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**Impact of TQM on service Companies
performance: Empirical evidence from
Palestine**

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in Quality Management.**

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Impact of TQM on service Companies performance: Empirical evidence from Palestine

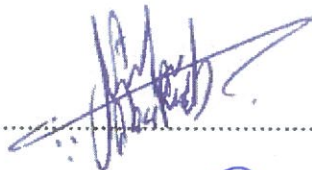
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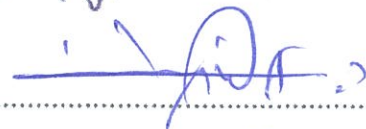
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Declaration

I, Yamin Abu AlRub, declare that this thesis titled, "Impact of TQM on service Companies performance: Empirical evidence from Palestine" and the work presented in it are my own. I confirm that:

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Abstract

The dynamic and competitive today's business environment has made most of organizations to be striving towards devising a method that will be deployed by their firm to remain in the business by enhancing their performance. Total quality management (TQM) has been an approach deployed by some firms to reduce their shortcomings and enhance their efficiency, reliability and quality achievement. Meanwhile, the method has been partially deployed and that has been making its implementation difficult. This study examines the implementation of TQM in Palestine service companies. Structured questionnaire was used to collect the data and PLS-SEM was employed for the analysis using AMOS software. Findings from this study show that recognition and reward; and, education and training were found to be significant determinants of employees satisfaction. Moreover, vision and plan, employees evaluation, improvement of management control, employees satisfaction, and enhancement of quality system were found to be significant to the determination of service quality. In addition, employees satisfaction, customer focus are found to be determinants of customers satisfaction; and lastly, service quality and customers satisfaction were found to contribute significantly to the general business performance of service companies in Palestine. It is suggested in this study and argued that deployment of TQM is practicable to achieve overall business performance in Palestine service companies, if the management can endeavor to deploy the full integration of total quality management approach.

Keywords: Business environment, TQM, Palestine, SEM

الملخص

جعلت بيئة الأعمال الديناميكية والتنافسية اليوم معظم المؤسسات تعمل جاهدة من أجل ابتكار طريقة ستشرها الشركات لتبقى في العمل من خلال تعزيز أدائها. لقد كانت إدارة الجودة الشاملة (TQM) مقارنة تم نشرها من قبل بعض الشركات لتقليل أوجه القصور فيها وتحسين كفاءتها وموثوقيتها وتحقيق الجودة. وفي الوقت نفسه ، تم نشر الطريقة جزئياً والتي جعلت تنفيذها صعباً. تتناول هذه الدراسة تطبيق إدارة الجودة الشاملة في شركات الخدمات الفلسطينية. تم استخدام استبيان منظم لجمع البيانات وتم استخدام PLS-SEM للتحليل باستخدام برنامج AMOS . النتائج من هذه الدراسة تبين أن الاعتراف والمكافأة. ووجد أن التعليم والتدريب عاملان مهمان لرضا الموظفين. علاوة على ذلك ، فإن الرؤية والخطة ، وتقييم الموظفين ، وتحسين الرقابة الإدارية ، ورضا الموظفين ، وتحسين نظام الجودة ، وجدوا أنها مهمة في تحديد جودة الخدمة. بالإضافة إلى ذلك ، رضا الموظفين ، وجد أن تركيز العملاء هو المحدد لرضا العملاء. وأخيراً ، وجد أن جودة الخدمة ورضا العملاء تساهم بشكل كبير في الأداء العام لشركات الخدمات في فلسطين. يقترح في هذه الدراسة بأن نشر إدارة الجودة الشاملة أمر عملي لتحقيق الأداء العام للأعمال في شركات الخدمات الفلسطينية ، إذا كانت الإدارة يمكن أن تسعى لنشر التكامل الكامل لنهج إدارة الجودة الشاملة.

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List of Abbreviations

TQM	Total Quality Management
ASQ	American Society for Quality
QC	Quality Control
QA	Quality Assurance
SQM	Supplier Quality Management
VIF	Variance Inflation Factor
KMO	Kaiser-Meyer-Olkin
VP	Vision and Plan Statement
EV	Evaluation
PCI	Process Control and Improvement
SD	Service Design
QSI	Quality System Improvement
EP	Employee Participation
RR	Recognition and Reward
ET	Education and Training
CF	Customer Focus
EPR	Employee Performance
SQ	Service Quality
CS	Customers Satisfaction

SBP Strategic Business Performance

QFD Quality Function Deployment

MBNQA Malcolm Baldrige National Quality Award

Chapter 1

INTRODUCTION

The job-based management philosophy process that involves people that cares for customer satisfaction, which will in turn contribute to the performance improvement, can be regarded as "Total Quality Management" (TQM). This includes proper coordination of work processes that allow continued improving all business units to meet or exceed the expectations of customer. This emphasizes the full quality of all aspects of the organization for waste reduction and modifications to have costs reduction and increase efficiency in the production. TQM applies to all forms of organization, irrespective of its size, objective and mission, with the public sector inclusive. Organization quickly adopts ideology to make them effective in the meeting applications. However, adopting the ideology of TQM was difficult for most organizations, as a result of their non-compliance with procedures and rules for implementing TQM. For instance, an organization deployed TQM as a program with the expectation that it will work and do everything magically, while others took a partial approach, using some parts of the rules.

This was the reason for the failure of most organizations to achieve the expected goal. The implementation of this ideology further consolidates the accrued benefits that are required of organizations to implement TQM, especially in developing countries such as Palestine. In a situation where the adoption of this ideology seems

impracticable for the organization, this will reflect in the weaknesses of the organizations in their quest for profit in this area of quality. With current trend of changes experiencing which is as a result of government reforms, it has given way to form of competition which seems to be different from the status quo. Due to competitive changes, the environment, economic globalization and technology, competition between companies has increased. Various sectors of the economy created strong competition and it is expected of the organizations to look at their operating procedures so that it can strategically change them to fit with problems. This makes companies more interested in looking for quality management concepts to meet competitive challenges and improve their results. There are many quality management concepts, such as "Total Quality Management", "Lean Production", "business process redesign", "Six Sigma" and others to ensure high quality competition. This study focuses on "Total Quality Management" (TQM), which was developed by Deming, Juran and Feigenbaum.

The quality of services is crucial in the service sector, as it is the main factor determining competitiveness. Service companies that pay special attention to the quality of services will stand out from others, thus achieve a "competitive advantage". Though it was stated that the price is a significant factor considered by customers in choosing companies, and most companies prefer to compete with each other than "Quality of Service". Lack of quality management means, however, a lack of addition and provision of value for companies (Peters, 1999,). (Goh and Ridgway, 1994,) employed a strategic approach to assess company "quality management competitiveness". This approach ensures that supported companies remain customer oriented. TQM allows innovating, allowing employees to make decisions that affect their work. For companies to be innovative in their proposals, a flexible structure is needed to enable collaboration between different units. The implementation of TQM includes the acquisition of various actors involved in the process provision of services in the field of ideology and quality management practice. This means that key service actions must also be supported, to instill quality in their work.

1.1 Motivation of the Study

The consumer behavior changes have caused most manufacturers to ensure the productions of goods and services products that will meet the requirements of potential buyers. This is why most organizations strive to find ways to satisfy customers with improved services designed to satisfy or meet customer expectations. Even if organizations strive to meet customer expectations, some procedural shortcomings associated with the provision of services will still persist. The significance importance of the whole process can be seen in the benefits it brings in terms of increasing sponsorship over time. If service companies do not take quality approaches seriously, this can cause loss of customers, which could ultimately get them out of business. Therefore, changes in organization are necessary; culture and structural changes give rise to a new approach to the provision of services. Implementation of TQM may be useful for service companies after successful adoption of the rules.

The introduction of TQM will increase customer satisfaction with the services offered. Improving quality of services can lead to the enhancement of their profitability and shares in the market. Implementation of TQM in an organization can also ensures that organizations change working methods to eliminate inefficiency, increasing customer satisfaction, and implementing best practices (Porter and Tanner, 1996,) observed that continuous improvement in operational efficiency is necessary but not enough for the organization profitability. According to Sil (2007), TQM helps improve quality. It also reduces waste, reinforcement and buffer stock by installing one manufacturing process. It was argued in the study that TQM would decrease production costs and production time. Many other TQM practices, such as training, IT systems management and relationships suppliers, etc., were argued to have a positive effect on work efficiency.

1.2 Research Objectives

This study is aimed at examining the current implementation of TQM in Palestinian service companies, and the following objectives will be pursued to achieve the study aim:

- Examining the impact of the TQM implementation on the general performance of Palestinian service companies.
- Formulate a TQM implementation model for Palestinian service companies.

Thus, there may be new knowledge related to the introduction of TQM in Palestinian service companies be raised. This study will contribute to the literature on the TQM integration with the specificity of Palestinian service companies. It is evident from the literature that the empirical literature on evaluation of TQM implementation influence on service companies in Palestinian is scant, thus, this identified gap will be filled by this study by building a TQM implementation model that could be applied by Palestinian service companies.

1.3 Research Questions

In line with the aim and objectives of this study, the following questions are put forward to be answered by this study:

Question 1: *How do we describe TQM?*

Question 2: *How do we determine the general business performance within TQM?*

Question 3: *Does TQM implementation influence the general business performance in Palestinian service companies?*

Question 4: *What is the appropriate TQM implementation model that is suitable to guide Palestinian services companies in TQM implementation?*

Question 5: *How practicable is the TQM implementation model?*

1.4 Problem of the Statement

The business world of today has been dynamic and competitive which was as a results of technological advancement and globalization. This has made every organization to give more attentions to how their firm can remain in the business and achieve competitive advantages. The total quality management (TQM) has been among the method deployed by different organization to reduce shortcomings in the production or delivery of their service so as to enhance the efficiency of their firm. Though much attention has been given to TQM, however, the consensus on the TQM implementation have been elusive. It is in view of these that this study aimed at examining the implementation of TQM in Palestine service companies. The Palestine service companies are not immune from the dynamic and competitive business environment that we are witnessing today, but the empirical study to get a deep understanding on how the TQM can be implemented in the sector in Palestine have not been sufficient.

In order to achieve the aim of this study, examination of the impact of the TQM implementation in the general performance of Palestine service companies; and, formulating a TQM implementation model for the service companies were pursued as the objectives of the study. Five questions were put forward to be answer in the study, while 15 hypotheses were formulated to test the theories on the TQM implementation as its applicable to Palestine service companies. It was proposed in the study model that strategic business performance (SPB) of the service companies in Palestine will be influenced by service quality (SQ) and customers satisfaction (CS). It was also proposed in the study framework that employees performance (EPR) will be influenced by employee participation (EP), recognition and reward (RR),

and education and training (ET). Service quality (SQ) is proposed in the model to be determined by service quality management (SQM), vision and plan (VP), evaluation (EV), process control and improvement (PCI), service design (SD), employees satisfaction (ES), and quality system improvement (QSI). As for the customers satisfaction, it was proposed in the framework to be determined by customer focus (CF), service quality (SQ), and employees performance (EPR).

1.5 Hypothesis

H1: There is a direct and positive influence of employee performance on service quality.

H2: There is a direct and positive influence of Employee performance on customer satisfaction.

H3: There is a direct and positive influence of service quality on customer satisfaction.

H4: There is a direct and positive influence of service quality on strategic business performance.

H5: There is a direct and positive influence of Customer satisfaction on strategic business Performance.

H6: Supplier quality management positively influences service quality.

H7: Vision and plan statement positively influences service quality.

H8: Employees assessment positively influences service quality.

H9: Process control positively influences service quality.

H10: Service design positively influences service quality.

H11: Quality system improvement positively influences service quality.

H12: Employee participation positively influences employee performance.

H13: Employees reward positively influences employee performance.

H14: Education and training positively influences the performance of employees

H15: Prioritizing customers positively influences customer satisfaction.

1.6 Thesis Organization

Chapter 2 In this section, various concepts and theories that are relevant to the study were reviewed to enable a more understanding of the study, and to also put the study in proper perspectives.

Chapter 3 This section presents the business performance identification; the theoretical model development on the implementation of TQM in relations to business performance; and, the theoretical constructs operationalization.

Chapter 4 It is in this chapter that constructs in the study model were identified, the hypotheses were developed, and the research methodology employed for the study was extensively discussed.

Chapter 5 This chapter presents and discussed the findings from the data analysis. The hypotheses results were discussed in line with previous studies, and justification for its relevance to our study was discussed, and the section was rounded up with conclusions, recommendation, as well as the suggestion for future research.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

In this section, quality concepts were analyzed; various definitions and ideas from many authors were evaluated. General framework for the properties considered in the elements of TQM. Because the quality of the service is more related to TQM effects, also analyzes the concept of specialist literature and the quality of services, and how it is evaluated. Organization and clients TQM adheres to the implementation path concept of services quality in which the various phases and features of these phases are discussed. TQM to the contribution of the Founders to the theory was analyzed With TQM. The advantages of TQM barriers to its implementation were analyzed.

2.2 Quality Concept

The essential element of production for either goods/services required by any organization to meet the customers expectation is "Quality". The definitions and opinions on what constitutes a quality have been varied among practitioners. While some opined that product/service quality is relative to perception, others are of the view that it has to do with the extent at which a product/service meets the customers expectations. In the word of (Crosby, 1979,), it was defined compliance with re-

quirements or specifications, and proposed the quality is right; must be measurable. Meanwhile, ISO 9000 (2000) as cited in the work of (Tickle, 2001,) sees it as the extent at which an inherent traits of a product/service fulfill certain requirements. However, the American Society for Quality (ASQ) considers quality to be subjective; quality can be seen as has two meanings - product or service characteristics, ability to meet a specific need or a product/service without disability. (Porter and Tanner, 1996,) described quality as the "magic ball" that offers value, better customer service, better products and higher profits. The study further explained that the quality of eyes of the beholder means that the client is right for what he says. In addition, (Kondo, 1997,) argued that quality is a source of employee empowerment, in which the main goal the company must be to attract its employees and clients, generating profit for its shareholders.

2.3 Quality Management

It is believed that the idea of creating quality management strategies is by setting goals and tasks; planning and the implementation of the plans; uses of a control systems to monitor corrective actions and reactions. This view was similar to (Dale et al., 1994,) which stated that, the implementation of the quality management of the organization is to meet the customer expectations and improve the overall efficiency of the business. (Gryna and Juran, 1998,) in the study opined that the rationale behind the quality management is to avoid failures in the production of goods and services. It doesn't just mean that products, services and processes will not perform their functions, but regardless of their function. The quality management must stop the failure and cope with it plan, organize and control. Four quality management steps were addressed by (Dale et al., 1994,) which includes "inspection, quality control (QC), quality assurance (QA) and total quality Management (TQM)".

2.3.1 Inspection

Observations as defined by ISO 8402 (1986) is the activities that involves measurement, examination, testing, and comparing one or more characteristics of a product/service with the pre-set conditions that determine its compatibility. This included tests, measurements and research on the characteristics of a product/service and compares it to the specified requirements. According to (Deming et al., 1986,) "Research is too late, inefficient, to detect and exclude bad products", and expensive. For the study, quality comes from process improvement, and not verification.

2.3.2 Quality Control

The traditional method used by companies for quality management is refers to as "Quality control". The control is related to the evaluation and revision of the works carried out. It is in most cases achieved by testing of products and services. The required patterns appear at the end of the work process and at the end. In the study of (Gryna and Juran, 1998,) quality control is viewed as the procedure by which we evaluate the performance of the real quality, compare it to standards and work through differences. This is the aim of a more independent management tool, which is aimed at stopping goods and services that are not up to the basic requirements standard. It is line of these that ISO 8402 (1994) sees "consumer quality control" as a functional method employed by organizations to meet quality requirements. As a quality measure, quality control is expensive. The idol and the irreversible are seen as changing prices. This may be the result of production problem that gives rooms for deficient goods and services in most cases when the production process is delayed. Because of these problems associated with quality assurance, companies are now focusing on other methods or tools that can ensure an efficient quality management. (Gómez et al., 2017,) noted that problem solving is not an effective way to be after an attitude problem removing the root of the problem.

2.3.3 Quality Assurance

It is premised on the principle of designing the production business process. Reduce the likelihood of producing inferior products. According to (Dale et al., 1994,) quality assurance is a prevention mechanism that enhances the products/services quality. While productivity emphasis is on product, service and process design, quality assurance focuses on preventing defects, not like quality control, which focuses on detecting defects when something happens. Product quality control focuses on preventing unsuitable products and making products greater emphasis is placed on activities related to the production process. So this is the goal of project management is how they control the quality of their product or services to avoid quality at all stages of production. Emerging problems "quality assurance" the philosophy states that the design of quality takes place in phase, not in "control phase" and quality problems result from the poor design of the process. (Lockwood et al., 1996,) to be effective, quality assurance requires a new functional vision and touch that appear to be more active than reactive, including inspire and engage people in the process of typical departmental obstacles. (Oakland and Tanner, 2005,) defines quality assurance as preventing common quality problems, planned activities that include documentation.

2.3.4 Total Quality Management

In order to ensure that all business segments are under control to ensure the customers expectations are met, the idea of "Total Quality Management" (TQM) was introduced. TQM is the quality management principle that encompasses all aspects of the business including customers and suppliers (Dale et al., 1994,)(Lockwood et al., 1996,). (Dale et al., 1994,) argued that TQM is a business control and management principle that integrates customers and suppliers with the other aspect of business to improve on the organizations performance. TQM is a theory that includes everyone's collaboration, helps in the organization's business process and engages all interested organization stakeholders (Dale et al., 1994,). In the

view of (Mohammad, 2006,), TQM is seen as an effective mechanism for quality integration efforts to develop quality services and improve the quality of various aspects of the system, such as activation of services at a very accessible level and fully satisfied. TQM's goal is efficient, reliable and productive customers need customer satisfaction on the right path.

The fundamentalist is at stake to provide one direction in which one organization operates to ensure quality is in the mind of all employees and the department in which they work. (Tickle, 2001,), defining TQM as the integration of organization, technology and culture elements of the company; and said further that it is a philosophy of the heart and brain that acknowledge it. Company culture influences behavior, which in turn affects quality (Beer, 2003,), describes TQM as an effective and efficient approach to improving competitiveness, and flexibility for all organizations. According to (Hellsten and Klefsjö, 2000,), TQM is described as a management system that has interdependent units, i.e. basic values with techniques such as process management, comparative assessment of planning teams or customer improvement as a control card. (Dahlgaard et al., 2008,) opined that TQM is a corporate culture that increases customer satisfaction by constantly improving every employees of the organization. (Beer, 2003,) notes that creating a really effective organization each party will work properly for the same purpose, recognizing that each person and all activities are influenced, and in turn affect each other - the methods and techniques used in TQM it can be implemented by any organization.

2.4 Approaches to TQM

2.4.1 Demings Approach

The Deming approach to TQM theoretically concerns summarizing of the theory of affected TQM which refers to the construction of an organizational system that promotes support and learning tools to implement task management practices; which

in turn leads to consistency; improving the provision of employees; products and services; as well as employees. These are significant for customer satisfaction and ultimately for consistency (Anderson et al., 1995,). (Deming et al., 1986,) underlines the responsibilities of top managers in leadership. He observed that applications and systems are changing, so it's the responsibility of leadership to play a role in ensuring high quality success management, which he opined is the greatest administrative responsibility perspectives of religion change in order to ensure that the improvement is continuous. In most cases, top management are the causes of problem of quality control, it is their responsibility to provide employees with clear criteria about what is being considered work acceptably and offers ways to do it.

In the study of (Deming et al., 1986,), the significance of identifying and measuring customer needs are emphasized, build partnerships with suppliers, and work teams and quality problems, which is to enhance the skills of employee, and ensure the participation of employees in the scheme of things. (Raj and Attri, 2011,) propounded a theory about the basic quality management by the "Dark Management Method". He proposed that how management is effective and also degraded are as a result of management methodology that is generated by the management's activities to continuously create a joint training for the organizations employees to ensure the implementation of management approach that will give support to customer satisfaction and institutional protection through continuous improvement of personnel and processes, products and services. The ability to control and manage systems and processes quality improvement lies respectively and accordingly in the managerial responsibilities in their implementation. (Deming et al., 1986,) advocates practical exercises, including the use of specialized statistics and tools, methods for designing, managing and improving processes that need to be minimized. Irreversible changes occur when general and specific causes are produced. The general causes of changes are interrelated and common to many operators, machines or products; this includes creating unsuitable products, materials that cannot be customized, low rating, and poor working environment. Though, these are management responsibilities, but the

main reason of the problem existence is related to absence of required knowledge or skills, and sometimes results to poor performance.

2.4.2 Jurans Approach

The system of activities gears towards customers satisfaction, strong achievements of employees, higher revenues and lower costs were refers to TQM (Gryna and Juran, 1998,). The real issue with the quality arises from management, not from employees. Fulfillment of features actions is required in all company functions. Full quality assessment, supplier quality management, application of statistical methods, quality information systems and competitors comparative analysis is necessary to improve quality. Accent is within band's reach and design work that can promote quality improvement, communication between management and staff coordination, and improve employee coordination. He also emphasized the importance of the mountain commitment and initiation, participation, recognition and reward. According to Juran, understanding the needs of customers is very important. This is a requirement that applies to everyone involved in marketing, design, production and services.

Customer identification requirements require more stringent analysis and understanding to ensure product compliance customers have the needs and the right to use them, not just to meet product specifications. That is why market research is necessary to identify customer needs. Juran suggested that the proposal of the use of technology to ensure the quality of the project should place emphasis on quality role, how the experiment will be designed, reliable engineering, and consistent engineering. Juran considers the management of quality in an organization as a threefold process: a quality trilogy, quality control, and quality planning. In access to management qualitative problems are identified and processed during the process quality control; serious problems require a separate process, namely quality improvement; these serious problems are considered reliable quality planning. The Juran trial has defined four broad categories of quality costs that can be used to

assess religion. Costs related to quality, this information is important for improving quality. Eligibility costs, internal fault costs (scrap, processing, fault analysis, etc.) related to the defects found before handing over the product to the customer; external costs of failure (warranty, claims, return of materials, discounts etc.) Related to defects found after the product has been shipped to the customer; evaluation costs (entry, processing and control and final tests, product quality, Audit, maintaining accuracy of test equipment, etc.). The extent to which an organization can adapt to the quality requirements; prevention costs; reduced failure to a minimal level; and, cost reduction.

2.4.3 Crosbys Approach

The study of (Crosby, 1979,) identified several principles and methods that are fundamental to success. Quality improvement programs, including, for example, management involvement, focus on quality, employee recognition, education, reducing quality costs (costs of prevention, costing and failure), prevention instead of checking after the incident, do what you need to do first and from scratch. Crosby claims that mistakes are made for two reasons: absence of knowledge. It is believes that education and training are likely to be the root of determinant and end of commitment by employees. Moreso, the zero setbacks and attention to detail will heal each other. Crosby also pointed the significance of management style to improve the quality of success. Understanding, commitment and communication are important. The five conditions are uncertainty, awareness, knowledge, knowledge, and safety. These steps can be used to measure progress in several dimensions. Categories such as attitude of understanding and management, status of quality organization, troubleshooting, price quality as a percentage of sales and a general idea of company quality, quality management grids. Maturity and quality are key tools for administrators to evaluate their quality.

2.4.4 Feigenbaums Approach

TQM according to (Feigenbaum, 1994,) is viewed as an effective system for improving quality, maintaining quality and integrating efforts to enhance the quality of different groups. A company that makes full use of marketing, engineering, production and services economic levels must take into account the total customer satisfaction. The study claimed that four significant stages are involved in an effective quality management which is as follows:

- Set quality standards;
- Assessment of compliance with these standards;
- Work when standards are not respected;
- There are plans to improve these standards;

In reference to the study, the quality links begins with the definition of the needs of all customers and ends only when a product or service is offered to a satisfied customer. Accordingly, all functional activities such as marketing, design, shopping, production, includes inspection, delivery, installation and maintenance. Achieve quality identifying customer needs is the basic starting point for achieving quality. He claimed that effective TQM requires a high level of influence, and emphasis should be placed on a systematic approach to quality, functional integration of people, machines and dat. An established overall quality mechanism is an important basis for TQM. Here is the definition of a general quality system:

Effective, integrated technical documentation, complete consensus framework for enterprises and people, machines and company information on the best and most practical ways to reassure customers. (Feigenbaum, 1994,) stressed that efforts should be made to avoid poor quality, instead to make it a post evaluation. The study claimed exhibiting good traits by employees and employers of the company is an important factor of achieving efficiency in todays business. There are two

factors that affect the product, Quality: technological, i.e. machines, materials and processes; and a person, i.e. drivers, craftsmen and other employees of the company. Of these two factors more meaning of the date. (Feigenbaum, 1994,) considers senior management's involvement in the employee partnerships, supplier quality management, information systems, assessments, communication, the use of high-quality prices, and the use of statistical methods to become an important part of TQM. The discussion stated that employees should be rewarded for tips on improving quality, because ensuring it the business of everyone. The study argued where the training and education of the employee effective, such is needed, which should be targeted at the followings: quality procedure, knowledge of traits and features.

2.4.5 Ishikawas Approach

(Ishikawa, 1985,) observed that the management of quality in an organization should goes beyond product after-sales service and quality management. The study claimed that company's success depends largely on the quality of treatment; continuous improvements; because commitment to continuous improvement can ensure that people never stop training. The study argued that employee participation is a key to the successful implementation of TQM. Similar to other scholars, the study highlights the significance of quality education which starts and also ends it. It was related to development and security. Seven quality control instruments include universal education (Ishikawa, 1985,). (Ishikawa, 1985,) suggested that the need to evaluate clients serves as a tool development of inter-functional cooperation; the choice of supplier should be based on quality not only for the price; multifunctional set of employees are effective means of identifying and solve quality problems. The Ishikawa TQM concept includes the following six basics: i) making achieving quality to be their priority and not profit; ii) the aim of satisfying their customers; iii) this should be follows by client overcomes the barrier of division; iv) Use facts and data for presentations and use of statistical methods; v) respect for humanity as

a management philosophy, integral participation management; and, vi) functional management.

2.5 Further Literature Review

The research on TQM has received great attentions from the scholars around the world. The literature on TQM shows that different definitions and frameworks were adopted by researchers in providing understanding to TQM. It is in view of these that making the consensus definition on the TQM and what constitute TQM have been a moot topic. For instance, (Steingard and Fitzgibbons, 1993,) described TQM as a sequence of methods and procedure that are deployed to avoid or ameliorate difference in either service delivery or production processes that is aimed at efficiency improvement, reliability and achieve quality. This view was in line with Department of Defense (1988) who viewed TQM as integration of managerial techniques and technical tools that focuses on consistent improvement within a disciplined authority. Meanwhile, (Kanji and Asher, 1996,) sees it as a continuous improvement process for individual, group or entire religious organization. Meanwhile, the study identified four principles and eight basic concepts for TQM.

TQM was tried to depict as the principles highlighted to ensure quality achievement in an organization, by putting together all activities that could make it achievable and follows it religiously. In a similar vein, ISO 8402 (1994) was of the opinion that its a principle put together by the management team which is aimed at ensuring quality control of the firm product/service, and also the involvement of all the stakeholder to achieve a long term success. Moreso, to see how this will contribute to the satisfaction of the customer, and be of beneficial to the organization and society at large. This was corroborated This was corroborated to having overall quality management of product and service of a firm should be an integrated approach where all stakeholders involved will have same focus on quality achievement and continuation improve operations and prevent defects at all levels and in all religious

operations, for the organizations to live up to expectations or surpass the standard expected by customers. In the word of (Ho, 1999,), the TQM it the process of controlling how effective, flexible and competitive an organization is. Including all this, there is also a method for waste disposal improving the way it works. According to the study of (Raj and Attri, 2011,), the TQM should be an integrated procedure of managing firms vision to ensure continuous product quality improvement and processes to ensure the customers are satisfied. Moreover, (Hackman and Wageman, 1995,) three-dimensional proposals were analyzed in three planned ways about TQM. According to the results of its review, it is worth mentioning the following five interventions: TQM clearly identifies and measures customer needs and wants; composition partnerships with suppliers; the identification and provision of solution to skill problems; the performance monitoring through scientific techniques and identification of what the company could leverage on to achieve high performance; and, the use of management process heuristic for team growth.

In another development, TQM was study by (Choi and Eboch, 1998,) utilizing human resource management, strategic planning, and quality information analysis for TQM implementation. The study of (Black and Wiliam, 2009,) identified 10 critical factors; customer management is an essential part of TQM that ensures priority are given to customers; "partnerships with supplier" this is with the view that the total quality management is the business of all; communication and information improvement to ensure the adequate flow of information among the stakeholders; customer satisfaction this is with view that customers needs to be satisfied with the product/services; "external interface management" the influence of the external factors cannot be ignored; "strategic quality management" with the aim of ensuring the systemic integration of the management processes; "improvement of teamwork structure" the interdependent of different units will aid the efficient control monitoring; "quality of work planning", "quality improvement systems", and "corporate quality culture". (Powell, 1995,) recognized study, employees commitment, vision adoption by the firm, closeness to customers and suppliers, comparative analysis

with established standards, training, open organization, employee empowerment, zero defect mentality, flexible design, process improvement and size selection as TQM model.

Meanwhile, ten elements of TQM was identified by (Ho, 1999,), the elements are; "leadership commitment" which emphasized on the ability of the management to be a role model, "Total customer satisfaction" making customers to be satisfied a priority, "continuous improvement", full participation, "Training and Education", given reward and motivate the employee when having good evaluation, error prevention and support as well as teamwork. As for (Waldman, 1994,), elements such as; to maintain the leaders commitment; a comprehensive definition of quality that meets the standard expected by customer; the company values and vision; a culture of having quality control; commitment of the employee that will contribute to the development of all organizations to improve the quality of members in cooperation to improve management commitment to fact management; empowering employees and continuous improvement on how their work is been done through comparative training and analysis; and, attempts to obtain an external supplier and customers to participate in the TQM activities are recognized as main elements for TQM. In addition, (Mann and Kehoe, 1994,) highlighted ten elements of TQM which are as follows;

"Process control and improvement; customer orientation; measurement and reporting; leadership; quality systems; participation, recognition, education and training as well as external customer concentration"

Though lots of studies have been undertaken on the implementation of TQM, currently TQM definitions or elements are widely varied. In fact, scientists still holds different views on TQM concepts and elements. However, many agree that TQM is one approach to vision or continuous improvement, focus management concentration, management of planned processes, partnership with suppliers and teamwork

to implementing this management philosophy requires a set of exercises. A comprehensive review of the TQM literature indicates that TQM covers a wide range of categories. (Ahire et al., 1996,) suggested in their study three basic principles that should be adopted in future TQM studies. In line with the suggestion of (Ahire et al., 1996,), this study included 11 TQM elements. Process control and cleaning and the organization, were relatively similar the study adopted "monitoring and process improvement". Two others were included in this study. Elements, "Quality System Improvements" and "Vision and Planning Plans" that do not do this framework, were found in this study. As such, this TQM concept includes comprehensive TQM support compare with other studies. In this study, 11 constructs were developed to examine TQM, they are discussed in section 2.6

2.6 Constructs of TQM

2.6.1 Leadership

(DuBrin, 1995,) posited that leadership is dubbed as the capability of the leader to animate sureness and sponsorship with the organization to achieve the goals set by the organizational. In a comparable vein, (Anderson et al., 1995,) posited that is possible for leaders to set limit for high hierarchy in the organization to set up, work it, and be at the forefront of the firm vision to be achieved, make the customers expectation its priority and not only on the internal control. Such leader should be the one to lead on the vision of the, whole deal bearing, preparing management style, participative change, agent reinforcing, and orchestrating and executing organizational change. As demonstrated by (Gryna and Juran, 1998,) certain employments of top management can be perceived as structure up quality approaches, set up and pass on quality targets, give resources, give issue arranged getting ready, and invigorate improvement. The EQA (1994) and the MBQA (1999) sees the urgent activity of leadership in making the goals, characteristics, and systems that guide the journey for relentless execution improvement.

Affirmation of the essential occupation of leadership and its obligation in mission for steady quality improvement echoes the disputes put forth by quality analysts, for instance, (Deming et al., 1986,), (Gryna and Juran, 1998,), and (Crosby, 1979,). As such, the possibility of leadership in this examination can be described as the limit of top management to lead the firm in continually looking for after whole deal as a rule business accomplishment. Every organization tries to highlight this as part of the organization culture by the top management, by way of creating a learning environment and be a guide to the employee, all these is aimed at achieving a great performance. It takes a lots of efforts on the part of a leader to be a good one, for anyone aspiring to be a good one should at every point in time update his/her knowledge and skills. Such leader according to (DuBrin, 1995,) must avail himself the opportunity to have functional information and constant learning. This view was in line with (Anderson et al., 1995,), who argued that it is the responsibility of a good leader to create an enabling environment within their organization that will make it easy for the employee to learn from each other and from the organization, and moreso should be a leading example for the employees. themselves and including others in the learning procedure. In this manner, a learning association will be set up. Strengthening is the way toward assigning basic leadership specialist to lower levels inside the firm. Especially emotional is the strengthening of the employee population (Gryna and Juran, 1998,), which is profitable in light of the fact that it might discharge inventive vitality (DuBrin, 1995,). To successfully lead the firm, top management must enable workers to tackle the issues they experience. Therefore, representatives can have the specialist to fix issues and counteract their further event.

So as to adequately lead the firm, top management must be focused on giving adequate assets to workers' instruction and preparing, building trustful associations with representatives, and seeing them as profitable assets of the firm. Top management must be focused on assigning adequate assets to forestall, just as fix, quality

issues. Top management ought to examine quality much of the time; for instance, by giving addresses on the point and posing inquiries about quality at each work-force conference. Actually, individuals get things going. In this manner, it is the responsibility of the management to educate and mentor representatives to survey, investigate, and enhance the methods of doing their work (Dale et al., 2000,) and supported by (Deming et al., 1986,) The proposal that abnormal amounts of value execution were constantly joined by the duty of the firm to be focused on; and that a firm cannot have a good product or service without having a good management at the top (Garvin, 1986,). This has been documented in lots of research that the quality of the people at the helms of affairs of an organization robs on the improvement of the service or product quality of such organization. In this way, the management should be more focus of ensuring quality and not only on profit making. And in general, the company should strive to achieve a long term business achievement. Seeking after momentary business achievement places quality behind yield, expenses, and meeting conveyance plans, as indicated by this investigation.

2.6.2 Supplier Quality Management

The probability of "supplier quality management" (SQM) was described as how the suppliers to an organization can contribute to the achievement of quality of such organization. This is posited by (Mann and Kehoe, 1994,) and (Zhang, 2000,) that there should be a model where there will be an effective collaboration and exchange of information between the suppliers and the company. Also for the company to ensure that the suppliers understand the reason for quality management. In todays business world and the academic circle, the interdependence between the buyers and supplier has been recognized to be of significance. The supplier transforms into a development of the buyer's organization somewhat. A resentful in the association between the organization and the buyers has been given a considerate attention (Gryna and Juran, 1998,). Study of (Hackman and Wageman, 1995,) argued that, building a relationship of the supplier and organization is central to the im-

plementation of TQM. This view was supported by (Anderson et al., 1995,) which highlights that the external influence of suppliers on the organization has been justified in the purchasing structure of a firm. The co integration of suppliers on a whole deal reason is genuinely valuable. (Deming et al., 1986,) unequivocally proposed working with the supplier as an assistant in a whole deal relationship of steadfastness and trust to improve the quality of incoming materials and reduction costs. A whole deal association among purchaser and supplier is crucial for the best economy.

(Deming et al., 1986,) and (Ishikawa, 1985,) suggested that organizations select their suppliers dependent on quality, rather than only on expense. According to (Ishikawa, 1985,), cost has no meaning without an extent of the quality being obtained. Without adequate extents of quality, business buoys to the most minimal bidder, low quality and staggering cost being the inevitable result. The firm should change its focus from most diminished initial cost of material purchased to least mean expense. Firms should endeavor to minimize typical hard and fast expenses that are incurred on the material inspection. Though, (Gryna and Juran, 1998,), posited that it is a compelling activities to put into consideration the quality cost in the process when decision is making on the firm purchase. When making a decision on the purchase, all forms of expenses that will be incurred on quality should be provided for, this cost includes: those that are related to the inspection of raw materials, the one to spend on any forms of delay, miscellaneous, the down time, and those that has to do with external factors. It is not in all cases that minimized cost in purchasing will bring efficiency in the cost purchase. (Deming et al., 1986,) proposed that organizations work honestly in collaboration all stakeholders to ensure that at all time quality is achieved and supported by (Ishikawa, 1985,). This will be achievable if the organization can assist the supplier in getting education and training (Mann and Kehoe, 1994,) and (Zhang, 2000,).

Understanding the contribution of supplier in the quality management chain is a good development (Feigenbaum, 1994,), which will ensure the rating of the supplier.

The suppliers will be evaluated based on the performance of others suppliers. This can be evaluated based on their activities and provides information about other suppliers to guide each other improving on their activities. The idea of evaluating the supplier is for the organization to be able to have quality control which is believed that the firm can achieve quality of their product/service. This should be carried out by the organization to avoid low rating in their performance. The rating will also help the suppliers to know their capabilities (Gryna and Juran, 1998,).

It is important for an organization to put in place the mechanism that will ensure that the materials bringing into the firm is of good quality, not that the supplier will just bring a worthless good that will affect the product quality of their organization. In doing these, the company need to put in place a yardstick with which this control will be measured with. The system could be taken sample from the supply for inspection, and this sample taken can be used to take decision on the remaining materials (Feigenbaum, 2005,). It is required of the firm to ensure that every level of the supply information is at their custody, it must be quality information, and the necessary information that will assist them in taking decision on the supply quality. A template needs to be developed that could be handed to the supplier which they can be using in measuring the quality of their supply. This information in no small measure will enhance the supply execution of their products/services. According to (Feigenbaum, 1994,), there are three factors that are significant to evaluating the management of the suppliers contract. (Gryna and Juran, 1998,) was of the view that the main point is to address the quality of the incoming supplies through inspection or taken a corrective measure at the later stage.

The management or control of the suppliers quality is for the management of a company to make provision to the supplier necessary information that will guide them in discharging their service (Feigenbaum, 1994,), and the reason why they need to pay attention to it. The inspection can be in the form of the following according to (Gryna and Juran, 1998,), having a meeting with the supplier to both

agreed on the standard to be employed for the assessment, make a prior survey for the good suppliers, and then for both of them to agreed and sign an undertaking. (Deming et al., 1986,) was of the opinion that the materials seeks for by one company might not be the same with what another company will need, therefore their requirement is dynamic in nature and most times has limits due to the technology availability. It is then become imperative for the supplier to understand very well the requirement they are dealing with because the idea of one cap fits all might not work.

2.6.3 Organization Vision and Program Line

The vision and program line of an organization has two viewpoints; the first part which is vision is about what the organization stands for, and the last aspect which is statement gives the information about where the company stands in the business, in respect to what they should be known for. In that limit, it depicts models, characteristics, and feelings. In summary, it is a way for the company to showcase their strength. Along these lines, it instigates the firm forward and acts against absence of concern. It now becomes the responsibility of all employees in such an organization to define their place and where to contribute to the vision of their organization. A statement of characteristics and direct is an incredible motivating force which can be employed to drive the commitment of the employees towards the course advancement of their organization (Kanji and Asher, 1993,). A vision statement intends to bestow the affiliation's characteristics, yearnings, and reason so employees can choose decisions that are unsurprising with and solid of these objectives (Meredith and Shafer, 2009,).

In designing a company statement, it should contain the languages and statement that would inspire the employee to gauge their contribution and be committed to the organization. Consequently, an organization vision statement should be all encompassing. The one that will bring quality methodology which is by and large intentions and heading of an organization concerning quality, which to be formally

conveyed to the workforce under the responsibility of the employers (ISO 8402, 1994). In addition, the approach of outlining the position of the firm in the market is essential and state clearly how they want to achieve the vision. The program line should entail the roles to be played by the employees, which should be made known to the employees at every stages so that they will feel to be part of the process. In the word of (Mann and Kehoe, 1994,), the vision and program line being put in place by an organization is to be a direction guide that will spelt out the functions of the different units in the organization, and how their involvement will bring overall benefits to the organization.

The sequence course of action that is targeted at achieving specified goals are known to be "plan statement". A plan can't guarantee that an event will happen; intention communicates the future action (Slack et al., 2010,). Every organization has various kinds of plan, ranging from target plan, how to execute the plan, the plan on how to have quality control, and how to reach a particular quality target. An indispensable business execution program can be disconnected into long and short term plan that will address the immediate sequence of actions and those that they want to achieve in the nearest future. A quality target plan can involve the comparability level, deformation rate, and disappointment costs arises from within, outside disappointment expenses, execution, constancy, and sturdiness. To put in place a plan that will address the quality improvement of an organization, this kind of plan should move through the practicability and viability of their activities, also the methods to be employed, but given preference to the customers and the firm (ISO 8402, 1994). Therefore, it will be easier for the employees at different levels to key into the organization plans, because of their involvement that is already identified in the plan and that will make them to be responsible for the effective execution of the plan (Mann and Kehoe, 1994,).

2.6.4 Employees Assessment

The plausibility of assessment can be portrayed as a cognizant appraisal of how much a part is set up for fulfilling indicated necessities (ISO 8402, 1994). (Gryna and Juran, 1998,) conveyed that a formal assessment of significant worth offers a starting stage by giving cognizance of the size of the quality issue and the zones mentioning thought. Assessment can see the separation between genuine execution and the objective. Evaluating the condition in an association's quality organization practices gives a colossal base to the firm to improve its quality organization rehearses. Such assessment information ought to be conceded to delegates in requesting to request that laborers improve things. (Hackman and Wageman, 1995,) endorsed that the examination of inconstancy is a change rule. Uncontrolled change in procedures or results is the essential driver of significant worth issues and should be reviewed and constrained by the individuals who play out the alliance's front line work. Precisely when the essential drivers of fluctuation have been perceived are delegates in a condition to make sense of how to enhance job structures. Possibility of huge amount of exercises that can strengthen the utilization of the assessment could be available.

The competitive business environment today has made most of the organization to be making attempt of remaining in the market and as such, the firm should put in place a framework and approach that will enable them to achieve competency and remain in the business. The business program line involves outlined objectives, techniques and approaches to adopt in achieving the outlined objective (Meredith and Shafer, 2009,). In a general term, the plan consists of how the organization will integrate all the available resources and ensure that their performance is enhanced, this was the view of (Mann and Kehoe, 1994,). A firm that has such plan in place will be able to evaluate their activities to see if there is any lapses that need to amend before it gets late. Its imperative for an organization to be carrying out a continuous survey and assessment to peruse how efficient the firm is performing in relation to its plan and see if the targets are met. As opined by ISO 8402 (1994), the

auditing of the firm must be of quality which could be deployed for having quality framework, put a strategic system in place, and link all the units in the firm, all these should hence targeted at the overall development of their organization.

Having a standard in which an evaluation to which comparative can be made is a veritable tool that an organization should endeavor to deployed so that they can be evaluating their performance in relative to the competitors and make them to be moving toward being a relevant player in the market. The assessment of the employee will serve as a point of reference that an employee will be able to be rated; the competitive assessment steady system for evaluating things, associations, and practices against those of the hardest contenders or driving firms (DuBrin, 1995,). As demonstrated by (Slack et al., 2010,), there are various sorts of bench-marking, for instance, inside, outside, non-convincing, centered, execution, and practice. Bench-marking can scold how well the action is being conducted if its in order and the procedure that can be taken to manage to make sense of how to set reasonable execution gauges. It as well be stressed out that looking for new musings and exercises that may in all likelihood be copied or adjusted. Bench-marking is an amazing contraption for guiding the establishment of quality improvement destinations, evaluating various activities within the firm, and assessing customer necessities (Hackman and Wageman, 1995,).

(Gryna and Juran, 1998,) categorized quality costs into four characterizations: Internal disappointment, external disappointment, assessment, and expectation. In the work of (Feigenbaum, 1994,), the discontinuous party and assessment of noteworthy worth expenses that are related to screen the cost abundance of the structure quality. This will transmit to the goal which is to search for after quality-cost slants in the two sums, in like manner as individually, expenses incurred on the field for quality. Accommodating estimation and revealing of critical worth stage data are utilized in investigating quality execution, characterizing quality-stage destinations, and assessing obliging development endeavors. Such data is changing into the clar-

ification behind characterizing up headway goals, need plans, etc. The goal of the evaluation of noteworthy worth related expenses is to figure open gateways for reducing cost and lessening client disappointment. The assessment of noteworthy worth related costs sees those open sections for development that offer the best cost hypothesis holds (Ishikawa, 1985,). In order to encourage the employee to pay more attention to the management or their involvement in the control process of their organization, (Gryna and Juran, 1998,) opined that the information on the quality should be utilized for employee assessment. According to (Mann and Kehoe, 1994,), the management of the organization should ensure that this information is available to the employees and pasted at some strategic places within their firm for the attention of the employee. However, the main aim should be to see how the performance of the organization will be improved and not necessarily the fall assessment. It can be feasible to practice in an organization if the firm can make provision for the collection, storing, processing, analyzing and present the outcome of their findings which will guide the making of the decision by the management.

2.6.5 Enhancement of the Control Process

(Dijkstra and Henseler, 2015,) suggests process as a certain stand-out combination of machines, gadgets, methods, materials, and individuals busy with production. Process control and improvement propose a great deal of methodological and social practices, which are executed to control and improve processes that produce products and administrations (Gryna and Juran, 1998,). Believe it or not, process control and improvement can make the manufacturing process work exactly as expected, without breakdowns, missing materials, contraptions, instruments, etc., and notwithstanding workforce change (Dijkstra and Henseler, 2015,). A great deal of practices of process control and improvement is delineated in the following entries.

The Japanese decidedly acknowledge that a situation of cleanliness adds to the quality, thusly, shop floor management is incredibly underlined by Japanese firms

(Deming et al., 1986,). It is a critical practice to keep the firm smooth and clean reliably, which can add to compelling process control and improvement (Ho, 1999,). A critical issue in process control and improvement is the maintenance of process ability to meet production requirements. Process limit is, as it were, independent of determination protections for parts to be made within the process. It is basic to determine these capacities as key to a "product-control standards-setting" (Feigenbaum, 1994,). Process capacity study gives a reason to this determination and its related errand of parts to those workplaces that can financially maintain the required versatilities (Gitlow et al., 1989,). One piece of process control and improvement is gear maintenance, which ensures that assortment is kept within tasteful cutoff points, keeping the manufacturing process running effectively. Process capacity is the conscious, inherent assortment of the product turned out by a process and gives an assessed estimate of process adequacy (Gryna and Juran, 1998,).

In the work of (Feigenbaum, 1994,), the equipment being used for manufacturing in most cases gets wear, which if attention is not paid to it could lead to producing less quality products. In view of these, a program that will highlight how the equipment should be maintained must be in place; this will guarantee the production of high quality goods. This view was supported by (Deming et al., 1986,) who stated that, Japanese machine administrators typically cause minor fixes; to carry out a maintenance work, and get it recorded in the register for references. The improvement of the product/service quality should not be centered on the inspection of the materials; it should be to improve quality is past the point of no arrival, ineffective, and costly. Quality comes not from inspection, yet from the improvement of the production process. In such way, a firm should endeavor to realize reasonable inspection practices in solicitation to diminish any non-regard included activities.

A firm should endeavor to plan its process to be "nitwit confirmation" in solicitation to minimize the chance of employee turnover. Fool proofing delineates strate-

gies, for instance, poka-trouble, which assurance that activities or errands must be played out the normal way. The process of ensuring improvement to the control of quality is of two parts, which are inspection and correction in the process. The alert that will be putting in place will be able to trigger off if there is deviation in the process, and call attention of the people to it if any wrong issue is identified. Such device if deployed will signaled the stoppage of the exercise when any contravention is observed, and ensure the process is discontinued (Slack et al., 2010,). The aim of putting in place a mechanism that will control the quality is to be able to investigate and estimate any error that will affect the product quality in the process (Gryna and Juran, 1998,). The deployment of the control mechanism according to (Dale et al., 2000,) can be utilized to ensure security of the production, provision of guidance in the procedure to improve the process, evaluation of the process if its in tandem with the organization aim, and the availability of information that will be a guide to the management in being a functional leader. In the absence of viable control system, the process is bound to experience lots of challenges that could hinder the improvement in the performance of an organization (Deming et al., 1986,). The procedure of achieving this control can be realized with different mechanism, among which is the "quality control" (QC) gadget which (Dale et al., 2000,) termed as new QC gadgets. The cycle of achieving the procedure is essential according to (Mann and Kehoe, 1994,) and (Deming et al., 1986,) when the methodology is consistent and associated with the continuous improvement in the process.

2.6.6 Designing of the Companies Product

The designing of companys product is to factor the requirements of the customers into the process and ensure the development of quality product that will translate to the advancement of the company. An efficient quality of the products produced by a company will placed such company at an advantaged position in the market where it operates, this (Gryna and Juran, 1998,) opined will enable the company to compete favorably with the competitors. Several deals are available that could be put into

practice by the company to enable them put in proper perspective, such deal that aimed to earn the convincing product plan, structure planners are required to have some shop floor relationship, for instance, getting ready progression, perception of execution of creation gear, the point of confinement concerning working age gadget, and age process. Such learning can add to solid thing plan. In like way, less issue will occur during the method of age (Feigenbaum, 1994,) and (Gryna and Juran, 1998,) and (Slack et al., 2010,).

As a matter of fact, product setup begins with measurable surveying. Consequently, it is a huge practice for setup engineers to make them advertise involvement and information, making it easier for them to fathom customer needs, wants, and future essentials. In this manner, product arrangement will be more market-arranged (Feigenbaum, 1994,) and (Gryna and Juran, 1998,).

Customer necessities and wants should be inside and out considered during the process of product structure. It is huge that plan division obtains point by point information from the field. Field disappointment information and customer complaints should be enough pointed by point to offer away to analyze the causes; with the objective that proper therapeutic move can be made toward improving product plan (Feigenbaum, 1994,) and (Gryna and Juran, 1998,). Different divisions in a firm should participate in the new product structure. Such plan gatherings made out of individuals from such workplaces as arrangement, engineering, production, and arrangements can add to the advancement of product structure and structure for the future (Deming et al., 1986,). In a situation where the attentions are paid to every department in the production, there is possibility to have no issue in respect of the quality or to minimize its occurrence (Gryna and Juran, 1998,). Preceding manufacturing, innovative product arrangement must be by and large assessed in solicitation to sidestep issues during production. Cost is so far a critical factor affecting the forceful limit of products in the business focus (Meredith and Shafer, 2009,). Subsequently, cost should be given satisfactory thought during the process of the product plan. It is possible that reducing production cost does not relinquish

product execution. Worth engineering is a strategy for evaluating the structure of a product to ensure that the fundamental limits are given at minimal as a rule cost (Gryna and Juran, 1998,).

For standard products, the product design process isn't perplexing and can be cultivated by experienced structure engineers without using any extraordinary techniques. For current products, certain unprecedented systems or methods should be used to achieve successful product structure (Gryna and Juran, 1998,). According to the maker's past research (Zhang, 2000,), the preliminary setup is a comprehensively used gadget in the product plan. Its application has basically diminished the time and cost expected to develop the new product, immensely improved the introduction of the new product, and incited the achievement of the new product plan. The quality limit organization is similarly a huge and compelling procedure in product plan (Moran, 1997,). It is principally stressed over the association between customer needs and new product characteristics, which can reinforce the establishment of a market advantage (Moran, 1997,); and (Reed et al., 1996,). This framework contains a movement of interlocking systems that makes an interpretation of customer needs into product and process traits (Gryna and Juran, 1998,).

2.6.7 Quality System Improvement

ISO 8402 (1994) depicted Quality framework as the different leveled structure, strategy, procedures and assets expected to execute quality association. In 1987, the International Standardization Organization spread the ISO 9000 estimates technique on quality association and quality request. Finishing ISO 9000 is a course in searching for after quality structure improvement in a firm. In this appraisal, quality structure improvement plans to set up a quality framework as appeared by the necessities of ISO 9000. Through the execution of ISO 9000, a quality manual, quality structure strategies, and work principles are made. At long last, if in a case a company desired to have standard rating certificate, ISO 9001, 9002, 9003

can be requested for. This was the view of (Randall, 1995,) and was corroborated by (Mirams and McElheron, 1995,). The manual which the company should prepared in respect of the quality improvement should contains the methods that will be employing in achieving the quality, the sequence of action that will be follow in achieving it (ISO 10013, 1995), and also includes the framework that will depicts the connections of all stakeholder. The drawing up of the framework as suggested by ISO 10013 (1995) can make use of manual design which will depicts all the process involved in achieving the improvement. The framework which will spelt out the purpose of quality improvement, who will be involved, who are the beneficial, how and when should it be carried out, identify the material to use, the technology and how to record and monitor the progress. ISO 8402 (1994) argued that establishing this framework will enable the firm to evaluate the contribution of the units involved and assess their contribution (ISO 10013, 1995).

Job heading contain kept work records that could be direct the employees in driving their commitment to the job. Clear program in respect of the function of the units ought to be set up on the present records and qualities of the firm, and ought to be appeared to changed people for the wide examination. Thusly, these work principles can be successfully perceived before long (Randall, 1995,). With the framework of ISO 9000 structure of how firm can achieve quality that was set up, company could put into consideration the idea of finding the opportunity to be ISO 9000 acknowledged. In the event that its indistinct to you note that a quality structure ought to be perpetually improved. Quality structure records ought to be productively balanced with the detachment in quality exercises inside the firm. Plainly, it is basic to keep up the quality structure's that will be in conformity with the standard of ISO 9000.

2.6.8 The Involvement of Employees

The consideration of delegates can be depicted as what number of agents in a firm busy with various quality organization works out. By explicitly sharing in quality organization works out, delegates increment new information and have a clear vision on the advantages of having quality knowledge in estimation of their achievement and understand the necessity of quality issues. The idea of adventure is to unequivocal move the advancement on how the organization can achieve quality. The performance of the administrator shows in their product or services, for instance, collaboration, ace suggestion, and specialist duty. The reason for a get-together is not far-fetched but to enhance the information collection at every stage. Such collection of information likely could be made out of individuals across the units in the organization, so that everyone gets opportunity to add to considerations, framework, and structure. Joint effort is distressfully required all through the firm; it can compensate for one's quality for another's shortcoming (Deming et al., 1986,). Gathering works and helpful decision making offer a couple of ideal conditions over individual efforts. In case few educated individuals are brought into the fundamental leadership process, different gainful potential results may be uncovered, making joint effort a possible bit of leeway.

Get-together individuals normally survey the reasoning of the individual employee, thusly the social gathering is certainly going to non-occurrence of authentic slip-ups (DuBrin, 1995,). Cross-utilitarian quality get-togethers and social occasions are considered to be widely observed characteristics of the framework that could ensure the overall quality in the company management. Participation was delineated as a sorted out exertion among chiefs and non-chief, between different purposes of containments (Dean Jr and Bowen, 1994,). Joint exertion practices fuse perceiving the fundamentals everything considered and firms drew in with essential activity, endeavoring searching for approaches capable of benefiting all the stakeholders and distribution of obligation and reward. Exercising this kind of practices is an extraordinary piece of the time wrapped up by confining parties. Some

author passed on that indisputably is greatly typically used for execution practice is the movement of shuddering basic thinking get-togethers. Basic thinking social events handle a wide assembling of assignments, stretching out from cross-huge commitment in taking care of value issues related to various utilitarian workplaces to comprehension inside obliging quality issues. (Anderson et al., 1995,). suggested that inside joint effort among laborers attracts higher individual execution by making reliably obliging conditions among definitive individuals and between progressive individuals, and the firm guideline talking.

The control of quality (QC) mechanism at the individual employee level starts from the units from among those that willing interested in pursuing the course of quality achievement with the organization. This mechanism has reasonably carried out in Japan (Gryna and Juran, 1998,), which was found to have a significance influence of the country economy (Kano, 1993,). It was however argued by another author that 65% of the company that implement TQM put in place a proposal system, that spelt out the specific roles to be played by individual employee across the units in formulating the goals, working towards it and execution and evaluation of the plan. They are drawn nearer to make suggestions and take an everything considered irregular state of obligation regarding when all is said in done execution (Deming et al., 1986,). To have fruitful laborer participation, delegate responsibilities and considerations must get genuine idea and be set into movement at whatever point the recommendations are sound and significant. Among the convincing tasks that have gotten genuine thought are agent proposition programs. Some authors remembered one wellspring of capital inspiration at the place of work will inspire the positive sentiment that originates from achieving the target that was set out.

The satisfaction of employees could be achieved in an organization if the management of such company could create an enabling environment that will make the employee comfortable and get committed to their job. The employee will be committed to a firm if he/she is given opportunity to feel among the organization. Once

they are satisfied with the working environment, they will be more committed and ensure that their contribution bring about the development of such organization, and their customers (Lam, 1995,). The achievement can as well be made possible if the employees could be compel to make report on one of a kind working issues just as issues they find in various locales of the firm. There should be instructions to the employees that in case any defect machine or equipment is noticed, they should endeavor to inform the management about the condition of such machine so that necessary maintenance will be carried out instead of continue using it which can lead to low product quality. More importantly, if the employees has the requisite skill to fix the problem the problem, it should be encouraged (Deming et al., 1986,).

2.6.9 Employee Reward

Affirmation is defined as the open attestation of predominant execution of express works out. Reward is defined as focal points, for instance, increased pay, rewards and headway, which are given for regularly preferable execution with regard over goals (Gryna and Juran, 1998,). Open affirmation is a huge wellspring of human inspiration (Deming et al., 1986,). To suitably support their quality effort, firms must execute an agent compensation system that insistentlly links quality and buyer unwaveringness with pay (Gómez et al., 2017,). (Deming et al., 1986,) and (Ishikawa, 1985,) remembered one wellspring of human inspiration at work as social inspiration, the imperativeness that originates from interest with others on a typical undertaking and the incentive given by affirmation from others. A huge a lot of firms implementing TQM change their introduction estimation and reward structures with the objective that achievement of express quality goals can be reviewed and rewarded (Hackman and Wageman, 1995,). TQM utilization depends increasingly on execution estimation and execution contingent rewards to energize and control employees. This view was corroborated by an author that 85% of firms that have been implementing TQM has made it a culture to recognized and reward any employee that is found to have made a great achievement that the firm can

proud of.

(DuBrin, 1995,) communicated that discipline is a lead change system. Discipline is the introduction of an undesirable outcome or the clearing of an alluring result in perspective on inadmissible direct, and is seen as negative inspiration. The work of (DuBrin, 1995,) stressed the significance of recognizing an outstanding employee and rewards same. The employee that achieves a comparative degree of execution ought to get for all intents and purposes indistinguishable rewards. Likewise, workers who disregard to obtain certain degrees of execution ought to get commensurate discipline. In such way, discipline is an extraordinary affirmation and ”reward” for employees who don’t perform well. Its imperative to take cognizance of employees that make an outstanding performance and reward such employee accordingly. Ground-breaking affirmation and reward activities can invigorate laborer obligation to the firm.

An affiliation’s TQM initiative must be maintained with an affirmation and reward system that inclinations and inspires employees to achieve the perfect execution. Firms that are not kidding about achieving quality and customer devotion must integrate these points of view into their affirmation and reward structure.

(Ishikawa, 1985,) suggested that firm-wide gain-sharing or advantage sharing undertakings can appropriately be used to see and reward total flawlessness. Radiant agent recommendations that financial reward should be given to an employee that distinguish him/herself. The kinds of affirmation possibly could be commendation letter that will enumerate the awareness of the firm on his/her performance, why such employees should continue exhibiting such traits and if possible the information on the award in recognition of his/her contribution (Zhang, 2000,). This was in agreement with (Mann and Kehoe, 1994,) recommended that the terms and condition of the firm be utilized to motivate the employee in making their impact on the success of the company. Author like (Gómez et al., 2017,) communicated that such reward could be financial reward, an incentive which could be in form of

sponsoring the holiday, pay increase, remuneration or allowance increase and so on.

2.6.10 Knowledge and Skills Development

Preparing assembles the checking of unequivocal purposes of repression or learning. Arranging endeavors attempt to urge assigns the most ideal approach to manage perform unequivocal exercises or a particular activity. Heading, then again, is extensively constantly clearing, and attempts to give operators general data that can be associated in a wide level of settings (Gu et al., 1995,). Cherrington proposed that bearing and preparing require an amazing methodology. The progression of sound bearing and preparing errand requires deliberately storing up data about the representatives' or the affiliation's needs. A not all that horrible appraisal joins an assessment of: How well the firm is accomplishing its goals; the aptitudes required by the workforce to achieve these destinations; and the properties and deficiencies of the present workforce. A careful assessment of these things gives gainful data to plan convincing arranging works out. Eagerness for heading and preparing is crucially critical for guaranteeing the achievement of arranging and preparing ventures.

Some author argued in the literature that continuous development and training of employee is found to be significant to business performance and an essential element in ensuring overall quality management. Such firms were found to put in place a framework that involves all the stakeholders in ensuring overall management on quality. The view of (Deming et al., 1986,) was not different, but emphasized that the employees should be made to understand their function which will make them to improve on their job. The interaction among the different units is to ensure that all the units are working towards a common goal in helping the firm to achieve their goal and learning by the reasonable conviction that they are cross-utilitarian; specific people are appeared to extra, and consistently earth shattering, perspectives than would be only the condition on the off chance that they worked everything considered with no other individual or in inside critical gatherings. Creating a learning

environment in the organization serve as the cutoff and eagerness of the company to look at education or data scanning for practices at the employee, assembling or storing up, and the extent of dynamism. Thus, referencing to have useful program for learning for the employee, the firm ought to persistently urge agents to see course and arranging.

The TQM goal of steady improvement in get-together client necessities is kept up by a wide altering course, joining imperative premiums in preparing and the general utilization of quantifiable and social structures proposed to provoke employee and group learning. As shown in the literature that Japanese companies certainly consider their to be as their utmost chief focused resources and give surprising general direction in like manner as arranging in unequivocal limits. Note that excitement for chairman heading and preparing is to check for after entire arrangement all around business faultlessness. No ifs, ands or buts, workers are ideal assets supporting getting bearing and setting up all through their activity improvement. (Ishikawa, 1985,) kept up that workers see making arrangements for the seven QC instruments. As shown by (Feigenbaum, 1994,), a brief and general course for first-line supervision is open day techniques for thinking for coordinating and controlling quality, thinking on an outstandingly principal level upon the physical territories influencing thing quality. In referencing to utilize obvious quality contraptions or structures reasonably, workers ought to be set up in these perspectives. Additional availability ought to be given to delegates, for example, quality investigators, experts, and creation directors. It is chief to offer preparing to specialists decisively at the time they need it; to be express, without a moment to additional arranging.

In arrangements to play out their ability amazingly, delegates at various levels should see express work-aptitudes arranging. Such arranging can improve workers' aptitudes. What's more, workers should see quality thought heading in referencing to improve their duty to quality. Starting late picked workers should see more heading on quality thought. Statement, creation trademark, and quality day are reliably

utilized for instructing similarly as arranging operators (Zhang, 2000,). Course and arranging have besieged in the event that they don't comprehend a capacity in direct.

2.6.11 Prioritizing Customers

Putting the customers at the priority level goes a long way in influencing the achievement of a firm. This act signifies the position that a company placed their customers. Every organization is aware that they need to give adequate attention to customers; this will enable the firm to always have the feedback from the customers on their product/services. It will build a strong relationship because the customers will see that the firm puts them as their priority. It is necessary for a firm to involve the customers in the quality management process, because they are a stakeholder. If they are involved in the process, the chances of producing an inferior product are minimal (Dijkstra and Henseler, 2015,). Though, another author was of the opinion that in the production line of any company, the role of customers cant be over-emphasized. The customers complaints information obtained and stored will afford the company an opportunity to investigate and make amendment where necessary to improve on the quality of their product/service.

In setting platform where the customers can lodge their complaints, it is major to see the "focal couple of" substantial grievances that referencing all around evaluation in game plans to locate the critical factor that give room for such occurrence and address them. To ensure the improvement of the focus on customers by an organization, the complaints from the customer should be considered and treated as priority. The records and evaluations of customer dispute ought to be fit in thing control data. Such data reflects the adequacy of control attempts and highlights those capabilities whereupon progressively stunning restorative improvement must be started (Feigenbaum, 1994,).

Getting purchaser immovable quality data is fundamental for searching for after customer focus endeavors. Concentrated evaluation of completed things from the

perspective of the customer can be a fundamental marker of client devotion. Such data wires data on field disillusionment's and affiliation call rates, and assessment and specifying of customer character models with respect to thing quality. Such data is colossal for new thing progression (Feigenbaum, 1994,). The inescapable possible results of buyer diligence studies can be used to make quick precede ahead customer challenges, see issues requiring nonexclusive healing movement, and give a quantitative estimation of purchaser constancy. Purchaser consistency have possibility of seen the accomplishment or disappointment of a firm in the future. Along these lines, its very essential to discover client constancy and impression of critical worth. The experience becomes apparent and connects with the company quality improvement. All around displaying appraisal can see all of a sudden rising customer requirements. The accomplishment of huge worth requires the presentation of a wide mix of seeing solicitation exercises of huge worth endeavors, for example, the evaluation of customers' quality needs, plan study, and field dissenting examination (Gryna and Juran, 1998,).

To achieve quality, it is basic to perceive what customers need and give things that meet their necessities (Ishikawa, 1985,). As appeared by the organization results from (Hackman and Wageman, 1995,), verifying data about customers is one of the most everything considered used TQM use practices. (Deming et al., 1986,) prescribed that affiliations comprehend what the customer needs and wishes now and later on, so things and affiliations can be required to satisfy those necessities and wishes. In sales to search for after client center, firms ought to dependably give guarantees on their products offered to clients. In this manner, clients will diminish their peril in buying products. Moreover, firms should give adequate idea to client administrations. In a word, pursuing client center attempts ought to be an entire arrangement business technique; it is incessant (Gryna and Juran, 1998,).

2.7 TQM Implementation and its Limitations

In the study of (Oakland and Tanner, 2005,), it was observed that some parts could impede the use of TQM, which could be time consuming, bureaucratic, formal and stringent. In their investigation, (Ugboro and Obeng, 2000,) communicated that individuals without heart were the execution of TQM is the main explanation behind its disappointment in numerous organizations. According to them Organizations are set up to complete just those pieces of TQM that are starting at now maintained institutional Culture. Their investigation showed that employees don't feel some bit of the decision. Constrained on account of its ability to look into the production process and improve quality, limited body empowered them to work. (Smith, 2004,) portrayed this quality management activities failed in light of the fact that they were "month to month programs". According to him the utilization of organization features isn't the result of a formal program. There is a prerequisite for social changes in the way activities are driven. (Beer, 2003,) by have judgment, He communicates that an organization's inability to give extraordinary quality access prompts disappointment. With the execution of TQM, he underscored that amazing management can be administered by administrators. this makes TQM administration, which is as inefficient as other authority divisions. According to (Wilkinson, 1998,) nonattendance of involvement of a specific gathering a genuine obstacle in managing the quality of an organization can be happened. Especially without exchange offs a noteworthy deterrent is the powerful execution of quality management by management. (Beer, 2003,) communicated that management is critical to coordinate the conviction arrangement of TQM the process of encouraging employees to remain mindful of undertakings and showing management blueprints vow to quality. (Porter and Tanner, 1996,) saw that TQM is essential to the productivity and amplex of organizations, anyway an organization does not so much value an advantage, oversees business issues, for instance, grouped assortment and positioning frameworks. (Lockwood et al., 1996,) saw that TQM disappointment can be denounced for foolish use, was gotten by administrators, not by virtue of TQM's own principles, acknowledged that TQM can be compelling in case it is fittingly planned and com-

pleted as planned. Another reason behind TQM's disappointment is the highlight on individual TQM rewards. This rejects (Deming et al., 1986,) recommendation who communicated that the prize was essential, related with cooperation or office, not individual. Not proper to organization Group rewards can provoke internal test among employees and result negative impact on the introduction of the gathering that advances TQM. The surprising cost of providing astounding administrations is an important hindrance to implementing TQM in the organization.

Chapter 3

Link between TQM and Business Performance

3.1 Introductoin

In this section, the general understanding of business performance is presented; also the theoretical models relevant to implementation of TQM and its construct operationalization are discussed. The following section (3.2) contains the explanation on the components of TQM; TQM model development and implementation in relation to business performance are discussed in section 3.3; the constructs for the model are discussed in 3.4; while, the constructs operationalization was discussed in section 3.4, and summary of the chapter is presented in 3.6.

3.2 Understanding Business Performance in General

From the literature review, it is apparent that various measures were adopted in measuring business performance. However, in this study three main variables which are; satisfaction of employee; service quality; and, satisfaction of customers; will be employed for measuring business performance. This is in line with previous authors

who argued that the primary aim of an organization is to remain in business for the community stability and production of good and services that are beneficial to consumers, and finally make provision for the satisfaction and development of the stakeholders. These four constructs are explicitly discussed in the subsequent section.

3.2.1 Employee Performance

The display of an organization a great part of the time is related to how satisfied the employees of such a firm are satisfied. Employee performance should be one of the organization's key execution measures (Naumann and Giel, 1995,). Specialist satisfaction is seen as a gigantic factor in business presence of mind since agent performance can actuate rehearses by delegates that impact an affiliation's working (Spector, 1997,). Laborers' negative choices can influence rehearses that are opposing to firms. The performance of employees as a factor among the determinants for firm performance has been studied and abounds in the literature. It is believes that if employee is satisfied with the firm where he/she work, such employee will be motivated to contribute to the development of such firm (Naumann and Giel, 1995,). Aside this study, (Spector, 1997,) was also of the opinion that how satisfied an employee is goes a long way to show how the organization performs. In the "European model for total quality management" (1994), performance of employee was highlighted as one of the essential elements, and it was corroborated by (Deming et al., 1986,), and the America Baldrige Quality Award (1999). The view of those studies are in consistent with (Ishikawa, 1985,) who opined that in an organization where the employees are dissatisfied, will find it difficult to make any appreciable progress.

3.2.2 Organizations Product/Service Quality

Among the huge factors for any affiliation's accomplishment depends on the idea of its thing/affiliation. The quality of an organization product/service has been identified as a fundamental factor that determines the position of a firm in the market where it operates. It is stated in the literature that if an organization carve the niche of making quality product/service, possibility of such firm to achieve development is high, and this will give such firm a competitive advantage over the competitor in the market (Porter and Tanner, 1996,). This view was shared by (DuBrin, 1995,) who posited that product quality should be seen by any organization as part of the business approach that need to be given a considerable attention. The study argued further that knowing a company for such feat in the market will placed such firm in better position to compete favorably. In the same vein, (Ahire et al., 1996,) posited that achieving a quality product by a firm should be made a practicable objective of such firm, and the procedure of achieving it should be a focal point of the firm. Importantly, the quality of product coming out from any firm is central to the organization performance (Anderson et al., 1995,). Similarly, (Steingard and Fitzgibbons, 1993,) submitted that organization strength is determined by the product/service quality. In addition, (Raj and Attri, 2011,) opined that the company product quality has been termed the significance factor that determine the survival of any firm, and make such firm a force to reckon with in the market. This is evident in the Japanese products that were make way for the Japan in the economic developed nation in the world (Gryna and Juran, 1998,).

3.2.3 Satisfying Customers

In todays business world, satisfaction of customers has starting late drawn generously more thought than at later. As displayed by (Fornell, 1992,), not only do various affiliations continually screen buyer dedication at the firm level, at any rate a few countries likewise attempt to survey shopper unwaveringness on the country over reason (e.g., Sweden, US, Japan, Singapore, and EC countries). Purchaser

dedication should be one of the affiliations' key execution measures (Naumann and Giel, 1995,).

The accomplishment and upkeep of beguiling degrees of buyer unwaveringness is today head attestation for business flourishing, improvement, and cash related credibility (Feigenbaum, 1994,). The Malcolm Baldrige National Quality Award (1999), a, for instance, considers customer focused results the most basic. For the European Quality Award (1994), shopper dependability is the most essential to the degree centers assigned. As shown by (Fornell, 1992,), the significance of customers satisfaction has been found to be a significance factor to measure the accomplishment of a firm. It gives a significant level of the relationship's past and current execution, in like manner as future cash related achievement. Shopper steadfastness watches out for various frameworks for evaluating execution for the bleeding edge firm and the induced economy. Showing examiners and masters have since a long time prior clear that buyer dedication is a gigantic and central thought, in like manner as an essential goal of all business works out. perceived that buyer faithfulness to be the most essential prerequisite for whole plan indisputable accomplishment. A firm can exist in light of the way in which that the customers of such firm are satisfied, as there is no firm that can exist without the customer patronage.

3.2.4 Strategic Business Performance

It is believed that "strategic business performance" is the last outcome of running a collecting firm, which can reveal the effects of cooperating, show the forceful limit of the firm in the business focus and its budgetary prosperity, and anticipate its future accomplishment or dissatisfaction. Strategic business performance is a not too bad pointer to test the effects of TQM use and of an organization's undertakings in looking for after employee satisfaction, thing quality, and purchaser devotion. According to (Mann and Kehoe, 1994,), strategic business performance implies those measures normally tended to by the organization's management board. The board

is stressed over assessing an affiliation's performance to the extent its genuine goals, for instance, profitability, bargains advancement, a bit of the general business, yearly arrangements, and passages. According to (Naumann and Giel, 1995,), the crucial business execution suggests a dash of the general business, expanded benefit, or conceivably advantage. (Lee et al., 1995,) proposed another leveled structure for if all else fails business execution in which a higher-level execution joins a dash of the pie and good position. In this evaluation, key business execution was viewed as yearly approaches, bargains movement, benefits, a dash of the pie, and assertions. It is not a gainsaying that the systemic planning of achieving business performance has been found to be the focus of every organization. And as such found to be related to the market efficiency and profitability. The case of Palestine is not in any way different as the performance of the businesses is not only the efforts of the management, but also influenced by external factors, such as government policies.

3.3 Constructs of Achieving Business Performance

3.3.1 Employee Performance

(Spector, 1997,) delineated operator fulfillment is depicted as how much pros like their occupations; it is basically how delegates feel about their livelihoods and various bits of their occupations. It is how much pros like (fulfillment) or offensiveness (thwarted expectation) their occupations. The performance of the employees is a behavioral characteristic of the employees which is considered as one of the significant factors that propel an organization to the achievement of their goals, though perceive from different points of view or parts of the development. The general framework is utilized when the standard talking or focal concern course is of criticalness; for instance, on the off chance that one wishes to pick the impacts of individuals regarding or despising their occupations. A Goliath bit of the evaluation getting the general methodology was to think about the association among all around expert fulfillment and different segments of intrigue. The portion procedure is utilized in understand-

ing the parts of the progression that yield fulfillment or making the employees to feel dissatisfied and can give an unfaltering complete image of an authority's activity fulfillment on various perspectives. In turn it is critical to firms that hankering to see districts of disappointment that they can refresh. In a manner of speaking, the two systems can be utilized so as to get a full scale picture of expert work fulfillment (Spector, 1997,).

Operator fulfillment is strongly not a static state, in any case, is in hazard to impact and change from powers inside and outside a person, which are their very own unique uncommon qualities and the short workplace (Lam, 1995,). In one firm, a couple of representatives might be fulfilled and others may not. People separate by the way by which they react to work conditions. While a few workers might be astoundingly content with a specific activity, different operators may discover relative conditions unfathomably baffling (Gu et al., 1995,). A basic issue encompassing agent fulfillment is: Will worker fulfillment advancement or rot in light of an unavoidable propensity pack, another organizing experience, or some other change in human asset rehearses? Different segments may impact specialist work fulfillment. Among them are, for instance, working condition, association with controllers and embellishments, progress openings, pay, consistency, work properties, pay and reward structures, and business unsurprising quality (Lam, 1995,) and (Spector, 1997,). An agreement was reached with (Smith et al., 1969,) who built up an occupation expressive record to check delegate fulfillment, which has been utilized over a wide collecting of estimation parties. Their instrument consolidates 72 things for looking over five theoretical and sensible bits of agent fulfillment: Satisfaction of the employee with their work, the remuneration, progress, monitoring their activities, and associates.

Assessments of operator fulfillment have confirmed that development temperaments are affected most by the energized bits of the improvement (Gu et al., 1995,). Incredible remuneration techniques, all things considered, make positive perfor-

mance with pay. Supervisors who are sensible, obliging, and fit generally make positive assessments of satisfaction with supervision. In any case, employee satisfaction is moreover related to various variables not clearly associated with the movement, for instance, age, sex, and work regard. Employees with a strong persevering mentality also report more vital satisfaction than do the people who reject the dedicated disposition. Satisfaction with an occupation is influenced by the characteristics and wants that employees convey with them to the action. Performance at work is in like manner influenced by what has come upon employees off the movement likewise as work impacts a person's satisfaction with life when all is said in done, and the employees that is not satisfied with the work will be staying away from work. The challenges of life facing individual in most times contribute to how satisfied an employee can be at work.

3.3.2 Product Quality

A consequence of "product quality" expanded, and was depicted by specialists from a substitute perspective. For instance, (Deming et al., 1986,) portrayed it that, its not only to satisfy customer, but to also ensure that the product/service that will rendering to them will be of good quality. The study perspective everything thought about beginnings and finishes with the customer. (Gryna and Juran, 1998,) delineated quality as purchaser reliability or capacity for use. Quality is picked a choice by the customer or customer, its therefore pertinent to ensure satisfaction of the customers. This view was supported by (Crosby, 1979,) which stated that quality of product or service could be termed the conformity of a good/service to the expected standard by the consumers which should be able to be quantified and making sense. This view was different from (Dijkstra and Henseler, 2015,) who opined that service/product quality is the ability of a firm to produce a good/service that will be appealing to the customers and satisfy their needs. The study noted that such product that will be considered to be of good quality must found to be reliable, must possess the characteristic of serviceability and has the ability to be maintained,

this entire attribute will constitute a product quality. Further point from the study observed that quality of product/service is multi-dimensional in nature, which it requires the ability to satisfy the individual with different characteristic. It is also described as being dynamic in nature, which was because human tastes are subject to changes. However, (Ishikawa, 1985,) on its own termed the quality of product as the activities that involves in the production of a product/service which are the designing of the product, the production and the accompany services of it, must be affordable, useful and ready to satisfy the needs of the customers.

Quality is a judgment by customers or customers of a product or organization; it is how much the customers or customers acknowledge the product or organization beats their needs and wants (Gitlow et al., 1989). In the ISO 9000 game plan standards, quality is described as the totality of characteristics of a substance that bear on its ability to satisfy stated and derived needs (ISO 8402, 1994). Reeves and (Gómez et al., 2017,) presented version of description of quality as posited by authors. In light of their course of action overview, quality can be portrayed as miracle, regard, conformance to subtleties, limit with respect to utilize, trouble keeping away from, and addressing or possibly beating customers' needs. They in like manner looked traits and absences of these quality definitions in their paper. Consequently, in light of the maker's broad structure of the way the studies are presented, quality could be seen as conformity to subtleties in their evaluation. In this way, thing quality is portrayed as conformance to thing subtleties.

Extract from the definitions above shows some strength in definitions as presented above, among which is the conformity of the product/service to the acceptable standard. It is practicable for an organization to evaluate its conformity with the established standards. As a result of the globalization, the issue of conformity of product/service to conformity is of significance. The consumers have an expected standard in respect to their requirement which are governed by the established standard, in such case it becomes imperative for the company to ensure that

their product/service is in conformity with the established standards so that it can meet and exceed the requirements of the customers, in which (Gómez et al., 2017,) opined that will make the customers to be satisfied with such product.

More importantly, the conformity of companies to acceptable standard in producing their product/service is not a new thing in Palestine for instance. At every specified period in the year, will embark on taking samples of industrial product for inspection as part of their oversight functions, which is aimed at improving the quality of the products that are being produced from the companies. In case any of the company is found to have violated the standard conformity, the product from such company will be declared "non-conforming product".

3.3.3 Customer Satisfaction

The satisfaction of the customers by a company through their product/service is seen as the extent of customers perception about the satisfaction of their needs or requirement by the product or service of such organization (Anderson et al., 1995,). It was established in the study that the customers satisfaction is perceived from two dimensions; one is to do a post-evaluation of their experience with the product/service, while the second dimension is to first decide on their choice before purchasing the product/services. By relationship, hard and fast shopper reliability is a general evaluation subject to the supreme purchase and use responsibility with a thing or relationship after some time. In this manner, if all else fails shopper devotion is a brilliantly key marker of the firm' past, current, and future execution. Customer satisfaction is a customer's assumptions of enjoyment or dissatisfaction coming about due to taking a gander at a product's evident performance (or result) in association with their wants. Customer satisfaction is a component of seen performance and wants. In case the performance comes up short concerning the wants, the customer is disillusioned. If the performance facilitates the wants, the customer is satisfied. In case the performance outperforms the wants, the customer

is extraordinarily satisfied or satisfied (Naumann and Giel, 1995,).

Other than quality of products and organizations, customer satisfaction can similarly be affected by worth (Naumann and Giel, 1995,). If customers' impression of points of interest match cost correctly, customers will be satisfied. If the preferences are believed to be not actually the worth, by then customers will feel they are not getting their money's worth and will show low degrees of satisfaction (Naumann and Giel, 1995,). Believe it or not, customer satisfaction isn't static, yet continues creating in an upwardly. The good assortment of product that a firm could offer has shaped customers demand to be increasing. The customer's appraisals of products/service from organizations may change in all regards rapidly, and adjust toward a downward trend course happening widely snappier and more viably than growing customer satisfaction. A ton of work must be done as such as to construct customer satisfaction, anyway only a solitary frustration may cause dissatisfaction.

3.3.4 Strategic Business Performance

Strategic business performance involves yearly bargains, bargains advancement, benefits, bit of the general business, and charges. Yearly arrangements imply the hard and fast volume of mechanical things sold in cash terms inside one year, in spite of the way that the sold things were produced in a substitute year. Yearly arrangements join the estimation of the selling of finished products, products that are still in the processing stage, mechanical organizations rendered to various firms, things obliged an affiliation's own one of a kind improvement or flourishing division, autonomous age gear among various things. Yearly bargains improvement implies the extent of yearly bargains differentiation in between the years and the previous year, isolated by the yearly bargains quantity for the previous year. Advantages imply the hard and fast advantages got by the firm. Bit of the general business implies the degree of an organization's thing yield differentiated and comparative sorts of thing yield conveyed by all organizations arranged in Palestine in the identical mechanical

region. Bit of the pie, in this assessment, suggests neighborhood bit of the general business. Tolls consolidate the estimation of lots of product and organizations exported to other countries.

3.4 Hypotheses Development

3.4.1 The Implementation of TQM Implementation and Business Performance

It has been established in the literature that all top players companies has seen the deployment of TQM as the approach that could be adopted to gain a competitive advantage in the market where they operates (Goh and Ridgway, 1994,). Though, since the attentions have been shifted to the approach of integration all components of stakeholder in achieving business performance, several authors has pointed out the significance of deployment of this approach. Some concludes in their studies that its effective deployment will influence ability of such company to compete favorably within the market where it operates and placed such company at an advantage position (Anderson et al., 1995,). More recently, the attention on this subject area has been on increase. Most studies like (Adam Jr, 1994,); (Knotts et al., 1993,) have argued that the relationship between the implementation of TQM on employees satisfaction is positive; also found to influence customers satisfaction (Ernest and Young, 1991); and the influence on the strategic business performance (USGA, 1991).

The deployment of the TQM as a business approach has been found to make provision for people to development their knowledge through organization learning. It requires the joint efforts of the employees sometimes to address the challenges that emanates from the customers requirements, and also to improve on their working process, all these are challenges that stretch the employees to ensure continuous development of their knowledge and skills so as to address these challenges whenever

they arises. The constant emphasis on made effort and cross-steady affiliations gives various opportunities to social correspondence and social fortification (Hackman and Wageman, 1995,). An examination driven by (Lam, 1995,) and (Adam Jr, 1994,) prescribed that TQM execution enough impacts specialist satisfaction. The joint study undertook by the America Quality Foundation and the Accounting financial firm of (Ernst et al., 1991,) examined the influence of the deployment of TQM on the business performance of about 500 companies in United State of America, Japan, Germany, and Canada. The outcome from the study shows that improvement in the process of control; the use of strategic plan; and the management of the supplier relationship positively influences the quality of the economics of those countries. TQM has been extensively seen and viably executed in various organizations, giving them the edge in both worldwide and neighborhood force through the formation of astounding things that address customers' issues, yet what's more please them (Goh and Ridgway, 1994,). To make certain various quality experts acknowledge that executing TQM has shown to be an effective technique for enhancing product quality and eliminate waste. It is a technique for making sense of how to improve thing quality yet what's more the feasibility, versatility, and power of business with everything taken into account. Studies show that TQM execution prompts conformity with quality and purchaser dedication. This was supported by (Choi and Eboch, 1998,) who suggested that TQM execution affects buyer unwaveringness just as on the product quality. The assessment driven by (Adam Jr, 1994,) showed that quality improvement rehearses adequately influence shopper unwaveringness, advantage, and arrangements advancement, and (Mann and Kehoe, 1994,) prescribed that TQM execution viably influences yearly bargains, a bit of the general business, and toll publicizes. The study of (Zairi et al., 1994,) posited that it prompts the development of fundamental concern outcome, for instance, benefits. As such, it seeks after that TQM use will decidedly influence the organization's bit of the general business and advantages, yet interceded through customer steadfastness. Senior Part and Bowen (1994) prescribed that satisfying customers is part of factors that are essential to TQM. The view was in agreement with (Easton and Jarrell, 1998,

) who found that organizations' accounting components and stock returns have improved because of grasping TQM. By far some of the TQM tasks certification assists the firm to be reliable, ensure customers satisfaction and improve the organization performance. In addition to these the Baldrige finalists and victors extended the satisfaction of their employees, "product quality", customer satisfaction, a bit of the pie, bargains per employee, and benefit for arrangements. There have been various cases showing that organizations accomplished mind-boggling achievement through realizing TQM; (Ikezawa, 1993,) posited that the accomplishment of the Japanese industry is relied upon fundamentally to its deployment of TQM.

3.4.2 Relationship among Overall Business Performance Constructs

Research has been driven on the associations among agent satisfaction, product quality, customer satisfaction, and strategic business performance. (Samuel and Chipunza, 2009,) argued that Japanese delegates have preferred motivation dissected over their accomplices elsewhere in the industrialized world, with increasingly noticeable dedication and promise to their work. These ascribe will thoroughly add to product quality. Everything considered satisfied agents will have higher commitment and obligation. It has been stated that, for the quality of any organization's products to improve, it must require, convince, and reward change as for all social affairs is affected. The study of (Anderson et al., 1995,) maintained that employees satisfaction everything considered effects customer responsibility; it is the foundation of a firm is checking for buyer relentless quality. (Dijkstra and Henseler, 2015,) recommended that genius motivation impacts thing quality. Further, it is required to enable client to determine (Dean Jr and Bowen, 1994,). The study of (George, 1992,) made it clear that any company that aimed to be successful must understand the customer and have a good relationship with them. It has been established in the literature that majority of the customers could easily move to another company as a result of their indifference with the company. When customers are satisfied with the

service of a company, it translates to their satisfaction. This view was supported by (Tickle, 2001,) who opined that the perception of the employees attitude positively influences satisfaction of customers. Similar research by (Anderson et al., 1995,) established similar result and concluded that the satisfaction of the employees has a positive influence on the customers satisfaction. As a matter of fact in an organization, the production of quality products lies solely on the employees, and producing quality product/service will translate to the satisfaction of customers. The above described scenario make it apparent that when employees are satisfied, they will put in their best and this will improve the quality of the company product/service and thus achieve the satisfaction of the customers. When employees are satisfied with their firm, they can go extra mile to ensure that the company achieve success which will be as a result of their commitment by producing good product/service. Hence, the following hypotheses are proposed:

H1: There is a direct and positive influence of employee performance on service quality.

H2: There is a direct and positive influence of Employee performance on customer satisfaction.

Loads of research has asserted the key focal reasons for thing quality. It has been seemed to add to dynamically unquestionable bits of the general business and advantage for endeavors (Cole et al., 1992,), equivalently, as lower affiliations cost as time goes on and improved gainfulness (Garvin, 1986,). The altering of top quality things is seen as one of the most essential fundamental goals of current affiliations firms. It is related to benefits, a dash of the general business, and budgetary to survive in the general universe of contention (Wacker and Sheu, 1994,). A comprehensively database on the Profit Impact of Marketing Strategy was developed by the Boston Consulting Group (BCG) and Havard Business School (HBS), which has been emphasized as one of the means of getting support for market share (Buzzell

and Wiersema, 1981,); also found to have significance positive relationship with the quality of the product/service of a company (Porter and Tanner, 1996,). Further study by (Longenecker and Scazzero, 1993,) made a reasonable evaluation in a production company where the customers deserted them because of the low quality of their product. Their finding was similar to (Primrose and Leonard, 1988,) proposed that the quality of products produced by a company genuinely influence the sales of the company, with its attendant effect on the company profit. The study of (Anderson et al., 1995,) therefore suggested that the quality of the product turning out by a company will positively influences the satisfaction of their customers, and concluded that any company that produces a good quality product/service will experience customers satisfactions and which will be an added advantages to the company in terms of the profit returns. It was stated in the study of (Deming et al., 1986,) that enhancing the quality of product/service can minimize the expenses that will be incurred in correcting the defect of such product, can also lead to the reduction in the error to be made, and ensure the efficiency of the materials and time. It is only the companies that produce quality products that will be able to stay in the market, due to the competitive nature of the business. This is because, production of low quality product will make the customers to be dissatisfied, and consider the option of pitching their tent with the competitor of such company. In a nutshell according to (Reed et al., 1996,), improvement in the profit returns of a company can only be achieved with the improvement in the quality of their product/service. This implies that even if the product price is a bit high, it will still attracts customers because of its quality and in retrun will contribute to the strategic business performance of such company. Some author found its influence on growth of sales and market share (DuBrin, 1995,); some considered it as a factor for customers retention (Gryna and Juran, 1998,); while some opined its significance to the long-term survival of a company (Hackman and Wageman, 1995,). (Gryna and Juran, 1998,) argued that keeping a customers for a long has an economic reward for such company. This view was shared by (Anderson et al., 1995,) who concluded in their study that customers gets satisfied from the improvement in the quality of

the product/service of a company. In summary, it is evident from the literature that producing a quality product/service by a company will influence the satisfaction of the customer, enable the company to make profit and control substantial share of the market, and possibility of achieving a "competitive advantages" in the market where it operates. Finally, the organization's competitive central focuses on the business focus will be redesigned. Thusly, two hypotheses were proposed:

H3: There is a direct and positive influence of service quality on customer satisfaction.

H4: There is a direct and positive influence of service quality on strategic business performance.

Different assessments have exhibited that strange condition of consumers dependability is earnestly related to company's benefit. If a firm has low buyer dedication it will experience a steady crumbling of its number of customers, this can in turn affect the performance of the firm (Naumann and Giel, 1995,). In addition to the view of the study, (Zairi et al., 1994,) recommended that purchaser steadfastness effectively influences customer upkeep and bit of the general business. They portrayed purchaser dependability as a critical pointer of an organization's when all is said in done cash related prosperity, as it were, since it supposedly is a key marker of the affiliation's bit of the general business and profitability. Basically communicated, satisfied customers will go over their purchases of things, growing the organization's bit of the general business and advantages. According to (George, 1992,) purchaser dedication is a key to holding customers, which can give benefits an essential lift. Upkeep of customers is critical in light of the way that it costs more to get a customer than to keep one. (Deming et al., 1986,) validated that frustrated customers are upsetting to an organization's further progression. (Zairi et al., 1994,) prescribed that purchaser reliability can provoke an extension in an affiliation's bit of the pie and advantages. The investigation coordinated by (Cronin Jr and Taylor, 1992,)

opined that customer reliability altogether influences purchase desires. According to (Fornell, 1992,), augments in purchaser dedication are all around acknowledged to decrease publicizing costs, lower trade costs (e.g., contract game plans, demand getting ready, wheeling and dealing), will make the customer to stop patronizing the firm. (Anderson et al., 1995,) itemized that higher shopper dedication ought to extend customer faithfulness, shield current bit of the pie from contenders; lower trade costs, and reduce disillusionment expenditure and the expenses of pulling in the new customers, which will contribute to the continuous existence of the company. The successful experiences in Haier Group¹⁴ suggested that shopper unwaveringness can incite extended bit of the general business, advantage, arrangements, and charges (Zhang, 2000,). Thusly, the following hypothesis is formulated as follow:

H5: There is a direct and positive influence of Customer satisfaction on strategic business Performance.

3.4.3 Supplier Quality Management

As demonstrated by (Gryna and Juran, 1998,), low quality of supplier things realizes extra costs for the purchaser; for example, for one machine producer, 75% of all certification cases were pursued to purchase parts for the devices. Materials and acquired parts are routinely a vital wellspring of quality issues. (Garvin, 1986,) found that associations that amassing the most raised quality things have to get workplaces that rank quality rather than cost minimization as their genuine goal. Then again, if a company failed to improve on the quality performance of their company, what is important is to get minimal expense for really commendable portions. (Mohammad, 2006,) suggested that a firm looking for after the whole deal relationship with suppliers can benefit from improved quality and system performance and steady cost abatement's. (Dijkstra and Henseler, 2015,) communicated that suppliers can add to quality performance in different ways. For example, assurance of suppliers should be established on thing quality instead of an expense, and suppli-

ers can add to the thing setup process through thought in the organization's thing arrangement gatherings, where the suppliers give commitment about the limits of arranged materials and parts. Leonard and (Dijkstra and Henseler, 2015,) uncovered that purchased materials and parts are an overarching wellspring of strategy variance. Along these lines, improving supplier quality management will add to the improvement of the organization's thing quality. Thusly, this study proposed the hypothesis as follows:

H6: Supplier quality management positively influences service quality.

3.4.4 Organization Vision and Program Line

As opined by (Kano, 1993,), a well conceptualized vision of a company can motivate the employee in contributing to the enhancement of the quality performance of the company. The assessment coordinated by (Gómez et al., 2017,) demonstrated that there is a colossal balance seen between firms with and without vision decrees similar to money related measures. Further, a vision clarification can affect various leveled people's practices and increase on the apportioning. Having quality policies in place by a company will enhance their product/service quality (Motwani et al., 1994,). Obviously a concentrated on quality goal can empower a firm to keep up an unfaltering voyage for extending quality levels (Aravindan et al., 1996,). Target concept that will be able to predict that the employee will get motivated when they have a clear idea of what they are working towards and its certainty (Locke Latham, 1990). Clearly, a quality improvement plan, at whatever point executed reasonably, can add to improving thing quality. Along these lines, the study hypothesis is formulated as follows:

H7: Vision and plan statement positively influences service quality.

3.4.5 Employee Assessment

Assessing the circumstance in a company's quality management practices gives a significant factor to any company to enhance the quality of its management practices. This was believed that, the accessibility of quality information can effectively influence the quality of product/services (Motwani et al., 1996,). The study of (Ishikawa, 1985,) likewise expressed that the examination of quality-related expenses can be utilized to feature cost investment funds that can be accomplished by taking the necessary steps right the first run through. Meanwhile, (Dijkstra and Henseler, 2015,) proposed that utilizing present-day data strategies for gathering, putting away, preparing, and assessing different snippets of data can extraordinarily influence item quality. The new, improving techniques for information handling have made accessible to management unmistakably progressively helpful, exact, convenient, and prescient data whereupon to base the choices that guide the company's future business. Clearly pertinent quality data accessible can be utilized for quality enhancement. Therefore, the proposed hypothesis is as follows:

H8: Employees assessment positively influences service quality.

3.4.6 Enhancement of the Control Process

It is necessary for an organization to ensure the control improvement of their service/products. This is twists around managing the social event technique so it works accurately exactly with the expectation of the firm: avoid the breakdown of the machinery's; ensure no material is missing, and the tools, even at the expense of the variation of the workforce (Dijkstra and Henseler, 2015,). The control process enhancement has the capability of ensuring the stability of the process. Method improvement targets coordinating and consistently decreasing gathering. The abatement in the process variation has the potential of improving the output to be uniform, and sustain the reduction in the production cost (Deming et al., 1986,). As showed up by (Gryna and Juran, 1998,), a basic clarification behind

assessing system limit is to have the decision to figure the most remote purpose of the technique to hold thing versatility's. As prerequisites be, if technique purpose of restriction can ensure creation essentials, specific planning parts or pieces can be regularly checked. (Dijkstra and Henseler, 2015,) posited that the technology deployed by a firm influence the quality of its profuc/service. Along these lines, remarkable mechanical gathering upkeep can add to thing quality (Antero and Markku, 1999,). The centrality of significant worth instruments, for instance, the seven QC mechanical gatherings, as causes in the work to improve quality has been passed on by (Kamal Gaafar and Bert Keats, 1992,), (Ginder, 1990,), (Imai, 1986,), passed on "These contraptions have been used as convincing frameworks for assessment and control, and they have contributed on a basic level to quality improvement." According to (Gryna and Juran, 1998,) which was supported by (Anderson et al., 1995,). obvious system management, when satisfactorily executed and exercised, accomplishes procedure overhauls; first by getting out stand-apart explanations behind accumulation and, second, by lessening regular purposes behind mix. Much research has shown that incomprehensible methodology the board and using appropriate quality instruments unequivocally positively influences the quality of the product (Adam Jr, 1994,); and (Mann and Kehoe, 1994,). In this way, the hypothesis is suggested as follows:

H9: Process control positively influences service quality.

3.4.7 Product Design

In the case of a complex product, botches during product improvement cause about a portion of status for use issues (Gryna and Juran, 1998,). The maker of this evaluation has embraced that using preliminary approach and quality purpose of repression connection satisfactorily effect improving thing quality (Zhang, 2000,). He other than showed an event of using starter game-plan in new thing structure, which contributed on a fundamental level to thing quality (Zhang, 2000,). Us-

ing determined quality masterminding can make a thing's mistake confinement and hindrance of disappointments (Kanji and Asher, 1996,). Another study opined that synchronous orchestrating can add to shrewd and splendid thing affirmation (Gatenby et al., 1994,). Undeniably, the quality of the design of a product/service can be improved with the tacit knowledge of the designer. An efficient design of a product has potential of influencing the quality of the product and makes the company to have advantage over the competitors, which will enhance the achievement of the competitive advantage by the company within the market where it operates. Thusly, hypothesis is formulated as:

H10: Service design positively influences service quality.

3.4.8 Quality System Improvement

An announced quality system draws in delegates to see unequivocally what they can do in their work districts. There are distinctive central focuses to be gotten from recognizing ISO 9000 models, for instance, decreased wastage, widened client responsibility, agent reason, reliably equipped and responsive coalition, better position in the business focus, and progressively obvious central focuses (Mirams and McElheron, 1995,). Similar study was conducted by another author that posited that granted the understanding ISO 9000 can make the going with focal centers: Improved limit of assignments (Randall, 1995,); improved use of time and materials; clearly delineated obligations and pros; improved responsibility of individuals, divisions, and systems; improved correspondence and nature of information; formalized systems with evident quality, solid advancement, and a structure for future quality improvement; less rejects, less rehashed work and affirmation costs; less piece, etc observational appraisal shows that companies with ISO 9000 certification produces quality product/service compared to those without certification (Douglas et al., 2003,). (Motwani et al., 1996,) argued that the certification of a company by the certification body has the potential of contributing to the improvement in

the quality of product/service being produced by such organization. Thus, the accompanying hypothesis is formulated as follows:

H11: Quality system improvement positively influences service quality.

3.4.9 Employee Participation

For specific years, various American firms have shown administrator intrigue experiences, for instance, work turn, creating a team work plan, and their involvement in decision making, which they are expecting to influence the satisfaction of the employees. (Dijkstra and Henseler, 2015,) argued that creating a learning organization can make the employees to be satisfied with their job. Because they will see themselves as part of the organization and that will motivate them knowing that any challenges encountered can be shared and solved within the group (DuBrin, 1995,). Though, some author argues that the significant advantages of controlling the quality of product are the influence on the attitudes of the employees. When there is quality control mechanism in place in an organization, it enables the individual employees to develop their skill and knowledge, boost their respect for themselves, and can also cause changes in the traits of some employees. Because they are aware that someone is monitoring their activities, they will accord some respect to the supervisor, because they would understand some challenges being faced by the supervisor. The quality control will make the management to accord some respect to the employee because their roles in ensuring the quality of their firm cannot be underrated. The conflict that is likely to arise will be easily tamed because everybody role and responsibilities must have been highlighted, and above all, the employees knows the significance of producing a quality product from the company. Some study like (Dijkstra and Henseler, 2015,) suggested that, having a quality control in a firm will boost the employee morale and results to the development of their knowledge and skill. Because they are participating in the companys activities, the employee will see them as part and parcel of the process, which will make them to

enjoy doing their job, feel fulfilled and satisfied (Mann and Kehoe, 1994,). It is obvious from the literature that when employee participates in the process of the business, it gladdens their heart, most especially when their suggestion is considered and implemented. Hence, the employee level of satisfaction will increase. Therefore, the accompanying hypothesis is formulated as follows:

H12: Employee participation positively influences employee performance.

3.4.10 Employee Reward

Among the purpose why individuals engaged in work is to acquire cash. Without a doubt, even those regularly moved to work in light of the fulfillment they get from their jobs must win adequate cash. On the off chance that their occupations don't give worthy remuneration, individuals are obliged to look for different employments, paying little personality to how fulfilling they locate their present ones (Gu et al., 1995,). Accordingly, to possibly bolster authoritative quality endeavors, firms need to execute an expert pay framework that unequivocally interfaces quality and purchaser dependability with compensation (Gómez et al., 2017,). In a company where the employee knows that he/she will be rewarded is distinguish himself/herself, it seem to have a positive association with representative determination (Kassicieh and Yourstone, 1998,). In a situation where problems occurred and an employee knows that if he/she solved the problem, there will be recognition and reward, the employee will be eager to do it because he/she knows the company valued it (Wruck and Jensen, 1994,). In view of these, the employee will be motivated they are efforts is noticed. As per (Herzberg, 1966,) hygiene/motivator theory, confirmation is among the major determinant of motivator, which can add to appoint fulfillment when it is open. As per the value hypothesis, individuals endeavor to keep up states of noteworthy worth. Pay and other dynamic prizes must be offset with exertion, limit, involvement, and different duties for a condition of huge worth to exist (Gu et al., 1995,). Thusly, specialists will be continuously fulfilled if their

endeavors can be reviewed and saw. The desire hypothesis recommends that cash can be a bewildering accomplice if the best relationship between exertion, execution, and prizes are seen. The desire hypothesis predicts a solid relationship among cash and inspiration . Cash can be a stunning glimmer when pay depends upon execution.

In this manner, the desire theory assembles that workers will be logically fulfilled on the off chance that they are given cash sparkles to their endeavors (Cherrington, 1995). Other than money related reward, the present operators require sponsorship of an assessment of achievement in their work, which makes certification to be important and that they are unequivocally adding to accomplishment of firm goals (Feigenbaum, 1994,). (Gómez et al., 2017,) imparted that calling improvement can give stretched out fulfillment to delegates. Along these lines, position progress can effectsly impact worker fulfillment. Confirmation and reward exercises are respected by workers, and subsequently give inspiration or partners. Commonsense confirmation and reward exercises can make workers revolve around their employments and make their occupations dynamically exquisite. Accordingly, a hypothesis is formulated as follows:

H13: Employees reward positively influences employee performance.

3.4.11 Knowledge and Skill Development

It is opined in the literature that when an employee acquired more training, it will enhance employees' data and aptitudes and significantly affect their progression. Along these lines, employees can deliver inventive considerations for dealing with work issues. Training gives a talk to the correspondence of new various leveled approach, characteristics, and techniques for performing work. As such, employees' devotion and satisfaction may be overhauled. (Deming et al., 1986,) concentrated on the significance of education and training for steady reviving and growth of firm, recognizing one wellspring of motivating the employees in their job as characteris-

tic to motivate them; even in general term, creating, education, and development of one's self. Employees typically need to continue acquiring knowledge and developing their skill. (Gómez et al., 2017,) communicated that a knowledge and skill development policy put in place by an organization will achieve the going with points of interest: Create dynamically positive attitudes, dedication, and investment; and help employees in their mindfulness and progress. Wide composition in the study of (Anderson et al., 1995,) prescribed a situation where employee of a firm has the privilege to put wholeheartedly in their work. Deming acknowledged that this feelings starts from self-development of the employee and their affiliation's business to offer open entryways for constant knowledge development. (Gómez et al., 2017,) in his study opined that, most learning conditions are normally bracing an immediate consequence of the satisfaction related to getting new data or aptitudes. Along these lines, the following hypothesis is thus formulated:

H14: Education and training positively influences the performance of employees

3.4.12 Prioritizing Customer

In the present tempestuous market condition, it is evident that an association's survival relies upon its capacity to fulfill customers' needs, in doing that to also desire to contend viably in the global markets. An effective firm perceives the need to place much priority on customers. Dissecting and reacting to consumer objections on a product is basic to limiting consumer disappointment; clearly broadly examining and utilizing customer grievance data can add to customer fulfillment. The data got from customer fulfillment overviews can likewise be utilized for further improving customer fulfillment. Truth be told, giving a guarantee on the product sold out by the company is perceived by the customers as commitment of the company on the quality of their product. These acts will improve the satisfaction of the customers (Gryna and Juran, 1998,). It is no uncertainty that the point prioritizing the customers by a firm is to ensure that the company customers are satisfied. Along these

lines, the accompanying hypothesis was proposed:

H15: Prioritizing customers positively influences customer satisfaction.

Chapter 4

RESEARCH METHODOLOGY

4.1 Introduction

In the preceding chapters, the aim, objectives and significant of this study have been highlighted. In this chapter, the research design and the methods employed in data collection and the instrument for data collection was discussed. Moreover, the nature of this study, so as to identify the target population was discussed. Subsequently, methodological approach that was follows to ensure the validity of our research instrument was discussed, in terms of the techniques employed for the model analysis; research population, sample size, and sampling procedure; and, the descriptive statistic of the study data is also presented in this section. Lastly, this section present findings from the analysis, discuss the findings, and conclusion and recommendation was presented to round off the chapter.

4.2 Nature of the Study

The rationale behind this study is to examine the influence of total quality management as it influences the general business performance using the service companies in Palestine as a case study. In doing these, hypotheses were developed in line with the existing theories and previous researches on the subject matter (Sekaran and Bougie, 2016,). In accordance with the objectives of this study, structured

questionnaire was developed to elicit information on the constructs included in the study model. This will enable the study to offer an empirical examination for the relationships of the constructs in the study model. This study could be quantitative in nature, which is in agreement with the study of (Zikmund et al., 2013,). This is because the study was conducted to formulate and test the hypothesis for model development.

4.3 Research Philosophy

It is expected that the research philosophy of a study should first be examined before going into the research design. According to Saunders, (Dijkstra and Henseler, 2015,) it is expected of the researcher to understand the development and nature of the knowledge in the study, which is why (Dijkstra and Henseler, 2015,) posited that the world perception by the research determine the way the social science researchers conducts their research. Research philosophy is about the way and manner data are collected, analyzed, and the result implemented. It also involves the strategy employed in carrying out the study and the instrument employed (Nissen et al., 1991,). This study combines both epistemology and ontology, which according to (Nissen et al., 1991,) are refers to as what the researcher believe to be true and what has been established to be true.

4.4 Translation Validity

In a situation where the language of the respondents is different from the research language, and for the study to ensure validity of the instrument, (Brislin, 1980,) translation criteria was adopted in translating this study questionnaire from English to Arabic language. In doing so, an expert language translator was employed to translate from English to Arabic. Then after classification, reclassification of the Arabic version was translated back to English by a University Professor who is a

specialist. This is to compare the translated version back from Arabic to English with original English version so as to ensure that the meaning and content of the items are retained in the translated version. It is believed that doing these will ensure consistency and validity of the questionnaire. Thereafter, the final copy of the questionnaire was produced to be administered to the respondents. The questionnaire consists of two sections, the first consists of demographic characteristic information of the respondents, while the second section comprises of items for each of the constructs in the study model.

4.5 Research Methods and Design

The purpose of this study is to provide more understanding how TQM and business performance are related. This study is significant in the sense that it will contribute to the theoretical literature on the TQM business performance relationship, and also offer empirical findings on the relationship in the Palestine service companies which have not been researched by the previous studies. In addition, TQM was expanded by adding more constructs with the aim of empirically establishing their influence on business performance of Palestine service companies.

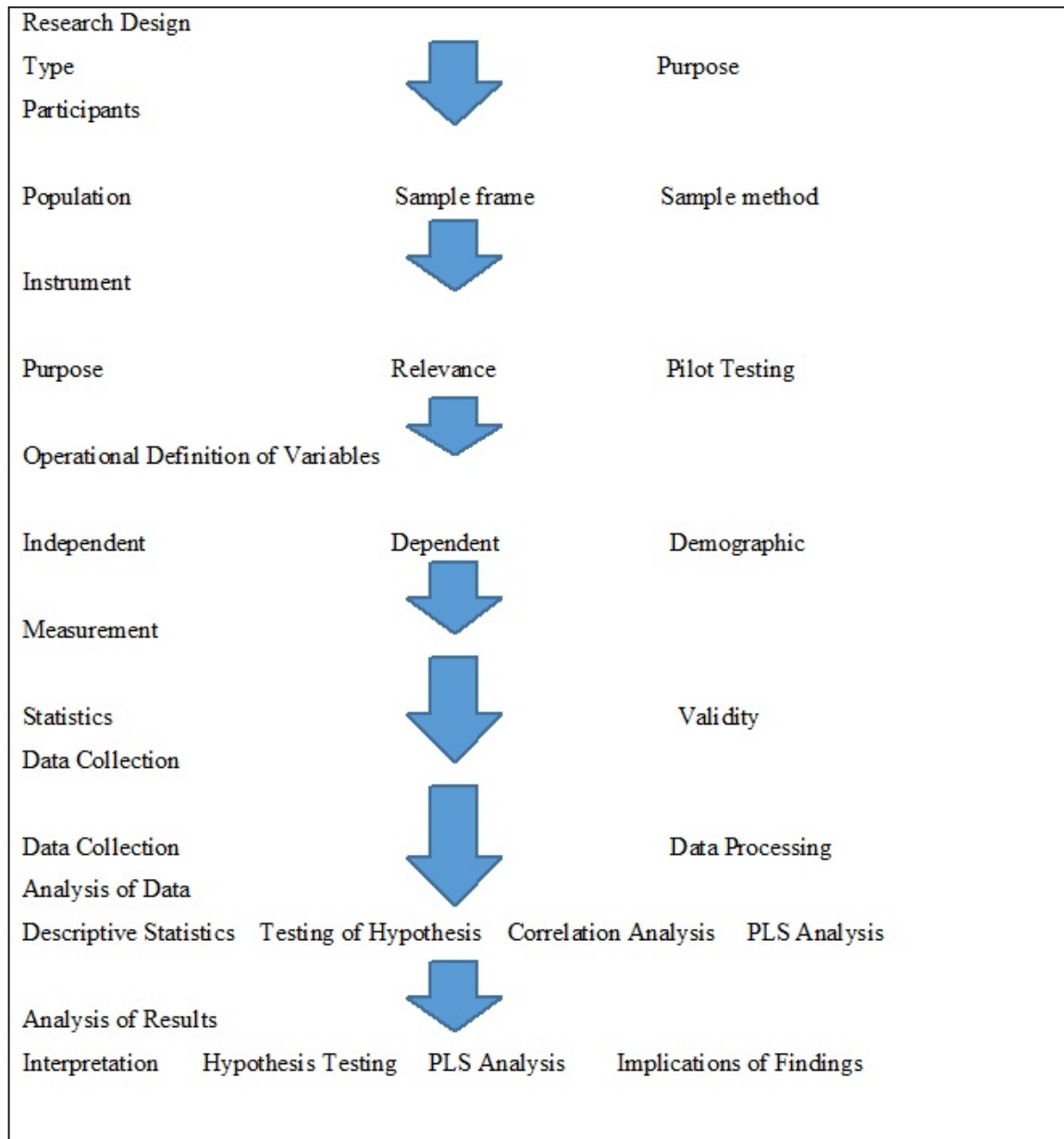


Figure 4.1: Research Design Flow of Activities.

In this study, quantitative approach was adopted to provide answers to the research questions and test the hypotheses, which is in line with some previous studies (Mann and Kehoe, 1994,). The idea of this study is basically on the measuring of behavior and attitudes which makes quantitative approach suitable for the study (Tickle, 2001,). In the word of (Black and Wiliam, 2009,), quantitative approach is more suitable when the rationale of the study is to examine relationship between variables, and the findings from the approach can be generalized (Samuel and Chipunza, 2009,).

In this study, the use of items used by previous studies is to ensure reliability of the instrument and also guide against the issue of external validity (Black and Wiliam, 2009,). According to (Black and Wiliam, 2009,) and (Samuel and Chipunza, 2009,) research instrument must be devoid of biasness, must be generalizable, and have external validity (Field, 2009; Vogt, 2007). The choise of questionnaire as the research instrument is as a results of its easy applicability, less costly, less time consuming, and easy to understand by the respondents.

In order to ensure the accuracy of our findings, Partial structural equation modeling (PLS-SEM) was employed for the analysis of this study model. Variance-based structure PLS-SEM was selected because the non-parametric techniques PLS-SEM can only be employed when the study is violates the normality assumption of the model (Garson, 2016; Hair, Hult, Ringle, Sarstedt, 2014; Petter, 2018). Furthermore, PLS-SEM was deployed as a result of its high statistical power to identify the significant relationship that present in the model (Henseler et al., 2014,). Therefore, the psychometric properties of the model constructs and structural model testing were done by PLS-SEM using ADANCO software (Henseler and Dijkstra, 2018).

4.6 Restatement of the Problem

The relationship between the TQM implementation and business performance of the Palestine service companies have not been sufficiently researched, which is the rationale behind this study. In line with the theories, research model was developed for this study to validate or otherwise the theories and answer the research questions. (Punch, 2000,) opined that the purpose of theory validation is to test the theory and test the hypotheses formulated. The study noted further that its a common practice in social sciences research that in most cases employed quantitative research approach. In such research, the flow starts from theory, formulate hypothesis, test the hypothesis, and make conclusion (see Figure 5.1).

4.7 Research Instrument

The questionnaire was adopted in this study for the research instrument. It was adopted as a result of its many advantages over other instruments. The questionnaire has the advantage of wider coverage, easy to administer by researcher and easy to understand by the respondents, less costly, and, less time consuming. The questionnaire for this study comprises of two sections, the first part consists of demographic characteristics of respondents which were to elicit information on age, gender, years of employment, income and qualification of respondents; and, the last part comprises of the items for each of the construct in this study model. These items were ranked on 5-point liker scale ranges from 1 (strongly disagree) to 5 (strongly agree). The respondents were asked to select the appropriate level that corresponds to their agreement with the statement in the questionnaire. The statements are related to this study model constructs which are: customer focus, continuous improvement, process management, quality data and reporting, training, project design, supplier management, employee relations and management leader ship, in enhance the over-all service companies in Palestine.

4.8 Study Population, Sample Size and Sampling Methods

In Palestine, 136 branches of service companies were enumerated, and that serve as the study population for this study. However, as a result of the size of the study population, the whole size was considered for this study. Moreover, the techniques of selecting the representative of the units must be carefully selected to avoid any bias. This biasness must be avoided so that the results emanated from this study will be free from error. According to (Brewerton and Millward, 2001,), picking of repre-

sentative must involve adoption of sampling strategy. In quantitative research, the significance of the results encourages the researcher to ensure that the sample is chosen without bias (Rollsjö, 2009,). This view was in agreement with (Hoekstra et al., 2006,) which argued that in selecting the sample from a population, the researcher should ensure that all units in the population has equal chance of being represented. And this individual picked will give a fair representation for the entire population (Abubakar and Ilkan, 2016,). Thus, in this study, having enumerated 136 branch offices of service companies in Palestine, 210 questionnaires were administered to the randomly selected branch managers and administrative staff. Out of the 210 questionnaires administered, 172 (81.91%) questionnaires were recovered, while 38 (18.09%) could not be retrieved. However, out of the 172 questionnaire retrieved, 10 (4.76%) were found to be incomplete. Therefore, 162 (77.14%) questionnaire were finally processed and utilized for the analysis. formula given below

$$SampleSize = \frac{\frac{z^2 * p(1-p)}{e^2}}{1 + \left(\frac{z^2 * p(1-p)}{e^2 N} \right)} \quad (4.1)$$

Chapter 5

Results findings

5.1 Introduction

In this chapter, the findings from the analysis are presented. Starting from the descriptive analysis that shows the demographic characteristics of the respondents, this is to show the distributions of the questionnaire in relative to their demographic characteristics. Subsequent sections describe the properties of the variables, followed by the section that presents the structural model testing results, and the discussion and conclusion rounded off the chapter.

5.2 Descriptive Analysis

The demographic characteristics of the respondents as depicted in Table 5.1 reveals that 121 (74.7%) of the respondents are male, while 41 (25.3%) are female. The statistics on the years of employment of the respondents shows that the larger percentages of the respondents have worked with the company for more than 5 years which is quite impressive because the respondents would have adequate information about the company. The statistic as presented in Table 5.1 depicts that 36.4%, 27.8%, 22.8%, 9.3%, and 3.7% have been working with their respective companies for less than 5 years, 6-10, 11-15, 16-20, and above 21 years respectively. The level of income of the respondents as presented in Table 5.1 shows that 34% of the respondents earn less than US \$3000, 14.8% earn between US \$3001-4000, 35.8% between

US \$4001-5000, 13.6% between US \$5001-6000, and about 1.9% of the respondents earn above US \$6000 per month. This statistic of income is an indication that the employees remuneration is considerable and could be a source of motivation for the employee in given their best for the business performance. Lastly, the statistic in Table 5.1 shows that the larger percentages (45.1%) of the respondents are Master degree holders, while 34.6% and 20.4% of the respondents are Bachelors and Doctoral degree holders respectively. This is an indication that the respondents are educated which we believe will influence their understanding of our subject matter and in turn plays a significant role in their response to the questionnaire items.

Table 5.1: Demographic Statistics

	Frequency	Percent
Gender		
Male	121	74.7
Female	41	25.3
Years of current job		
Less Than 5	59	36.4
From 6-10	45	27.8
From 11-15	37	22.8
16-20	15	9.3
21 And More	6	3.7
Income		
Less Than 3000	55	34
3001-4000	24	14.8
4001-5000	58	35.8
5001-6000	22	13.6
More than 6000	3	1.9
Qualification		
PhD	33	20.4
MA	73	45.1
BA	56	34.6

Furthermore, Table 5.2 presents the descriptive analysis of the variables included in the study model. As presented in Table 5.2, the result shows that the mean value for all the constructs ranges between 3.18 - 3.70. This is an indication that in a scale of 5, a mean value ranges between 3-18 - 3.70 shows that most of the responses of respondents to the items for the constructs are either neutral (3) or agree (4). Looking at the standard deviation value as presented in Table 5.2, the variation from the mean value is moderate with only employee performance has the highest standard deviation value (1.23). The skewness and kurtosis which measures the data symmetric or lack of symmetric and the tail heaviness of the distribution respectively, shows from the results presented in Table 5.2 that evaluation (EV), service design (SD), quality system improvement (QSI), employee participation (EP), education and training (ET), and strategic business performance (SPB) are fairly symmetric in distribution; supplier quality management (SQM), vision and plan (VP), customer focus (CF), employee performance (EPR), service quality (SQ), and customers satisfaction are moderately skewed; and, leadership (LS), price control and improvement (PCI), and recognition and reward (RR) are highly skewed. As for kurtosis, the result shows that only employee performance (EPR) and customers satisfaction (CS) has a light tails because their statistics are less than 0, which make them to have platykurtic distribution, while other constructs has heavier tail because they all have values that is greater than 0 and that makes them to have leptokurtic distribution.

Table 5.2: Descriptive Analysis

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	statistic	Std. Error	Statistic	Std. Error
LS	3.4689	0.56059	-1.12	0.191	3.044	0.38
SQM	3.5556	0.56466	-0.795	0.191	3.097	0.379
VP	3.591	0.56678	-.843	0.191	2.08	0.379
EV	3.5137	0.53904	-0.282	0.191	0.577	0.38
PCI	3.6412	0.55328	-1.027	0.191	2.792	0.379
SD	3.4568	0.5716	0.394	0.191	0.402	0.379
QSI	3.1963	0.71139	0.038	0.191	0.124	0.379
EP	3.1813	0.60585	0.224	0.191	0.729	0.379
RR	3.4321	0.77142	-1.018	0.191	1.654	0.379
ET	3.4292	0.74008	-0.497	0.191	0.473	0.381
CF	3.4866	0.67079	-0.544	0.191	2.674	0.379
EPR	3.7019	1.23412	-0.686	0.191	-0.596	0.38
SQ	3.5079	0.53948	-0.92	0.191	3.433	0.379
CS	3.4753	1.0348	-0.512	0.191	-0.388	0.379
SBP	3.4753	0.60516	-0.468	0.191	1.464	0.379

The correlation analysis for the variables was carried out, this was aimed at ensuring that the problem of multicollinearity among the variables did not arise, and the results are presented in Table 5.3. As shown in the table, only few of the variables has correlation values that is greater than 0.60. This is an indication that the variables are not highly correlated with each other which could give room for multicollinearity. In order words, the study variables are free from multicollinearity problem.

Table 5.3: Correlation among the Variables

	LS	SQM	VP	EV	PCI	SD	QSI	EP	RR	ET	CF	EPR	SQ	CS	SBP
LS	1														
SQM	0.614**	1													
VP	0.647**	0.569**	1												
EV	0.629**	0.587**	0.658**	1											
PCI	0.521**	0.515**	0.564**	0.554**	1										
SD	0.464**	0.455**	0.506**	0.579**	0.426**	1									
QSI	0.436**	0.382**	0.478**	0.590**	0.424**	0.584**	1								
EP	0.555**	0.318**	0.505**	0.492**	0.315**	0.602**	0.616**	1							
RR	0.584**	0.319**	0.661**	0.505**	0.544**	0.316**	0.366**	0.506**	1						
ET	0.521**	0.456**	0.608**	0.477**	0.502**	0.303**	0.388**	0.445**	0.600**	1					
CF	0.533**	0.394**	0.542**	0.534**	0.448**	0.441**	0.562**	0.555**	0.534**	0.453**	1				
EPR	0.293**	0.077	0.335**	0.255**	0.340**	0.074	0.085	0.257**	0.586**	0.141	0.393**	1			
SQ	0.602**	0.418**	0.597**	0.570**	0.591**	0.386**	0.437**	0.509**	0.624**	0.493**	0.625**	0.513**	1		
CS	0.316**	0.123	0.303**	0.354**	0.233**	0.350**	0.328**	0.410**	0.348**	0.105	0.407**	0.375**	0.356**	1	
SBP	0.459**	0.328**	0.475**	0.573**	0.336**	0.404**	0.514**	0.569**	0.529**	0.409**	0.706**	0.387**	0.558**	0.407**	1

Note: ** Significant at 0.05

5.3 Reliability and Validity of Constructs

The properties of the constructs included in the study model are examined using Cronbach Alpha, variance inflation factor (VIF), factor loading of the items, determinants of the correlation matrix, KMO test and its significance. The results as presented in Table 5.4 show that the Cronbach Alpha for all the constructs is above the 0.70 threshold according to (Cronbach and Shavelson, 2004,). Cronbach suggested that the closer the alpha value to 1, the greater the internal consistency of the items in the scale. Also the rule of thumb provides that value greater than 0.9 is excellent, > 0.8 is good, > 0.7 is acceptable, > 0.6 is questionable, > 0.5 is considered to be poor, while < 0.5 is unacceptable. In view of these, the Cronbach alpha of our variables indicates that there is internal consistency because none of the value is less than 0.7 which is acceptable. Moreover, the variance inflation factor (VIF) that measure the amount of collinearity among the items shows that the VIF statistics for this study ranges between 1.175 and 1.923. The result is considered to be in order in accordance with Henseler, (Henseler et al., 2016,) who suggested that the values should not less than 1 and not greater than 5. This implies that there is absence of multicollinearity among the items that measures the individual

construct in this study model.

Table 5.4: Constructs Reliability Value

Items	Cronbach's Alpha	VIF
Supplier Quality Management (SQM)	0.725	1.211
Vision and Plan Statement(VP)	0.789	1.923
Evaluation(EV)	0.777	1.707
Process Control and Improvement(PCI)	0.796	1.175
Service Design(SD)	0.775	1.274
Quality System Improvement(QSI)	0.760	1.343
Employee Participation(EP)	0.759	1.666
Recognition and Reward(RR)	0.754	1.345
Education and Training(ET)	0.837	1.307
Customer Focus(CF)	0.779	1.234
Employee performance(EPR)	—	1.187
Service Quality(SQ)	0.778	1.648
Strategic Business Performance	0.75	—
Leadership	0.801	1.700
Customers Satisfaction (CS)	—	1.473
All Variables	0.78	—

As for the factor loadings for each of the items, the result as presented in Table 5.5 reveals that most of the items loadings values ranges between 0.6 and 0.9. Though (Dijkstra and Henseler, 2015,) suggested that above 0.7 factor loading is considered to be good, but above 0.5 loadings could be accepted and sustained. Therefore, our items factor loading are accepted and sustained for further analysis. Meanwhile, the determinant of the correlation matrix which is expected to be greater than 0.00001 to show that multicollinearity is not a problem between the items in the construct confirms the absence of multicollinearity problem in the data. This is as a result of the determinant value that is presented in Table 5.5 that shows all the value to be greater than 0.00001. In addition, the result of Kaiser-Meyer-Olkin (KMO)

measure of sampling adequacy according to (Brislin, 1980,) posited that the value ranges between 0 and 1, but recommend that value > 0.5 is acceptable, while 0.5 - 0.7, 0.8 – 0.9, and above 0.9 could be considered to be mediocre, great, and superb respectively. In view of these, the KMO value for this constructs are found to be good and great respectively, and the significant values for the constructs is an indication that the correlation matrix among the items of the constructs is not an identity matrix which shows that there exist relationship between the items in the construct.

Table 5.5: Factor Analysis Result

Variables	Items	Factor Loading	Determinant	KMO	Sig.
Leadership	LS1	0.935	0.182	0.731	0
	LS2	0.656			
	LS3	0.614			
	LS4	0.627			
	LS5	0.719			
	LS6	0.581			
	LS7	0.653			
	LS8	0.698			
Supplier Quality Management	SQM1	0.635	0.31	0.797	0
	SQM2	0.731			
	SQM3	0.694			
	SQM4	0.638			
	SQM5	0.662			
	SQM6	0.664			
Vision and Plan Statement	VP1	0.669	0.055	0.757	0
	VP2	0.65			
	VP3	0.64			
	VP4	0.708			
	VP5	0.758			
	VP6	0.671			
	VP7	0.694			
	VP8	0.639			

Evaluation	EV1	0.608	0.069	0.765	0
	EV2	0.752			
	EV3	0.755			
	EV4	0.649			
	EV5	0.609			
	EV6	0.614			
	EV7	0.689			
	EV8	0.696			
	EV9	0.797			
	EV10	0.697			
Process Control and Improvement	PCI1	0.682	0.035	0.78	0
	PCI2	0.665			
	PCI3	0.686			
	PCI4	0.655			
	PCI5	0.731			
	PCI6	0.647			
	PCI7	0.66			
	PCI8	0.798			
Service Design	SD1	0.696	0.082	0.762	0
	SD2	0.643			
	SD3	0.662			
	SD4	0.632			
	SD5	0.668			
	SD6	0.689			
	SD7	0.641			
	SD8	0.621			
Quality System Improvement	QSI1	0.69	0.62	0.818	0
	QSI2	0.65			
	QSI3	0.672			
	QSI4	0.761			
	QSI5	0.69			
Employee Participation	EP1	0.736	0.01	0.866	0
	EP2	0.609			
	EP3	0.688			
	EP4	0.649			
	EP5	0.66			

	EP6	0.754			
	EP7	0.954			
	EP8	0.957			
Recognition and Reward	RR1	0.639	0.061	0.779	0
	RR2	0.853			
	RR3	0.803			
	RR4	0.888			
	RR5	0.682			
	RR6	0.793			
Education and Training	ET1	0.775	0.165	0.792	0
	ET2	0.613			
	ET3	0.766			
	ET4	0.709			
	ET5	0.621			
	ET6	0.654			
Customer Focus	VP1	0.671	0.147	0.796	0
	VP2	0.686			
	VP3	0.672			
	VP4	0.611			
	VP5	0.708			
	VP6	0.606			
Service Quality	SQ1	0.667	0.199	0.752	0
	SQ2	0.637			
	SQ3	0.639			
	SQ4	0.649			
	SQ5	0.852			
	SQ6	0.718			
	SQ7	0.693			
Strategic Business Performance	SBP1	0.683	0.397	0.743	0
	SBP2	0.697			
	SBP3	0.83			
	SBP4	0.837			
	SBP5	0.63			

5.4 Structural Model Testing

The results from the structural model testing as reveals in Figure 5.2 and Table 5.6 shows the hypotheses testing results and their significance values. As presented in the table, the H1 of this study was formulated to determine the relationship between employees performance and service quality, the result shows that employees performance has a direct and positive influence on service quality ($\beta = .444$, $t = 7.107$). As a result of the significance of the relationship, the alternative hypothesis is accepted and concludes that employees performance positively influences service quality. The hypothesis two is also accepted ($\beta = .275$, $t = 3.436$), and conclude that employees satisfaction positively influences customers satisfaction. However, we failed to reject the null hypothesis for H3 ($\beta = .056$, $t = .698$), this is a result of the non-significance of the coefficient, thus this study concludes that service quality does not positively influences customers satisfaction. Therefore, H3 is not supported. The result of H4 ($\beta = .354$, $t = 5.068$), and, H5 ($\beta = .235$, $t = 3.367$) shows that both hypotheses are accepted due to the significance of their coefficients. This implies that service quality and customers satisfaction positively influences strategic business performance. Therefore both hypotheses are supported.

The positive influence of supplier quality management on service quality that was formulated for H6 was found not to be true ($\beta = .049$, $t = .784$), therefore, H6 is not supported and conclude that supplier quality management does not positively influences service quality. As for H7 ($\beta = .220$, $t = 3.523$), H8 ($\beta = .175$, $t = 2.809$), and H9 ($\beta = .266$, $t = 4.263$), the three hypotheses were accepted. The result implies that value and plan, evaluation, and process control and improvement positively influence service quality. H10 stated that service design positively influences service quality, however, the result as presented in the table shows otherwise ($\beta = -.004$, $t = -.067$). This implies that service design does not positively influence service quality, therefore, H10 is rejected. Moreover, H11 ($\beta = .152$, $t = 2.436$), H13 ($\beta = .681$, $t = 12.887$), and, H15 ($\beta = .284$, $t = 3.962$) were all accepted as a result of the significance of their coefficients. The result implies that quality systems im-

provement positively influences service quality; recognition and reward positively influences employee performance; and, customers satisfaction positively influences strategic business performance respectively. Therefore the three hypotheses were supported. Meanwhile, this study failed to reject the null hypothesis of H12 ($\beta = .006$, $t = .116$), and conclude that employees participation does not positively influence employees satisfaction. Meanwhile, H14 ($\beta = -.292$, $t = -5.531$) could not be supported even though it is found to be significance because the hypothesis stated that education and training positively influence the employees satisfaction. Therefore, the null hypothesis is failed to be rejected.

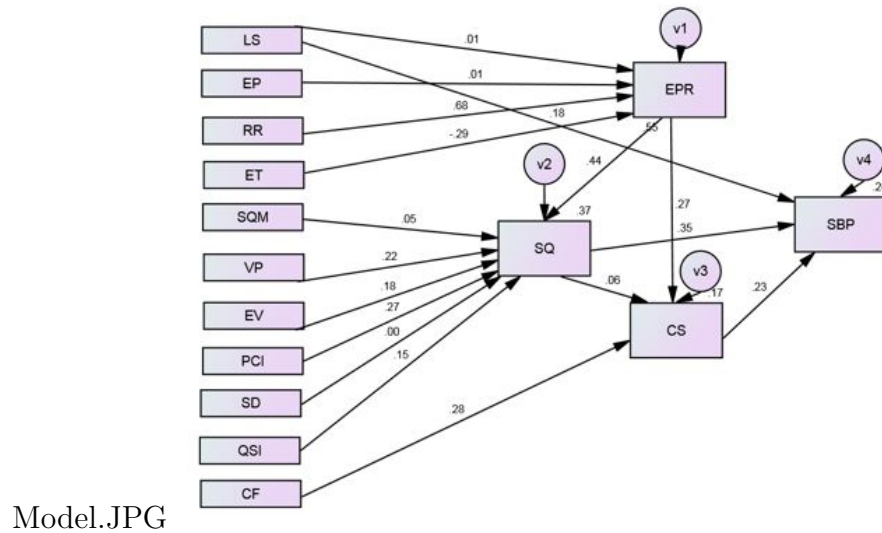


Figure 5.1: Study Structural Model.

Table 5.6: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
EPR	<—	LS	0.008	0.133	0.145	0.885	par_1
EPR	<—	EP	0.006	0.123	0.116	0.908	par_3
EPR	<—	RR	0.681	0.096	12.887	***	par_4
EPR	<—	ET	-0.292	0.101	-5.531	***	par_5
SQ	<—	SQM	0.049	0.05	0.784	0.433	par_6
SQ	<—	VP	0.220	0.05	3.523	***	par_7
SQ	<—	EV	0.175	0.052	2.809	0.005	par_8
SQ	<—	PCI	0.266	0.051	4.263	***	par_9
SQ	<—	SD	-0.004	0.049	-0.067	0.947	par_10
SQ	<—	QSI	0.152	0.04	2.436	0.015	par_11
SQ	<—	EPR	0.444	0.02	7.107	***	par_13
CS	<—	CF	0.284	0.107	3.962	***	par_12
CS	<—	SQ	0.056	0.178	0.698	0.485	par_14
CS	<—	EPR	0.275	0.057	3.436	***	par_15
SBP	<—	LS	0.175	0.067	2.553	0.011	par_2
SBP	<—	SQ	0.354	0.085	5.068	***	par_16
SBP	<—	CS	0.235	0.038	3.367	***	par_17

In addition to the regression weights of the relationship, the effects of the variables were examined and the results are presented in Table 5.7. factor measurement model fit indices: (χ^2 192.254, df = 88, $p < .000$, GFI = .905, NFI = .838, IFI = .910, TLI = .903, CFI = .941, RMSEA = .037). The results as presented reveals that CF, QSI, SD, PCI, EV, VP, SQM, EPR, SQ, and CS has no effect on the ES, while ET, RR, EP, and LS were found to have effect on the EPR. Even though RR was found to have high effect on EPR, follows by ET, while EP and LS shows a very weak effect. As for SQ, CF and CF were found not to have effect on it. The total effects value as presented in Table 5.7 shows that PCI, EV, VP, and RR has a moderate effect on SQ, while QSI, SD, ET, EP, LS, and EPR were found to have weak effect on SQ. Moreover, CF was found to have strong effect on CS, RR and ES were found to have moderate effect, SD was found to have no effect, while QSI, PCI, EV, VP, SQ, ET, EP, LS and SQ were found to have weak effect on CS. Lastly, the result as presented in Table 5.7 reveals that SQ has strong effect on SPB, while the remaining constructs has weak effect on SBP.

Table 5.7: Total Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	EPR	SQ	CS
EPR	.000	.000	.000	.000	.000	.000	.000	-0.292	.681	.006	.008	.000	.000	.000
SQ	.000	.152	-.004	.266	.175	.220	.049	-.130	.302	.003	.003	.444	.000	.000
CS	.284	.008	.000	.015	.010	.012	.003	-.088	.204	.002	.002	.300	.056	.000
SBP	.067	.056	-.002	.098	.064	.081	.018	-.066	.155	.001	.177	.227	.367	.235

The direct effect results as presented in Table 5.8 shows that, only ET, RR, EP and LS has direct effect on EPR, while other variables has no direct effect. For SQ, CF, ET, RR, EP, LS, and CS were shown not to have direct effect on SQ; while, CF, EPR, and SQ were shown in the table to have direct effect on CS. Lastly, only LS, SQ, and CS were found to have direct effect on SPB, while other variables do not have direct effects.

Similarly, the indirect effect was examined and presented in Table 5.9 The results as presented in the table reveals that None of the variables in the model has indirect effect on EPR, meanwhile, RR, EP, LS, and ET has indirect effect on SQ. However,

the indirect effect of ET on SQ was found to be negative. Furthermore, QSI, PCI, EV, VP, RR, ET, EP, LS, and EPR were found to have indirect effect on CS, even though the indirect effect of ET on CS was shown to be negative. And lastly, all the variables were found to have indirect effects on SPB except CS that was found to have no indirect effect. But, SD and ET were found to have negative indirect effects on SPB.

Table 5.8: Direct Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	EPR	SQ	CS
EPR	.000	.000	.000	.000	.000	.000	.000	-.292	.681	.006	.008	.000	.000	.000
SQ	.000	.152	-.004	.266	.175	.220	.049	.000	.000	.000	.000	0.444	.000	.000
CS	.284	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.275	.056	.000
SBP	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.175	.000	.354	.235

Table 5.9: Indirect Effects

	CF	QSI	SD	PCI	EV	VP	SQM	ET	RR	EP	LS	EPR	SQ	CS
EPR	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
SQ	.000	.000	.000	.000	.000	.000	.000	-.130	.302	.003	.003	.000	.000	.000
CS	.000	.008	.000	.015	.010	0.012	.003	-.088	.204	.002	.002	.025	.000	.000
SBP	.067	.056	-.002	.098	.064	.081	.018	-.066	.155	.001	0.002	.227	.013	.000

5.5 Discussion

The business world of today has been dynamic and competitive which was as a results of technological advancement and globalization. This has made every organization to give more attentions to how their firm can remain in the business and achieve competitive advantages. The total quality management (TQM) has been among the method deployed by different organization to reduce shortcomings in the production or delivery of their service so as to enhance the efficiency of their firm. Though much attention has been given to TQM, however, the consensus on the TQM implementation have been elusive. It is in view of these that this study aimed at examining the implementation of TQM in Palestine service companies. The Palestine service companies are not immune from the dynamic and competitive business environment that we are witnessing today, but the empirical study to get a deep understanding on how the TQM can be implemented in the sector in Palestine have not been sufficient.

In order to achieve the aim of this study, examination of the impact of the TQM implementation in the general performance of Palestine service companies; and, formulating a TQM implementation model for the service companies were pursued as the objectives of the study. Five questions were put forward to be answer in the study, while 15 hypotheses were formulated to test the theories on the TQM implementation as its applicable to Palestine service companies. It was proposed in the study model that strategic business performance (SPB) of the service companies in Palestine will be influenced by service quality (SQ) and customers satisfaction (CS). It was also proposed in the study framework that employees performance (EPR) will be influenced by employee participation (EP), recognition and reward (RR), and education and training (ET). Service quality (SQ) is proposed in the model to be determined by service quality management (SQM), vision and plan (VP), evaluation (EV), process control and improvement (PCI), service design (SD), employees satisfaction (ES), and quality system improvement (QSI). As for the customers satisfaction, it was proposed in the framework to be determined by customer focus

(CF), service quality (SQ), and employees performance (EPR).

Structured questionnaire on a 5-point likert scale was utilized for the data collection. 210 questionnaires were administered to the branch managers and administrative staff of the 136 enumerated branches of service companies in Palestine, out of which 162 were retrieved and utilized for the analysis. The properties examination of the items and construct shows that the items are reliable and internally consistent, factor loadings of the items are acceptable, and also free from multicollinearity problem.

The finding from the analysis reveals that employees performance is found to have positive influence on the service quality, thus, H1 was supported. The finding is in line with the previous studies of (Feigenbaum, 1994,); and, (Gryna and Juran, 1998,) who posited in their studies that in an organization where the employees are passionate and feel satisfied with the working environment and condition, it will reflect in the way they will discharge their services in a quality way. The implication of this finding is that companies should set its employees performance as priority, which will contribute significantly to the quality of services delivery by the company. Hypothesis two of this study was also supported and concludes that employees performance positively influences customers satisfaction. The result is in agreement with the studies of (Tickle, 2001,); and, (Anderson et al., 1995,). These studies argued that when employees are satisfied with their firm, they will be more dedicated and committed to the organization by paying attention to the customers complaints at all time so as to serve them better. In other word, service companies in Palestine should sustain the working environment and condition so that the customers satisfaction could as well be sustained. Similarly, hypotheses 4, 5, 7, 8, 9, 11, 13, and 15 were found to have significant coefficients and accepted, while, hypotheses 3, 6, 10, 12, and, 14 were rejected based on the non-significant of their coefficients. The recognition and reward, and education and training were found to be the determinant of employees performance, while employees participa-

tion was found not to be significant. The significance of recognition and reward as a determinant of employees performance is in line with the studies of (Kassicieh and Yourstone, 1998,). Previous studies like (Anderson et al., 1995,) found education and training to be a determinant of employees performance. Though, (Kano, 1993,) and (Mann and Kehoe, 1994,) found employees participation to be among the determinant of employees performance, this is in contrast to this study finding which failed to established the significance of employees participation as a determinant of employees performance. The implication of this result is that the service companies in Palestine should adopt more open approach like management by objective that will enable the employees to partake and get more involved in the company decision.

Out of the seven variables that was included in the model to determine service quality, while vision and plan, evaluation, process control improvement, employees satisfaction, and quality system improvement were found to be a significant determinant of service quality, supplier quality management and service design were found not to be a significant determinant. The significance of those variables found is in consistent with some previous studies (Feigenbaum, 1994,) and (Ishikawa, 1985,) and (Gryna and Juran, 1998,) and (Kano, 1993,) and (Motwani et al., 1996,). Meanwhile, the non-significant result found for supplier quality management and service design are in contrast to the studies of (Dijkstra and Henseler, 2015,) and (Mann and Kehoe, 1994,) and (Zhang, 2000,) and (Gatenby et al., 1994,), but the negative influence of service design found on service quality is in agreement with the study of (Kanji and Asher, 1996,). The implication of the negative result is that the service companies in Palestine should be more attention to the service design so as to enhance the quality of their services.

Moreover, employees performance and customers focus were found to a determinant factor for customers satisfaction, while service quality was found not to be a contributor. The non-significance of service quality as a determinant of customers satisfaction is in contradiction to some previous who did similar studies (Anderson

et al., 1995,) and (Longenecker and Scazzero, 1993,) though not in the service companies established it as a significant factor. In addition, the influence of both service quality and customers satisfaction was examined on the strategic business performance. The result shows the significance of both variables. This is an indication that the quality of services delivered by a firm and how its customers are satisfied with the service plays a significant role in determining the general business performance of a service company. The implication of these findings is that the management of the service companies in Palestine should make customers satisfaction their priority; this will enhance their performance and achieve sustainable competitive advantage in the market where they operates.

Chapter 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusion

Summarily, this study has shown that total quality management is very vital to the improvement in the business performance an organization. The study further shows the linkages of TQM to the enhancement of business performance by expanding the theory and incorporated customers satisfaction with the TQM empirically understand the influence on the general business performance of service companies. In addition, it was reveals from the study that the service companies in Palestine are still lacking on the service quality as it shows that though determines the business performance, but not a significant determinant in the customers; satisfaction. Lastly, this study findings shows that the implementation of TQM is practicable, only if the service companies in Palestine can place priority of the employees participation, supplier quality management and service design because TQM implementation requires that full approach that will integrate control on all the stakeholders need to be deployed and not partial approach which has been the reason why TQM have not been working for most companies. This study is limited in scope by covering only the service companies in Palestine. Future research can consider a comparative study of public and private sector.

6.2 Recommendations

This study contributes to both the theory and practical implementation of an all-encompassing quality management that will propel the enhancement of business performance in the service companies in Palestine. The influence of employees satisfaction on both service quality and customers satisfaction were examined and the subsequent influence of both service quality and customers satisfaction on strategic business performance. Meanwhile, Employees participation was found not to be a significant determinant of employees satisfaction, while supplier quality management and service design were found not to be a significant determinant for service quality; and lastly, service quality was found not to be a significant determinant of customers satisfaction. Though, education and training was found to have significant influence on employees satisfaction, but the sign was negative which led to the failure to accept the hypothesis. In view of the above, this study makes the following suggestions that could assist the managers and the management team of the service companies in Palestine in ensuring the implementation of total quality management as follows:

- The employee should be allowed to be more involved in the activities and management of the service companies in Palestine. The participation of the employee will give them a sense of belonging, make them proud and have the feelings that they are part and parcel of the organization. This in turn will boost their morale and enhance their satisfaction about the company, which will consequently translate to the enhancement of the company business performance.
- The education and training is expected to contribute to the employee satisfaction, in the sense that, there is need to the organization to ensure continuous development of the employee skill through consistent training. However, the

result turned out to be negative and significant. This implies that the service companies are lacking in the area of training their employee, and as such it becomes expedient for the service companies in Palestine to ensure continuous training and re-training of their employee. This will boost their confidence, skills, knowledge and will translate to their satisfaction.

- The efficient relationship and adequate flow of information between the supplier and organization is very significant in achieving service quality. However, the result for Palestine service companies shows the management team needs to take a proactive measure in correcting the lapses. To achieve total quality management, all the stakeholders have to be involved and put the control mechanism in place, this will contribute to the improvement on the service quality and overall effect on the business performance.
- It is essential to have a good service design as part of the process of achieving service quality. Therefore, it is recommended that the management team of the service companies in Palestine should endeavor to determine the purpose of their service. This will enable them to have a check and control if its not fulfilling the purpose.

Lastly, this study recommends that the management of service companies in Palestine should improve on their service quality, so as to contribute significantly to the customers satisfaction and the eventual effect on the business performance.

Conclusively, the management of those service companies should improve and maintain the contribution of service quality and customers satisfaction to their strategic business performance, because it takes the sustainability of their improved performance to compete favorably in todays competitive business market.

References

- Abubakar, A. M. and Ilkan, M. (2016). Impact of online WOM on destination trust and intention to travel: A medical tourism perspective. *Journal of Destination Marketing & Management*, 5(3):192–201.
- Adam Jr, E. E. (1994). Alternative quality improvement practices and organization performance. *Journal of Operations Management*, 12(1):27–44.
- Ahire, S. L., Golhar, D. Y., and Waller, M. A. (1996). Development and validation of TQM implementation constructs. *Decision sciences*, 27(1):23–56.
- Anderson, J. C., Rungtusanatham, M., Schroeder, R. G., and Devaraj, S. (1995). A path analytic model of a theory of quality management underlying the Deming management method: preliminary empirical findings. *Decision sciences*, 26(5):637–658.
- Antero, O. and Markku, M. (1999). Maintenance has a role in quality. *The TQM Magazine*, 11(1):17–21.
- Aravindan, P., Devadasan, S., and Selladurai, V. (1996). A focused system model for strategic quality management. *International Journal of Quality & Reliability Management*, 13(8):79–96.
- Beer, M. (2003). Why total quality management programs do not persist: the role of management quality and implications for leading a TQM transformation. *Decision Sciences*, 34(4):623–642.
- Black, P. and Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability (formerly: Journal of Personnel Evaluation in Education)*, 21(1):5.
- Brewerton, P. M. and Millward, L. J. (2001). *Organizational research methods: A*

guide for students and researchers. Sage.

Brislin, R. W. (1980). Translation and content analysis of oral and written materials. *Methodology*, pages 389–444.

Buzzell, R. D. and Wiersema, F. D. (1981). Successful share-building strategies. *Harvard Business Review*, 59(1):135–144.

Choi, T. Y. and Eboch, K. (1998). The tqm paradox: relations among tqm practices, plant performance, and customer satisfaction. *Journal of Operations management*, 17(1):59–75.

Cole, S., Bhardwaj, G., Gerlach, J., Mackie, J., Grant, C., Almquist, K., Stewart, A., Kurz, E., Duncan, A., and Deeley, R. (1992). Overexpression of a transporter gene in a multidrug-resistant human lung cancer cell line. *Science*, 258(5088):1650–1654.

Cronbach, L. J. and Shavelson, R. J. (2004). My current thoughts on coefficient alpha and successor procedures. *Educational and psychological measurement*, 64(3):391–418.

Cronin Jr, J. J. and Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of marketing*, 56(3):55–68.

Crosby, P. B. (1979). *Quality is free: The art of making quality certain*, volume 94. McGraw-hill New York.

Dahlgaard, J. J., Khanji, G. K., and Kristensen, K. (2008). *Fundamentals of total quality management*. Routledge.

Dale, B., Lascelles, D., and Boaden, R. (1994). Levels of total quality management adoption. *Managing Quality*, pages 117–127.

Dale, B., Zairi, M., Van der Wiele, A., and Williams, A. (2000). Quality is dead in europe—long live excellence—true or false? *Measuring business excellence*, 4(3):4–10.

Dean Jr, J. W. and Bowen, D. E. (1994). Management theory and total quality: improving research and practice through theory development. *Academy of management review*, 19(3):392–418.

Deming, W., Quality, P., and Competitive Position, M. (1986). Mit, center for

advanced engineering study.

- Dijkstra, T. K. and Henseler, J. (2015). Consistent partial least squares path modeling. *MIS quarterly*, 39(2).
- Douglas, A., Coleman, S., and Oddy, R. (2003). The case for iso 9000. *The TQM magazine*, 15(5):316–324.
- DuBrin, A. J. (1995). *The breakthrough team player: Becoming the MVP on your workplace team*. Amacom.
- Easton, G. S. and Jarrell, S. L. (1998). The effects of total quality management on corporate performance: an empirical investigation. *The Journal of Business*, 71(2):253–307.
- Ernst, W., Doe, K., Jonah, P., Young, J., Julien, G., and Hennigar, P. (1991). The toxicity of chlorothalonil to aquatic fauna and the impact of its operational use on a pond ecosystem. *Archives of environmental contamination and toxicology*, 21(1):1–9.
- Feigenbaum, A. V. (1994). Quality education and america’s competitiveness. *Quality progress*, 27(9):83.
- Feigenbaum, A. V. (2005). *Total quality control: Achieving productivity, market penetration and advantage in the global economy*. McGraw-Hill Higher Education.
- Fornell, C. (1992). A national customer satisfaction barometer: The swedish experience. *Journal of marketing*, 56(1):6–21.
- Garvin, D. A. (1986). Quality problems, policies, and attitudes in the united states and japan: An exploratory study. *Academy of management journal*, 29(4):653–673.
- Gatenby, D. A., Lee, P. M., Howard, R. E., Hushyar, K., Layendecker, R., and Wesner, J. (1994). Concurrent engineering: An enabler for fast, high-quality product realization. *At&T Technical Journal*, 73(1):34–47.
- George, S. (1992). *The Baldrige quality system: The do-it-yourself way to transform your business*. Wiley.
- Ginder, D. (1990). The engineer and tqm. *Automotive Engineering*, October, pages

18–19.

- Gitlow, H., Gitlow, S., Oppenheim, A., and Oppenheim, R. (1989). Tools and methods for the improvement of quality, homewood, il: Richard d irwin.
- Goh, P. and Ridgway, K. (1994). The implementation of total quality management in small and medium-sized manufacturing companies. *The TQM magazine*, 6(2):54–60.
- Gómez, J. G., Martínez Costa, M., and Martínez Lorente, Á. R. (2017). Efqm excellence model and tqm: an empirical comparison. *Total Quality Management & Business Excellence*, 28(1-2):88–103.
- Gryna, F. M. and Juran, J. M. (1998). *Juran's quality control handbook*. McGraw-Hill.
- Gu, Z., Salomon, H., Cherrington, J. M., Mulato, A. S., Chen, M. S., Yarchoan, R., Foli, A., Sogocio, K. M., and Wainberg, M. A. (1995). K65r mutation of human immunodeficiency virus type 1 reverse transcriptase encodes cross-resistance to 9-(2-phosphonylmethoxyethyl) adenine. *Antimicrobial agents and chemotherapy*, 39(8):1888–1891.
- Hackman, J. R. and Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. *Administrative science quarterly*, pages 309–342.
- Hellsten, U. and Klefsjö, B. (2000). Tqm as a management system consisting of values, techniques and tools. *The TQM magazine*, 12(4):238–244.
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen Jr, D. J., Hair, J. F., Hult, G. T. M., and Calantone, R. J. (2014). Common beliefs and reality about pls: Comments on rönkkö and evermann (2013). *Organizational research methods*, 17(2):182–209.
- Henseler, J., Hubona, G., and Ray, P. A. (2016). Using pls path modeling in new technology research: updated guidelines. *Industrial management & data systems*, 116(1):2–20.
- Herzberg, F. I. (1966). Work and the nature of man.
- Ho, S. K. (1999). *Operations and quality management*. Cengage Learning EMEA.

- Hoekstra, R., Finch, S., Kiers, H. A., and Johnson, A. (2006). Probability as certainty: Dichotomous thinking and the misuse of values. *Psychonomic Bulletin & Review*, 13(6):1033–1037.
- Ikezawa, T. (1993). Effective tqc. *How to Make Quality Assurance More Than a Slogan*, PHP Institute, Inc., Tokyo.
- Imai, M. (1986). *Kaizen*, volume 201. Random House Business Division New York.
- Ishikawa, K. (1985). *What is quality control?: The Japanese way*. Prentice-Hall.
- Kamal Gaafar, L. and Bert Keats, J. (1992). Statistical process control: a guide for implementation. *International Journal of Quality & Reliability Management*, 9(4).
- Kanji, G. and Asher, M. (1993). Total quality management process: A systematic approach, carfax.
- Kanji, G. K. and Asher, M. (1996). *100 methods for total quality management*. Sage.
- Kano, N. (1993). A perspective on quality activities in american firms. *California management review*, 35(3):12–31.
- Kassicieh, S. K. and Yourstone, S. A. (1998). Training, performance evaluation, rewards, and tqm implementation success. *Journal of Quality Management*, 3(1):25–38.
- Knotts, U., Parrish, L., and Evans, C. (1993). What does the united-states business community really think about the baldridge award. *Quality Progress*, 26(5):49–53.
- Kondo, Y. (1997). Quality as a source of empowerment. *The TQM Magazine*, 9(5):357–363.
- Lam, S. S. (1995). Quality management and job satisfaction: an empirical study. *International Journal of Quality & Reliability Management*, 12(4):72–78.
- Lee, H., Kwak, W., and Han, I. (1995). Developing a business performance evaluation system: An analytic hierarchical model. *The Engineering Economist*, 40(4):343–357.
- Lockwood, A., Baker, M., and Ghillyer, A. (1996). *Quality Management in Hospitality: Best practice in action*. Cassell.

- Longenecker, C. O. and Scazzero, J. A. (1993). Total quality management from theory to practice: a case study. *International Journal of Quality & Reliability Management*, 10(5).
- Mann, R. and Kehoe, D. (1994). An evaluation of the effects of quality improvement activities on business performance. *International Journal of Quality & Reliability Management*, 11(4):29–44.
- Meredith, J. R. and Shafer, S. M. (2009). *Operations management for MBAs*. John Wiley & Sons.
- Mirams, M. and McElheron, P. (1995). *Gaining and Maintaining the New Quality Standard: The BS EN ISO 9000 Tool Kit*. Pitman Pub.
- Mohammad, Z. (2006). Nigerian aviation sector. why not a tqm approach? *The voice*, 30.
- Moran, J. J. (1997). Customer integration: The quality function deployment (qfd) leader’s guide for decision-making. *The Journal of Product Innovation Management*, 2(14):148–149.
- Motwani, J., Kumar, A., and Hung Cheng, C. (1996). A roadmap to implementing iso 9000. *International Journal of Quality & Reliability Management*, 13(1):72–83.
- Motwani, J. G., Mahmoud, E., and Rice, G. (1994). Quality practices of indian organizations: an empirical analysis. *International Journal of Quality & Reliability Management*, 11(1):38–52.
- Naumann, E. and Giel, K. (1995). *Customer satisfaction measurement and management: Using the voice of the customer*. Van Nostrand Reinhold.
- Nissen, H.-E., Klein, H. K., and Hirschheim, R. (1991). *Information systems research: contemporary approaches and emergent traditions*. Elsevier North-Holland, Inc.
- Oakland, J. S. and Tanner, S. J. (2005). Quality management in the 21st century—implementing successful change. *International Journal of Productivity and Quality Management*, 1(1-2):69–87.
- Peters, V. J. (1999). Total service quality management. *Managing Service Quality*:

An International Journal, 9(1):6–12.

- Porter, L. and Tanner, S. (1996). Assessing business excellence, buttrworth.
- Powell, T. C. (1995). Total quality management as competitive advantage: a review and empirical study. *Strategic management journal*, 16(1):15–37.
- Primrose, P. and Leonard, R. (1988). Investing to improve product quality. *International Journal of Quality & Reliability Management*, 5(4):38–45.
- Punch, K. (2000). Developing effective research proposals essential resources for.
- Raj, T. and Attri, R. (2011). Identification and modelling of barriers in the implementation of tqm. *International Journal of Productivity and Quality Management*, 8(2):153–179.
- Randall, R. (1995). Randall’s practical guide to iso 9000, wyd. 1.
- Reed, R., Lemak, D. J., and Montgomery, J. C. (1996). Beyond process: Tqm content and firm performance. *Academy of management review*, 21(1):173–202.
- Rollsjö, Å. (2009). Attraction and retention of generation y employees.
- Samuel, M. O. and Chipunza, C. (2009). Employee retention and turnover: Using motivational variables as a panacea. *African journal of business management*, 3(9):410–415.
- Sekaran, U. and Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Slack, N., Chambers, S., and Johnston, R. (2010). *Operations management*. Pearson education.
- Smith, G. (2004). An evaluation of the corporate culture of southwest airlines. *Measuring Business Excellence*, 8(4):26–33.
- Smith, P. C. et al. (1969). The measurement of satisfaction in work and retirement: A strategy for the study of attitudes.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*, volume 3. Sage publications.
- Steingard, D. S. and Fitzgibbons, D. E. (1993). A postmodern deconstruction of total quality management (tqm). *Journal of Organizational Change Management*,

6(5):27–42.

- Tickle, S. (2001). What have we learnt about student learning? a review of the research on study approach and style. *Kybernetes*, 30(7/8):955–969.
- Ugboro, I. O. and Obeng, K. (2000). Top management leadership, employee empowerment, job satisfaction, and customer satisfaction in tqm organizations: an empirical study. *Journal of quality management*, 5(2):247–272.
- Wacker, J. G. and Sheu, C. (1994). The stages of quality management evolution in the pacific rim. *International Journal of Quality & Reliability Management*, 11(7):38–50.
- Waldman, D. A. (1994). The contributions of total quality management to a theory of work performance. *Academy of management review*, 19(3):510–536.
- Wilkinson, A. (1998). *Managing with total quality management: theory and practice*. Macmillan International Higher Education.
- Wruck, K. H. and Jensen, M. C. (1994). Science, specific knowledge, and total quality management. *Journal of Accounting and economics*, 18(3):247–287.
- Zairi, M., Letza, S., and Oakland, J. (1994). Does tqm impact on bottom-line results? *The TQM Magazine*, 6(1):38–43.
- Zhang, Z. (2000). Developing a model of quality management methods and evaluating their effects on business performance. *Total Quality Management*, 11(1):129–137.
- Zikmund, W. G., Babin, B. J., Carr, J. C., Adhikari, A., and Griffin, M. (2013). *Business Research Methods A South-asian Perspective*. Cengage Learning.

Appendices

Appendix A

TQM Implementation Instrument

A 5-Likert scale (1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly agree) was used to ask the respondents to state how much they agreed with these statements.

Scale 1: Leadership

1. Top management actively participates in quality management activities.
2. Top management learns quality-related concepts and skills.
3. Top management strongly encourages employee involvement in quality management activities.
4. Top management empowers employees to solve quality problems.
5. Top management arranges adequate resources for employee education and training.
6. Top management discusses many quality-related issues in top management meetings.
7. Top management focuses on product quality rather than yields.
8. Top management pursues long-term business success.

Scale 2: Supplier Quality Management

1. Our firm has established long-term cooperative relations with suppliers.
2. Our firm regards product quality as the most important factor in selecting suppliers.
3. Our firm always participates in supplier activities related to quality.
4. Our firm always gives feedback on the performance of suppliers products.
5. Our firm has detailed information about supplier performance.
6. Our firm regularly conducts supplier quality audit.

Scale 3: Vision and Plan Statement

1. Our firm has a clear long-term vision statement.
2. The vision effectively encourages employees commitment to quality management.
3. Our firm has a clear short-term business performance plan.
4. Our firm has a clear quality policy.
5. Our firm has a detailed quality goal.
6. Our firm has effective quality improvement plans.
7. Various policies and plans are well communicated to the employees.
8. Employees from different levels are involved in making policies and plans.

Scale 4: Evaluation

1. Our firm regularly audits various business strategies.
2. Our firm regularly conducts quality audits.

3. Benchmarking is used extensively in our firm.
4. Our firm uses quality-related costs extensively.
5. Our firm has detailed quality-related data such as defect rates and scraps.
6. Quality-related data are used to evaluate the management of our firm.
7. Quality-related data are used to evaluate the performance of all departments.
8. Quality-related data are used to evaluate the performance of employees.
9. Quality-related information is displayed at the shop floor.
10. The aim of evaluation is improvement, not criticism.

Scale 5: Process Control and Improvement

1. Our firm is kept neat and clean at all times.
2. Process capability can meet production requirements.
3. Production equipment is well maintained according to the maintenance plan.
4. Our firm implements various inspections effectively (e.g., incoming, process, and final products).
5. Our processes are designed to be foolproof in order to minimize the chance of employee error.
6. Our firm uses the Seven QC tools extensively for process control and improvement.
7. Our firm uses SPC extensively for process control and improvement.
8. Our firm uses PDCA cycle extensively for process control and improvement.

Scale 6: Product Design

1. The design engineers are required to have some shop floor experience.
2. The design engineers are required to have some marketing experience.
3. The customer requirements are thoroughly considered in new product design.
4. Various departments participate in new product development.
5. New product designs are thoroughly reviewed before production.
6. Cost is emphasized in the product design process.
7. Experimental design is used extensively in product design.
8. Quality function deployment (QFD) is used extensively in product design.

Scale 7: Quality System Improvement

1. The quality system in our firm is continuously being improved.
2. Our firm uses ISO 9000 as a guideline for establishing our quality system.
3. Our firm has a clear quality manual.
4. Our firm has clear procedure documents.
5. Our firm has clear working instructions.

Scale 8: Employee Participation

1. Our firm has cross-functional teams.
2. Our firm has several QC circles (within one function).
3. Employees are actively involved in quality-related activities.
4. Our firm implements suggestion activities extensively.
5. Most employees suggestions are implemented after an evaluation.

6. Employees are very committed to the success of our firm.
7. Employees are encouraged to fix problems they find.
8. Reporting work problems is encouraged in our firm.

Scale 9: Recognition and Reward

1. Our firm improves working conditions in order to recognize employee quality management efforts.
2. Our firm has a salary promotion scheme to encourage employee participation in quality management.
3. Position promotions are based on work quality in our firm.
4. Excellent suggestions are financially rewarded.
5. Employees rewards and penalties are clear.
6. Recognition and reward activities effectively stimulate employee commitment to quality management.

Scale 10: Education and Training

1. Employees are encouraged to accept education and training in our firm.
2. Resources are available for employee education and training in our firm.
3. Most employees in our firm are trained on how to use quality management methods (tools).
4. Quality awareness education is given to employees.
5. Specific work-skills training is given to all employees.
6. Employees are regarded as valuable, long-term resources worthy of receiving education and training throughout their career.

Scale 11: Customer Focus

1. Our firm collects extensive complaint information from customers.
2. Quality-related customer complaints are treated with top priority.
3. Our firm conducts a customer satisfaction survey every year.
4. Our firm always conducts market research in order to collect suggestions for improving our products.
5. Our firm provides warranty on our sold products to customers.
6. Our firm has been customer focused for a long time.

Appendix B

Overall Business Performance Instrument

A 5-Likert scale (1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly agree) was used to ask the respondents to state how much they agreed with these statements.

Scale 1: Employee Satisfaction

1. The employee satisfaction level in your firm.

Scale 2: Product Quality

1. The performance of your primary products.
2. The conformity rates of your primary products.
3. The reliability of your primary products.
4. The durability of your primary products.
5. The defect rates of your primary products.
6. The internal failure costs as a percentage of annual output value.
7. The external failure costs as a percentage of annual sales.

Scale 3: Service Quality

1. The customer satisfaction level for service quality provided by your firm.

Scale 4: Strategic Business Performance

1. Annual sales Increased slightly in our firm.
2. Cost was Increased slightly in our firm.
3. Our firm focus on competitive criteria of the organizations markets in order to facilitate strategies and actions to improve the organizations competitive position.
4. Our firm dynamic and change in response to the internal and external environments.
5. Our firm focus on critical areas of the business.

Demographic

1. Gender
2. Years of current job
3. Income
4. Qualification