

The Integrative Relationship Between Total Quality Management And Cost Management Techniques In Libyan Industrial Companies

Taher Bensalah*

Abstract

The research aims to study the integrative relationship between total quality management and cost management techniques in Libyan industrial companies and in addition to prepare a literature review survey about TQM and cost management techniques.

The research relies on the use of inductive and deductive methodology, and both approaches are considered. In addition, the research used a structured questionnaire to survey a different sample unit from the entire investigation study. The study community consists of the financial management accountant, the director of marketing department, the managers of the quality control offices and the general managers of all the Libyan industrial companies.

The research finding shows a lack of applied and field research on the process of linking TQM and cost management techniques to improve the level of performance.

This research is expected to contribute to clarifying the complementary importance of Libyan industrial companies between TQM and cost management techniques.

Keywords: TQM, Cost management techniques, Industrial companies.

Jell Code: M41

Özet

Araştırma, Libya Sanayi şirketlerinde Toplam Kalite Yönetimi ve maliyet

* Bingazi University, taherabdben200003@gmail.com

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yönetimi teknikleri arasındaki bütünleyici ilişkiyi incelemek amacıyla yapılmıştır. Buna ek olarak, TKY ve maliyet yönetimi teknikleri hakkında bir literatür taraması ve ölçek geliştirilmesi amaçlanmaktadır.

Araştırma endüktif ve Tümdengelim metodolojisinin kullanımına dayanmakta ve her iki yaklaşımı da dikkate almaktadır. Buna ek olarak araştırmada, tüm araştırma çalışmasından farklı bir örnek birimini araştırmak için yapılandırılmış bir veri toplama aracı kullanılmıştır. Çalışma topluluğu mali yönetim muhasebecisi, pazarlama departmanı müdürü, kalite kontrol ofisleri yöneticileri ve tüm Libya sanayi şirketlerinin genel müdürlerinden oluşmaktadır.

Araştırma bulguları; performans düzeyini artırmak için TKY ve maliyet yönetimi tekniklerini birlikte uygulama süreci üzerinde uygulamalı ve saha araştırma eksikliğini göstermiştir.

Bu araştırmanın, Libya Sanayi şirketleri TKY ve maliyet yönetimi teknikleri arasında tamamlayıcı önemini açıklığa kavuşturulmasına katkı sağlaması beklenmektedir.

Anahtar kelimeler: TKY, maliyet yönetimi teknikleri, endüstriyel şirketler.

Jell Kodu: M41

1. Introduction

Technical development is the foundation of the development of human civilization throughout the ages. The history of civilization is largely composed of mutual interaction between two forces that support and control man at the same time, technology and society. Technology plays an important role in the process of industrialization, as a result of the increasing technical developments and the intensification of competition, the challenges of improving performance have increased.

Technical development has had an impact on public life and productive activities. The characteristics of the modern manufacturing environment, and the emergence of modern management methods, including entrance activity costs costing, timed time entry just in time, TQM entrance, and Cost management techniques, where the emergence of these methods has had a significant impact on the structure of costs in the industrial field represented in the decline direct labor costs as a proportion of total costs, increasing indirect costs, and increasing the value of investments attracting the latest manufacturing systems.

In the context of the development of accounting and administrative thought, the increasing interest in recent years in the field of cost accounting and management accounting of both TQM and Cost management techniques



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as modern methods enables companies and institutions to achieve their goals of reducing costs and maximizing their profitability.

The importance of implementing the introduction of comprehensive quality management in many American, Japanese and European companies has achieved great success, which has raised the performance of the company through the methods of financial and administrative performance evaluation. Therefore, institutions must be keen to practice the management of financial quality as a method of competition between companies and improve performance compared to competing companies.

The outcome of the interaction of cost management techniques with TQM serves are mainly to achieve TQM objectives such as quality improvement, cost reduction, and customer satisfaction. By seeking to reach the quality of the product and the organization as a whole. Thereby, reducing or eliminating of the damage and cost of damage to reduce the total production costs and to achieve the competitive advantage of the organization and to ensure continuous and comprehensive improvement in all sectors of the organization. These to achieve survival, growth and balance in the market and increase productivity and market share, which is reflected in reducing costs and maximize profits and improve the competitive position to satisfy customers.

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This research aims to clarify the importance of the integration of cost management techniques and total quality management. In addition to understanding the complementary relationship between TQM and cost management techniques in Libyan Industrial Companies.

The problem of research is that many organizations are still afraid to enter the modern World of manufacturing for reasons of their accessibility to control markets, pricing decisions. Therefore, inability to control costs, as well as traditional ways of reducing costs. In fact, through cost management techniques, costs can be managed and reduced to cost leadership by integrating the work of these technologies and their service in business organizations.. It also aims to remove obstacles and constraints in the implementation of the TQM principles and to improve companies. Thereby, expanding the extent of improvement as much as possible.

Therefore, this search tries to access to understanding the complementary relationship among TQM and cost management techniques by



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answering research questions and testing associated hypotheses, this will be investigated by answering the following question:

Is there a statistically significant relationship between the components of TQM and cost management techniques in Libyan industrial companies?

2. Theoretical Framework

Quality Management Concept

Despite the many definitions and concepts of quality, there is almost agreement on the name of quality management TQM. Many writers and professional organizations in the field of management have made several attempts to define TQM. For example, James Rilay, vice president of the Guran Institute, who trains and advises on TQM, defined: "a shift in the way the company is managed, which includes the concentration of the organization's energies on continuous improvements of all operations, functions, and all the different stages of work. In other hand, quality is nothing more than meeting the needs of the client (Daradka, Maamoun et al., 2001). (Marsha Sacherin and Rene J. Reiser) defined the quality as "the philosophy of the organization for each individual and the customer's satisfaction through integration of portals, techniques and training, including continuous improvement of operations, resulting in high quality products and services" (Tawfiq, 1996).

Aqeli (2001) pointed out that TQM is a modern management philosophy that takes the form of a comprehensive administrative platform or system that based on the fundamental changes within the organization; thought, behavior, management concepts, management style, performance. In order to develop and improve the components of the organization to reach the highest quality of their outputs of goods and services, and the lowest cost. Thus, achieve the highest levels of satisfaction to customers by satisfying their needs and desires. Quality (2009) defines TQM as a set of long-term strategic of organizations that help the department to provide ongoing improvement initiatives through all production divisions. Where, quality practices integrate and harmonize a number of different management methods and principles. So, the everyone seeks to the quality elements, which are a goal of all parts of the organization. The objectives of TQM are to increase the competitiveness of the enterprise, increase the efficiency of the enterprise by satisfying customers, excellence and excellence over competitors, increase the productivity of the establishment and improve their performance, increase the mobility and



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flexibility of the establishment in dealing with the variables. Al-Daradka and Al-Shibli (2002) mentioned that there are many factors that led to the interest in the overall quality such as the globalization and the opening up of markets globally, increasing competition between the organizations, increasing the trend towards privatization and turning some developing countries into developed countries like South Korea, Taiwan and Indonesia. Through previous definitions of TQM, we reach quality management comprehensive elements:

- Support the senior management of the company to implement TQM.
- Focus on the customer and work to satisfy his desires and reach overall satisfaction.
- Adopting the method of participation and teamwork within the company.
- Adopting the use of statistical methods to detect the quality problems within the company.
- Adopting the process of continuous improvement of quality within the company.

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Cost Management Concept

Basile (2001) defined cost management as "a set of systems practiced by managers in short- and long-term planning as well as cost control". While, Horngren (2006) defined it as "the performance and effort of executives and others to introduce, embed and rationally link costs to both planning and control functions and in the short- and long-term". Among the techniques used in cost management are:

*** Just-in-time**

Morse (2003) considers that the production curve or production on time (Just-in-time) is one of the techniques of cost accounting management, which has been defined as "a comprehensive philosophy of inventory management focus on the policies, procedures and positions of managers resulting in the efficient production of high quality goods while maintaining the lowest possible level of stock. Gamal and Nouredine (2005) considered Lean Production to be based on the exclusion of all inventory types and the reduction of waiting time as activities that do not add value. In addition, Weygandt et. (2013) considered that this technique has several benefits such



as reduction or cancellation of frozen funds in inventory; reduction of damage and thus reduction of damage costs; enhancement of product quality; reduction or cancellation of recycling costs; savings in production costs through improved flow of goods During operations.

*** Activity Based Costing (ABC)**

Basile (2001) explained that ABC technology is based on a focus on activities, where the cost of activities is grouped into complexes called cost pools by allocating cost Activities on products or services according to cost factors based on the cause / effect criterion, which aims to maximize the cost-allocation and maximum accuracy of the allocation. Drury in (2005) defined ABC as "a system that assumes outflows to obtain resource supplies and subsequently consumed by activities, meaning that activities cause costs and products or services meet demand for activities.". Weygandt, et. (2013) defined ABC technical procedures as identification and classification of key activities that involved in the manufacture of certain products; allocation of indirect industrial costs to determine appropriate cost complexes for activity; determination of cost guides for each activity; Indirect costs of each compound cost of activity on products.

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*** Target Cost (TC)**

Gold and Gheban (2007), they saw that TC technology can be implemented in several steps as follows: target price setting; target profit setting; target cost setting; use of value engineering to determine ways to reduce product cost; Continuous cost improvement and operational control; Target cost reduction where the difference between the initial cost of the product, where the target cost is the desired reduction that the organization seeks to achieve to boost its profitability. Horngron (2012) defined TC technology as "a cost management tool in a competitive environment, because it targets three key competitive elements: price, quality and cost, as well as innovation." In order to achieve real cost reduction, Functional.

*** Value Engineering (VE)**

Hilton (2011) defines VE as "the way that organization can reduce the initial cost to the target cost, because each element of the product comes in to determine how cost can be reduced while maintaining quality and performance the product". Horngron (2012) stated that value engineering achieves its target cost targets by identifying improved product designs that



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reduce manufacturing costs and cost of parts; eliminating unnecessary functions that increase product costs. Value engineering is based on functional analysis to identify key functions and preferred characteristics of the product, study its components and parts, and then evaluate alternatives, including product modification or alternative product development, comparing the cost of these alternatives with the consumer wiliness to pay these products.

*** Theory of Constraints (TOC)**

Atkinson and Kaplan (2007) defined it as an administrative approach aimed at maximizing long-term profit through a management that addresses regulatory bottlenecks or scarce resources. While Hilton (2009) explained that the principles of applying the theory of constraints as the level of output achieved at the level of unrestricted resources is determined by the level of restricted system resources and the focus on synchronous flow rather than on energy balance.

*** Balanced Scorecard (BSC)**

Zoelph and Noor (2005) through their strategic vision, they emphasized that organizations should not only focus on measuring the (tangible) financial aspects of performance measurement, but also focus on intangible metrics, Balanced Scorecard technology, to create value for the organization through the integration of its components of current and future opportunities.

3. Aim and Importance of Research

The research aims to prepare a literature review for TQM, cost management techniques, in additional to study the integrative relationship between total quality management and cost management techniques in Libyan industrial companies that may help Libyan industrial companies to discover the importance of integrating between quality management and cost management techniques.

The study taken its importance for the title itself. In addition, highlight the role that TQM can play in raising the quality of operations and products. It also clarifies the importance of using cost management techniques in reducing costs in industrial companies. The importance of this research is attempt to clarify the importance of complementarily between TQM, cost management techniques in the Libyan industrial companies. Provided the opportunity for leaders and managers in the industrial companies to understand the



integration and interdependence relations between TQM, cost management techniques.

4. Scope and Methodology of Research

This research will focus on the complementary relationship between quality management elements and cost management techniques of Libyan industrial companies. The theoretical part will be formed, which includes some general concepts of TQM and cost management techniques. In this way, concepts are based on the relationship between Total Quality Management (TQM) and cost management techniques. The experimental study will be second part of the study, which is limited to Libyan companies (industrial sector) in the western and central region of the country. Because the researcher has knowledge of the industry and language market, making it easy to survey companies and collect data. (Küçük, 2016), stated that sample mass determination very sampling should be performed within systematic steps. The commonly known sampling process consists of five steps which are:

- Definition of the main mass,
- Sample frame,
- Determination of sample size,
- Determination of sampling method
- Selection of sample.

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The basic type of probability sample is the random sample in which every item in the relevant world has an equal opportunity of being selected. The study community consists of the financial management accountant, the industrial staff and engineers, the managers of the quality control offices and the general managers of all Libyan industrial companies operating in the central and western regions according to the industrial industry manual. The mineral sector (2017) of the number of 50 companies with about 5000 terminals, a random sample of about 360 employees were selected according to the schedule reported as mentioned (Küçük, 2016). In this case, a sample of the total number reached 211 is determined according to what he stated (Küçük, 2016).

The study community consists of the financial management accountant, the director of marketing department, the managers of the quality control



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offices and the general managers of all the Libyan industrial companies operating in the central and western regions according to the industrial guide for the industry and minerals sector (2017). The study sample was selected by financial accountants, quality controllers, general managers and industrial engineers, which the researcher can access in light of the difficult security situation experienced by the State of Libya. According to the personal knowledge of the researcher, some the companies that make up the study society, the researcher used the method of direct communication by hand when possible when distributing questionnaires to industrial companies in order to avoid their loss. The researcher also used the training department in other companies to distribute the rest of the forms. The researcher gave sufficient time to answer questionnaires. The period ranged between the distribution of the forms and their collection around 15 days. The number of collected forms reached 220, of which 211 were valid for analysis of the 360 forms, or about 58.6% of the number of distributed forms.

The researcher relies on the use of inductive and deductive methodology, and both approaches are considered. The first is the observation of the phenomenon, to development of scientific hypotheses, and then the final stage of the curriculum. The extrapolation is a test of hypotheses, relying on the methodological deductive Stages. Note the phenomenon under study, where the researcher will extrapolate and review studies scientific research and periodicals related to research, which will help to form a scientific background for different aspects. Then a framework was developed to study the complementary relationship between TQM and cost management techniques. The development of scientific hypotheses for research were prepared in light of the framework and the necessary data were identified through interviews with the company's officials, and the survey list was drawn up, then testing hypotheses.

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The hypotheses have been tested using statistical programs to reach search results and validation test to achieve and evaluate the research objectives in order to determine the possibility dissemination of research results to the study population. Data collection is a very important part of the study of the complementary relationship between TQM and cost management techniques. Data collection is the systematic approach to gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest. Data collection enables a person or organization to answer relevant questions, evaluate outcomes and make



predictions about future probabilities and trends. Data were obtained to achieve the objectives of the study based on two sources of data collection. Secondary sources are Review journals, books and publications related to the subject under study, which examines the integrative relationship between total quality management and cost management techniques.

5. The Research Model

Figure 1 shows the pictorial positions of the research framework. The research framework illustrates the relationship between TQM and cost management techniques.

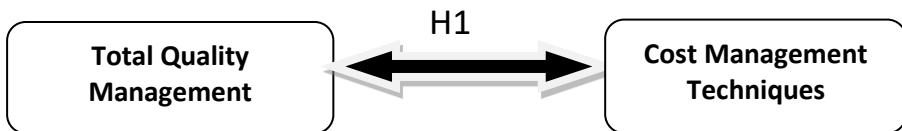


Figure 1. Research Model

Figure 1. The proposed conceptual framework of the study concluded from the above literature review.

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6. Research Hypothesis

Romle,et al. (2015), which they mapping the relationships between quality management practices, human-oriented elements and organizational performance: a proposed framework.

Musran Munizu (2013) studied the impact of total quality management practices towards competitive advantage and organizational performance, with case of Fishery Industry in South Sulawesi Province of Indonesia.

Ijaz & et.al (2012), they aimed at their research to study the relationship between TQM practices and employee satisfaction in Pakistani organizations.

To answer the research problem, the research was based on the following hypotheses

H₁: There is a statistically significant relationship between the TQM and cost management techniques in Libyan industrial companies.

7. Data Analysis



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Within the scope of the research, 6 items were used in the questionnaire where personality characteristics were asked. In the questionnaire where total quality management questions were included a scale of 10 items and cost management techniques questions were included a scale of 16 items. Descriptive factor analysis was conducted in order to determine the integrative relationship among total quality management and cost management techniques in addition to scale factors were related to relevant factors. Factor analysis provides grouping of measures, measuring the validity of factor loads, values, and measures in the form of appropriate analytical results. The Caronbach's Alpha model was used when reliability analysis was performed. A value between 0 and 1 this coefficient is called the Alpha coefficient. Depending on The Caronbach's Alpha, $1.00 > 0.80$ scale is highly reliable (Küçük, 2016).

Validity and Reliability for Total Quality Management

Table 1. The statistics related to total quality management factors and explanatory factor analysis that reveal the factor loadings represented.

The statistics related to total quality management factors and explanatory factor analysis that reveal the factor loadings represented by participants who are surveyed are shown in Table 1. This result shows that the goodness of being above 0.60. Kaiser-Meyer-Olkin measure of sampling adequacy is within acceptable limits ($p < 0.000$). A principal components factor analysis was conducted on the 10 items. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, $KMO = .869$. An initial analysis was run to obtain Eigen values for each factor in the data. Two factors had Eigen value over Kaiser's criterion of one, but the scree plot was clear and showed inflexions that would justify retaining only one factor that explained 42.886% of the variance.

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Table 1. Factor Analysis for Total Quality Management Scale

| Total Quality management | Factor Load | Eigen value | Variance Explanation Rate(%) | Cronbach Alfa | Average | KMO value |
|--|-------------|-------------|------------------------------|---------------|---------|-----------|
| Q5 The company's management sets a strategy to get the lowest costs in the market to reduce cost on the customer | .783 | 4.289 | 42.886 | .848 | 3.96 | .869 |
| Q10 he company's management has the ability to respond to customer needs flexibly to establish long-term relationship with customers. | .736 | | | | 3.92 | |
| Q9 The company's management is keen to respond quickly to customer requirements | .725 | | | | 3.92 | |
| Q4 Management of the company is making radical changes within the organization to develop and improve quality. | .716 | | | | 3.96 | |
| Q3:The company's management coordinates between a number of different management methods and principles to improve quality. | .686 | | | | 4.00 | |
| Q8 The management of the company is keen to meet the needs of customers at all times. | .655 | | | | 3.90 | |
| Q6 The company's management follows the principles of sound economic principles to develop a cost reduction plan. | .654 | | | | 3.99 | |
| Q7 The management of the company follows a cost-oriented approach to resource allocation based on sound economic principles. | .624 | | | | 3.84 | |
| Q2The company has a specialized department to monitor the quality of services provided to the client. | .487 | | | | 4.31 | |
| Q1 The management of the company is keen to address the imbalance that may occur to achieve the total quality required in the product. | .377 | | | | 4.08 | |

Validity and Reliability for Cost Management Techniques

The statistics related to cost management techniques factors and explanatory factor analysis that reveal the factor loadings represented by participants who are surveyed are shown in Table 2. This result shows the goodness of being above 0.60. Kaiser-Meyer-Olkin measure of sampling adequacy is within acceptable limits ($p < 0.000$). A principal components factor analysis was conducted on the 16 items. Question 30, The management of the company is concerned with measuring indicators related to product quality and customer satisfaction, was deleted because its factor loading is below the acceptable factor loading limit 0.30. The Kaiser–Meyer–Olkin measure verified the sampling adequacy for the analysis, $KMO = .876$. An initial analysis was run to obtain eigenvalues for each factor in the data. Three factors had eigenvalue over Kaiser’s criterion of one but the scree plot was clear and showed inflexions that would justify retaining only one factor explained 40.266% of the variance. Table 4.9 shows factor loadings after rotation.



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Table 2. Factor Analysis for Cost Management Techniques Scale

| Cost Management Techniques | Factor Load | Core value | Variance Explanation Rate(%) | Cronbach Alfa | Average |
|---|-------------|------------|------------------------------|---------------|---------|
| Q12. Staff in the Cost Management Section understand the concept and advantages of the ABC-based costing system and the methods of implementation of the system. | .717 | 6.040 | 40.266 | .893 | 4.03 |
| Q16 .The management of the company is interested in measuring the indicators related to profitability | .700 | | | | 3.79 |
| Q19 .The management of the company is concerned with measuring indicators related to product development through continuous training and staff education. | .698 | | | | 3.93 |
| Q11. The company's management provides new practices such as better service quality control. | .696 | | | | 4.04 |
| Q13 .Company management is concerned with cost tracking throughout the product life cycle. | .672 | | | | 3.84 |
| Q14. Non-value added activities are eliminated using the remaining systems, resulting in increased profitability. | .665 | | | | 3.90 |
| Q18. In developing the company's strategic plan, performance indicators are taken into account in financial services, customer service, innovation, training and product development. | .664 | | | | 4.04 |

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Correlation Analysis

The correlation analysis of relationship among total quality management and cost management techniques and calculated. The major statistical measure of the relationship is the correlation coefficient, where the correlation analysis is primarily concerned with finding out whether a relationship exists and within determining its magnitude and direction



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(Saunders, 2011). In order to know the most contributory of this relationship between the variables, the multiple regression was conducted. (Hair, Anderson, Tatham, & Black, 1998; Saunders, 2011; U. Sekaran, & Bougie, R. , 2016), they described the multiple regressions as a statistical technique to predict the variance in a single dependent variable caused by the effect of more than one independent variable. In other words, correlation indicates to the existence of the relationship between the variables.

In the study, the correlation between relationship among total quality management and cost management techniques is analyzed by Pearson correlation analysis, which as shown in Table 3. Pearson Correlation analysis is used to measure the level of linear relationships of two continuous variables. In other words, it investigates the meaningful relationship between two variables (Kalaycı, 2010). Pearson correlation has been used to test the relationships between variables in the study.

Table 3. Correlation Analysis.

| | | | |
|--|---------------------|--------|--------|
| | | 1 | 2 |
| Total Quality Management | Pearson Correlation | 1 | .717** |
| Cost Management Techniques | Pearson Correlation | .717** | 2 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | |

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A statistically significant and positive relationship was found between the two variables, where a correlation between total quality management and cost management techniques was found 0.809**, which main there is a statistically significant and positive relationship (Küçük, 2016). In this case, there is a statistically significant relationship between total quality management and cost management techniques. Therefore, H₁ hypothesis is accepted

8. Conclusions

This study taken its importance from title itself. Where, the study title was the integrative relationship among total quality management and cost management techniques of the Libyan industrial companies. This research aims to review the literature of TQM, cost management techniques in the Libyan industrial companies. Also, highlight the relationship between variables in the framework of alternative strategies based on previous literature. In



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addition, the research used a structured questionnaire to survey a different sample unit from the entire investigation study. This data collection tool included a symbolic and systematic question on research issues. All survey data was studied and investigated using SPSS software, then evaluated by discussion.

This research concluded and showing the principles of total quality management within the business and industry organizations. Spotlight on the concepts and techniques of cost management and its role in improving and measuring performance. Highlight the potential of the integration relationship of TQM and cost management techniques on organizational performance. Also give a detailed explanation about ideas related to the concept of performance and searching about ways of measuring it, as well as given a detailed explanation about reality of the Libyan industrial companies and its location of theories, accounting and administrative literature.

The research is new adding in field of integrations relations, because of Lack of applied and field research on the process of linking TQM and cost management techniques to improve the level of performance. This research is clarifying the importance of complementarily between TQM and cost management techniques and their effect on the performance improving of the Libyan industrial companies. This study given and provided the opportunity for leaders and managers in the industrial companies to understand the integration and interdependence relations between TQM and cost management techniques.

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9. Discussion

The main purpose of this study was to investigate the relationship between total quality management, cost management techniques and This study, evaluated the correlation between total quality management and cost management techniques in additional to Pearson Correlation Analysis has been done.

The tests result show that there is a statistically significant and positive relationship between total quality management and cost management techniques, which represented in research by H_1 .

The finding shows that the respondents believe that there is a positive relationship between the total quality management applications and cost management techniques. Which means that there is deep understanding that



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the implementation of total quality management orientation and cost management techniques highly effect each other in industry sector, this opinions and awareness of employees supported by results of Pearson Correlation Analysis, which provide us with evidence of positive relationship between quality total management and cost management techniques. This results confirm and agree with some international studies like (A. Seetharaman, 2015; Rallis, 2012).

The research finding shows that all the paragraphs that measure the performance improvement of the industrial companies got high mean, this indicates that the performance is improving in these companies. The results also show that TQM has a significant and positive relationship with improved performance. Which means that adopting TQM practices usually results in improved performance. This conclusion has been demonstrated by the study result, which shown that the improved performance and quality are positively correlated with the organizational performance improving. In addition, its suggesting that TQM can be used as an effective means of improving organizational performance. This is consistent with the (Kuçuk, 2016) study, he showed that the strategic priorities to achieve the competitive advantages of the company and improve performance. Where, nowadays the technology is the main focus of researchers, because it is no longer limited to the quality of products or services provided to customers, but extended to help organizational structures, system processes, procedures and human resources. The results of the study showed that TQM is applied in Libyan industrial companies

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Study finding is consistent with the results of (Cooper & Raiborn, 2002), which showed that the ability of companies to compete depends on their ability to provide products with high quality and high levels of job performance at the lowest possible cost, this can be achieved only by balancing cost, quality and functionality.

The study finding have been agreed with many studies in field, the most important of which are:

(Romle,et al, 2015), which they mapping the relationships between quality management practices, human-oriented elements and organizational performance: a proposed framework. In fact, the discussion of quality entails a variety of views and orientations of the different people, with different things and the way it defined. Previous investigations do not give much evidence on



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how precisely quality management practices (QMPs) affect organizational performance and it remains questionable. Furthermore, there is no a clear consensus on the comprehensive model for QMPs, organizations were blurred to adopt the real QMPs model in orders to avoid its unsatisfied outcomes. This paper presents the interrelationships between QMPs, human-oriented elements, and organizational performance. Through this approach, the implementation of QMPs has a direct impact on organizational performance and human-oriented elements as well as mediating effect of human-oriented elements on the links of QMPs and organizational performance. Little known about studies that has tested all these variables in a single model of QMPs and organizational performance. This gap has generated a new call for a research to simultaneously examine the influence of these variables in the service sector using a structural equation modeling.

(Musran Munizu, 2013) studied the impact of total quality management practices towards competitive advantage and organizational performance, with case of Fishery Industry in South Sulawesi Province of Indonesia. This study attempt to test the effect of Total Quality Management (TQM) practices towards competitive advantage and organizational performance. The respondents in this research are the managers of fishery companies. The study utilized primary data, which is obtained through questionnaire. The number of population was 66 fishery companies in South Sulawesi Province, Indonesia. Random sampling is used in the study. 55 complete questionnaires were returned as a final sample. Three hypotheses have been developed through literature review and tested using Path Analysis performed by SPSS 18.00 software. The results show that TQM practices have positive and significant effect both on organizational performance and competitive advantage. Competitive advantage has a positive and significant effect on organizational performance. Organizational performance is more influenced by competitive advantage than TQM practices.

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Ijaz & et.al (2012), they aimed at their research to study the relationship between TQM practices and employee satisfaction in Pakistani organizations. The study was conducted on 243 staff members working in six institutions. The results of the study showed the positive and significant impact of TQM practices on employee performance and job satisfaction, which results in greater commitment, motivation and reduced absence.



10. Recommendations

In the light of the above findings and limitations, this study recommends the following

- * Conduct further studies on all areas, as well as include more companies in Libya.
- * The study also recommends that Libyan industrial companies should continue to implement the TQM system, because of their positive impact on improving their performance.
- * The necessity of the continuation of the Libyan industrial companies in the application of cost management techniques, and keep abreast of developments in these technologies and choose what suits the company.



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