles are practiced in your company?

	Statements	Not	Low	Average	High	Very High
1	The extent customer focus is considered to enhance customer satisfaction in the organization.					
2	The extent leadership commitment is considered to enhance customer satisfaction in the organization					
3	The extent employees involvement is considered to enhance customer satisfaction in the organization					
4	The extent process approach is considered to enhance customer satisfaction in the organization					
5	The extent system approach to management is considered to enhance customer satisfaction in the organization					
6	The extent continual improvement is considered to enhance customer satisfaction in the organization					
7	The extent factual approach to decision making is considered to enhance customer satisfaction in the organization					
8	The extent mutual beneficial supplier relationships is considered to enhance customer satisfaction in the organization					

Section C. Level of customer satisfaction

The following relates to the level of customers perceived satisfaction of NewAman where:

(1- Strongly disagree, 2 – Disagree, 3 - Neutral, 4 – Agree, 5 - Strongly agree)

What is you rate your level of agreement about the statements about customer satisfaction of NewAman on the products and services rendered?

Statements	Strongly Disagree	Disagree	Neut ral	Agre e	Strongly Agree
The company produce and deliver quality Products					
The company have better experience on customer handling					
The company fix attractive product price compared to the market/competitors					
Customer management practice is implemented well by the department					
The management practices promotes employee loyalty to the company					
The management practices promotes employee retention					
The management practices promotes team work					
The management practices leads to job satisfaction					

Section D: Employees Training

The statements below relate to the effect of Training on customer satisfaction in NewAman . Supplied also are five options corresponding to these statements:

Strongly agree(SA)=5, Agree(A)=4, Neutral(N)=3, Disagree(D)=2, and Strongly Disagree(SD)=1.

3. Employees Training	Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Management declares that all employees will be trained and understand the company functions.					
Most employees understand the basic processes used to create quality services.					
Timeliness of the quality data delivery.					
Higher management has developed an environment helping towards on-the-job-training.					
Managers and supervisors participate in specialist training and education.					
Employees training need assessment will done including TQM training					

Section E: Customer Orientation

1. Customer Orientation	Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company is totally committed to creating satisfied customers.					
The companies goals are exceed customers' expectations.					
Customers' complaints are resolved often by giving special attention.					
Employees are encouraged to satisfy customers in the company.					
The Company conducts a customer satisfaction survey periodically.					
Customers focus orientation provided for					

the whole employees of the company.					
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Section F: Continuous Improvement

The statements below relate to the effect of continuous improvement on customer satisfaction in newAman. Supplied also are five options corresponding to these statements:

Strongly agree(SA)=5, Agree(A)=4, Neutral(N)=3, Disagree(D)=2, and Strongly Disagree(SD)=1.

4. Continual improvement	Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The company reinforces continuous study and improvement of its services.					
The management use specific organizational structure to support quality improvement.					
Works on identification of areas for improvement.					
Information management aimed at supporting quality management					
Suggestion for improvement are discussed and implement					
Risky initiative for improvements are not taken often					
Employees at all levels participate in brainstorming sessions					
The companies' service to the customers has continually improved.					

Section G-Leadership commitment

On a scale of 1-5, how will you rate the level of implementation of the listed TQM practices/principles in Newman, (1- Strongly disagree, 2 – Disagree, 3 - Neutral, 4 – Agree, 5 - Strongly agree)

1. Leadership Commitment	Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
There is a Participation in quality decisions by the employees.					
Building quality awareness among employees is ongoing practice in the company.					
Effectiveness of management in solving problems.					
Preventing faulty services is a strong practice of the company.					
The company use processes management used include quality measures					
The quality goals and policies are communicated to all levels in your company					
There is effective communication in the company					
Management has strong commitment to customers management					