

# The Role of Total Quality Management in Achieving Competitive Advantage: A Pilot Study at the University of Maysan

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Received: 07 February 2022 Accepted: 26 April 2022 Published: 30 May 2022

Abstract: The concept of total quality management is one of the relatively modern management concepts that the departments of all organizations in the industrially developed countries emphasized, as well as many organizations in the developing countries and worked on applying it, including higher education institutions in order to raise the level of their performance in order to confront the forces affecting their work, including competition between Public and private universities and between national and foreign universities, the study aims to find out the effectiveness of total quality management and its role in achieving the competitive advantage of organizations.

Keywords: Total Quality Management, Competitive Advantage.

# 1. INTRODUCTION

The concept of total quality management is of great and wide importance in various scientific and practical circles, and the twenty-first century has become metaphorically called the "era of total quality". Therefore, many production and service organizations have sought to consolidate the basic concepts of total quality management because it is one of the main pillars of its success, because Experience has proven that there is a strong relationship between consolidating the philosophy of total quality management and increasing its profits, productivity, quality of services, and enhancing its competitive reality in the market in light of strong competition, by working to gain competitive advantages, distinguishing the organization from other organizations, and thus the need to provide the best products and services to reach Customer satisfaction and work to anticipate their dreams and aspirations for the best while taking care to reduce the costs of these products and services.

The emergence of total quality management as a modern management concept began during the second half of the twentieth century, on the grounds that interest in total quality has become something necessary for the progress and success of the organization; Rather, to



distinguish it from other institutions so that the institution becomes dyed with a competitive color. (Qandil, 2008, 2) The challenges that the world has witnessed, represented by modern technological developments, fluctuating business environment, and fierce competition, have imposed on institutions to work on applying various modern trends in management, in an effort to provide the best services and products in order to meet the needs and expectations of customers, as quality is the main way to achieve this and thus achieve the advantage Competitiveness. (Assaf: 2015, 211)

**Research problem**: Achieving the competitive advantage of business organizations is based to a large extent on the quality of the services they provide to their consumers, and since the concept of total quality means the suitability of these organizations to the surrounding environment from the point of view of their beneficiaries and affiliates, Accordingly, the research problem is summarized in the following question:

The importance of the research: The importance of the research stems from the importance of the topic itself, in two ways:

1-Scientific importance: It is represented in knowing the conceptual framework of total quality management and its impact on achieving the competitive advantage of the organization.

2-Practical importance: It is represented in knowing the extent of commitment to applying total quality management by organizations.

#### **Research aims:**

1-Knowing the effectiveness of the total quality management system, which achieves competitive advantage.

2-Submit proposals and recommendations that may contribute to achieving competitive advantage.

#### **Research assumes:**

1-The first main hypothesis: There is a statistically significant relationship between total quality management and competitive advantage in the researched organization.

2-The following sub-hypotheses emerge from them: There is a statistically significant relationship between total quality management and time.

#### The first topic: total quality management (the Independent variable)

The concept of quality has developed historically, starting from a focus on quality, which means examination and control of specifications, which were the basics of quality at the end of the twentieth century. In today's world, quality means product and service quality as perceived by the customer, and it also means the quality of operations in addition to the quality of environmental matters that It affects the product and is affected by the characteristic and activity of the business.

It represents a set of features and characteristics of the product that determines its suitability to achieve the purpose for which it was made available to satisfy the expected desires of the



consumer, which are the standard specifications that are the main determinant of quality, which constitute basic pillars on which the quality of production and the quality of services are based. Through these basic pillars, the required development processes can be made to meet the purpose that A specific product is used in it, and quality is also defined as fulfilling the intended desire. (Al-Shatwani, 1997, 337)

# The Importance of quality:

With the increase in competition, and with the rise in the level of customer requirements, organizations have realized that they can make quality a source of their competitiveness. Quality is important for three main parties:

**First** :**The Organization:** The importance of quality products and services for the organization is evident in the following points:

**1-The public image and reputation of the organization in the markets:** Failure to allocate the necessary attention to quality may lead to the destruction of the organization, the reduction of its commercial participation in the local and global markets, and the dissatisfaction of its customers with its products.

**2-The degree of confidence in its products:** Poor design of the products may lead to accidents for the users of these products, which will cause the organization to be held legally accountable, such as the occurrence of a car accident due to the poor design or manufacture of the brake system.

**3-The level of productivity:** the quality of the environment, the products negatively affect productivity, through the production of a certain non-marketable commodity in addition to the costs of repair.

**4-Cost:** The poor level of quality leads to an increase in the costs of the organization, through an increase in rejected and defective items, in addition to the cost of losing workers and their departure to the products of competing institutions.

**5-Increasing profits and market share:** The profits resulting from quality represent 22% of the organization's capital. Quality also contributes to raising the market share by increasing customer satisfaction at the level of its products.

**Second :- Customers:** The purchase decision depends on the level of quality of the product or service provided to the customer, who is willing to pay a high price for throwing away a product, provided that it is of good quality. The importance of quality for customers is evident through the following two elements:

**1-Satisfaction:** No industry can survive or continue unless the products it offers and markets are of good quality and satisfy the desires and needs of customers.

**2-Loyalty:** Retaining a customer already exists and ensuring its loyalty costs five times less than acquiring a new customer. Ensuring customer loyalty can only be achieved by providing goods and services that meet their desires and needs.



**Third :-** Workers: The application of the quality perspective in the organization develops the spirit of responsibility among individuals by encouraging them to make decisions and develop their collective competencies. The quality approach is the ideal factor for every positive change in the organization. As well as the costs of everyone's efforts in order to achieve the required quality of products. The importance of quality for workers takes the following aspects:

1-Contributing to coordinating the management process: The quality policy proposes a new method of work in modern facilities represented in the development of horizontal communication networks between the various departments through the relationship of the supplier, the internal customer, and participation in solving work problems. (Hassan Ali, 1999, 251)

Fourth: Quality Objectives: Quality Objectives from the Customer's Point of View "The Customer's Desires" Objectives of Quality from the Institution's, Company's, Factory's or Service Provider's Point of View.

1-Quality objectives from the customer's point of view "The customer's desires: The customer has desires and expectations in the product or service that he receives, which in the end represent what increases the concept of quality, and among its objectives you can call it quality objectives for the customer, which are.

2-An efficient product that meets the purpose for which the customer bought it, suitable price, customer capabilities "the lowest price", after-sales services and availability of spare parts, availability of warranty on the product, warranty period, confidence in the product, availability of warranty on the product "warranty period", availability of the product in Markets and access to it, the availability of communication channels between the customer and the diamond, the company or the service provider, quality goals from the point of view of the institution, the company, the factory or the service provider, fulfilling the customer's desires and fulfilling a claim, even reaching the stage of dazzling the customer, reducing production costs and achieving a competitive price for the product or service.

# The second topic: competitive advantage (dependent variable)

Modern business organizations face intense and intense competition in light of the current changes, which prompts us to ask about the reasons for the increased intensity of competition, and about the modern trends that organizations seek to apply in order to address intense competition. Therefore, it was necessary to address the concept of competitive advantage, the revenues of its development, and the criteria for judging its quality. The concept of competitive advantage There are many points of view on the definition of competitive advantage, so some definitions were mentioned as follows:

Porter defines the competitive advantage as arising when the organization finds new methods that are more effective than those used by competitors, as it is able to embody this discovery in the field and in another sense, and merely to create a process of innovation in its broadest sense, (Abdul Aziz, 2006, 36)

It is also defined as the skill, technology, or distinguished resource that produces the production of values and benefits for customers that exceed what competitors offer them and



confirms its distinction and creation from these competitors from the point of view of customers who accept this distinction, as it achieves more benefits and values for them that are superior to what other competitors offer. (Al-Hadary, 2003, 19)

1-The perceived value of the customer: the competitive advantage is achieved if the customers realize that they are working as a result of their dealings with the organization at a value higher than.

2-Discrimination: Competitive advantage can be achieved by offering a good or service that competitors cannot easily imitate.

Through the previous definitions, we conclude that there are those who focus in defining the competitive advantage on its essence, which is creativity or value creation for the customer, or on the competition strategy or the characteristics and quality of the product, but it is agreed that the competitive advantage represents a point of difference for the organization and distinguishes it from other competitors Which may qualify it to achieve many competitive advantages, including obtaining profits through cost reduction, or through the continuity of the selling process to customers for specifications they believe in, such as safety, reputation, transparency, and others.

First: The reasons for the interest in competitiveness: The increasing interest in competitiveness due to several reasons and changes that have taken place and are still taking place in all economic, political, social and scientific fields, the most important of which we mention: The great developments that the world has witnessed in recent decades in economic thought regarding It is related to the determinants of competitiveness, such as the development of theories of date and trade, changes in the theories of production, distribution and warehousing management, the emergence of the theory of total quality management, competitiveness rather than competition, developments at the scientific and cultural level, where the traditional concept of sources of excellence and excellence moved from capital intensity to knowledge and skills. Infidel workers and management, political developments, new directions, the emergence of a unipolar world, and the strengthening of the role of international institutions, that globalization will enable the global economy to achieve higher economic growth. Anim Smith, in his book The Wealth of Nations, explained this hypothesis, and showed that levels of productivity and growth are two dimensions of specialization, and specialization depends on the breadth of the market, and that the international market for commodities allows for increased specialization, higher returns, and increased levels of productivity and growth rates.

Second: Competitive factors: There are three basic factors that determine the degree of competition, namely: (Abu Qahf: 1996, 26)

1-The number of institutions that control the supply of a specific product. The greater the number of institutions, the more intense the competition between them, and vice versa.

2-The ease or difficulty of some establishments entering the market. The easier it is for some new establishments to enter the market to produce and market a specific product, the more intense the competition, and vice versa.

Journal of Corporate Finance Management and Banking System ISSN: 2799-1059 Vol : 02 , No. 03 , April-May 2022 http://journal.hmjournals.com/index.php/JCFMBS DOI: https://doi.org/10.55529/icfmbs.23.64.75



3-The relationship between the volume of products that individuals demand in the market and the quantity that institutions can provide and display of these products.

#### Third: the importance of competitive advantage

The Importance of Competitive Advantage Institutions always seek to adopt trends through which they aim to define a competitive position that distinguishes them from their counterparts in the sector in which they operate: (Al-Ghalabi and Idris, 2007, 309)

1-Creating value for customers that meets their needs and guarantees their loyalty, and supports and improves the image and reputation of the institution in their ears.

2-Achieving strategic distinction from competitors in goods and services provided to customers, with the possibility of distinction in resources, competencies and strategies adopted.

(Al-Bakri, 2007, 203)

Fourth: Types of Competitive Advantage: There are two main types of competitive advantage: the internal competitive advantage and the external competitive advantage. It should be noted that each type can be obtained as follows: (Samira, 2012, 97)

a-The internal competitive advantage: when the enterprise gains preference in terms of controlling manufacturing costs and managing or managing the product, this preference gives the product the ability to offer a lower price compared to other competitors, and it may result

from good productivity.

b- The external competitive advantage: This advantage creates value for the buyer, either by reducing the costs of use, or by improving the performance of use and providing a product of distinguished quality.

**The third topic:** The theoretical relationship between the two variables, total quality management and competitive advantage: Some dimensions of the relationship between the entrance to total quality management and competitive precedence can be clarified through the

following: (Al-Jasmi, 2008, 15) 1-Adopting the approach of total quality management will enhance the ability of the organization to achieve customer satisfaction and retain it, and thus its impact will be reflected in increasing the market share of the organization, allowing it to achieve economies of scale.

2-The entrance to total quality management achieves a good reputation for the organization and increases customers' awareness of its image, which will achieve an increase in the market share of the organization and its impact will be reflected in reducing costs due to achieving economies of scale.

3-Working close to the customer as one of the basic principles of total quality management will allow the organization to identify potential changes in the needs and desires of customers and increase the possibility of responding quickly to those changes in the characteristics and specifications of products, which will in turn be reflected in achieving the primacy of speed.



#### The fourth topic: the methodology used in the field study:

This study aims to know the importance of total quality management and its role in achieving the competitive advantage in the researched organization.

**First - the study method**: In support of the theoretical study, the analytical descriptive approach was used, which relies on the study of the phenomenon as it exists in reality, and this approach is not satisfied when collecting information related to the phenomenon in order to investigate its various manifestations and relationships, but rather goes beyond that to analysis, linkage and interpretation, to reach conclusions, based on it. The proposed perception, and this method is defined, is that type of research method by which it is possible to know whether there is a relationship between two variables, and from there knowing the nature of that relationship.

Second:- the study population and sample: The study population is represented by the University of Maysan for the academic year 2020-2021, while the study sample is represented by a number of employees and workers at the university with their various .functional specializations

**Third- The study tool:** The questionnaire was used due to its multiple advantages. The questionnaire was designed specifically for this research to be valid for collecting data from the respondents, taking into account its consistency with the objectives and hypotheses of the study. Therefore, the form was as follows:

1-**Through it, the purpose of conducting**: this research and its framework were highlighted, in order to encourage the study sample to answer without fear and without reservation, as it is directed only for the purpose of scientific research.

2-**The first part**: relates to the personal (demographic) data of the study sample in terms of (sex, age, academic level and professional experience)

**Fourth:Procedures for distributing the questionnaire and collecting data:** After completing the preparation of the questionnaire in its final form, we visited the University of Maysan, the place of the field study, and distributed (50) questionnaires to employees and workers in the university in various colleges and departments, and we communicated with them to provide explanations and necessary information for the purpose of clarifying and facilitating the process of filling out the forms. After a period of the distribution process, we collected the distributed questionnaires, as we retrieved (45) questionnaire out of (50), and there are (5) questionnaires that were considered invalid.

**Fifth: the statistical methods used:** To achieve the objectives of the study and analyze the collected data, the Statistical Package for Social Sciences (SPSS) program has been relied upon. Among the statistical treatment methods that have been adopted are the following:

1-Arithmetic mean: The arithmetic mean is considered one of the most important measures of central tendency, through which the attitudes of the individuals of the institution under study towards each paragraph are identified. We will also rely on it in the process of arranging the questionnaire items according to their importance from the point of view of the respondents to the questionnaire in the institutions under study.



2-Standard Deviation: It is used to find out the extent to which the attitudes of the individuals of the institution under study are dispersed from their arithmetic averages. The closer its value is to zero, this means that the answers are concentrated and not dispersed. It is also useful in the process of arranging the paragraphs in favor of the least dispersed in the case of equal arithmetic mean.

**3-Coefficient of Variation**: It is used to indicate the degree of stability of the answers from their arithmetic mean.

4-**Percentage:** This is in order to know the percentages of individuals in the institution under study according to several characteristics, and the percentages of choosing each paragraph of the questionnaire in order to give a clearer picture of the description of the data.

Sixth:- Steps of conducting the study: Data sources. The data sources in this study are divided into two types, namely:

1-**Primary data:** It is represented in the study tool (questionnaire) in order to identify the reality of the application of total quality management and the level of achieving competitive advantage at the University of Maysan

2-Secondary data: It is represented in previous studies, books, references, research, and letters spread across the Internet and related to the subject of the study.

Seventh: Analysis and interpretation of the results of the field study (sample description): (50) questionnaires were distributed, which represents the number of the sample to employees and workers at the University of Maysan in their various specializations.

Table (1) Distribution of the study sample									
recover y ratio	e refurnable		excluded from the forms	Retrieve d forms	The distributed number of forms				
90%	45	3	2	47	50				

Table (1) Distribution of the study sample

Source: Prepared by the researcher based on the results of the field side

In order to describe the study sample, the researcher proposed to detail it in Table (1), as it is clear from this table that most of the sample members are among the people who are most familiar with the study variables). Table (1) also shows that most of the sample are holders of university degrees, as their percentage was (69%), which is the highest percentage among the other percentages, and as table (1) shows the number of years of service, as the category (11-15) got the highest The ratio is (37.8%), and this is a good indication that most of them have practical and professional experiences, and from the aforementioned information it is clear that this sample may be the appropriate sample to answer the questions of the scale prepared for this study.

Table (2) Characteristics of individuals on scholarships at the University of Maysan

sex

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feminine				male					
0	Repetition	n	% The ratio		Repetition				
33.3			15		66.7		30		
Age categories									
and over 50		40- 50			40-30		30 Less		
The ratio	Repetiti	The ratio	Repetition 15		The ratio	Repetiti	The ratio	Repetiti	
%	on	%			%	on	%	on	
2.2	1	33.3			46.7	21	17.8	8	
	The level								
Postgraduate		colleg	collegiate		secondary		Medium		
The ratio	Repetiti	The ratio	Repetition	n	The ratio	Repetiti	The	Repetitio	
%	on	%	Repetition	11	%	on	% ratio	n	
11.1	5	68.9	31		17.8	8	2.2	1	
	Years of service								
more than 16		11:15			5:10		less than5		
The ratio	Repetiti	The ratio	Repetiti	Т	'he ratio	Repetiti	The	Repetitio	
%	on	%	on		%	on	% ratio	n	
11	5	37.8	17		35.6	16	15.6	7	

#### The third topic: the correlations between the variables of the study

Through this research, the first main hypothesis and its sub-hypotheses will be tested, which states that (there is a significant correlation between total quality management and the competitive advantage of the organization). Table (3) was prepared, which indicates the existence of a significant correlation between total quality management and competitive advantage, as the total index was (0.866), and this proves the validity of the first main hypothesis.

Table (3) Relationships between total quality management and competitive advantage.

Independent variable	
Dependent variable	Total Quality Management
Competitive advantage	0.866*
N=45	: P ≤ 0.05*

Analysis of the influence relationships between the variables of the study. The content of this relationship represents a test of the second main hypothesis of the study, which indicates that "there is a significant effect of total quality management on the competitive advantage of the organization." Table (3) of the regression analysis indicates that there is a significant effect of total quality management variable. in competitive advantage as a dependent variable. This is according to the calculated (F) value of 129.224), which is greater than its tabular value of (4.042), and is significant at the level of (0.87) with two degrees of freedom (1.43), as long as the calculated (T) values are significant for the independent



variable, amounting to (0.434), which is greater From its tabular value (1.665), this reflects the significance of the model, and it is clear that the coefficient of determination (R2), which has a value of (0.750), indicates that the ability of the independent variable to explain (75%) of the differences occurring in the dependent dimension, and that (25%) is due to variables not included in the model. Thus, the second main hypothesis is accepted.

Table (4) The relationship of the impact of total quality management on competitive advantage.

Independent variable	Total Quality Management		F		Т		
dependent variable	Bo	<b>B</b> 1	calculated	Tabular	calculated	Tabular	R <sup>2</sup>
Competitive advantage	0.866	0.975	129.224	4.042	0.434	1.665	0.750
N=45	<b>d. f: (1.43)</b>			P≤0.05			

# 2. CONCLUSIONS AND RECOMMENDATIONS

#### **First: conclusions**

# The research enabled us to come out with many conclusions on the theoretical and applied sides:

1-Total quality management is one of the modern management concepts and one of the successful means in achieving and developing the competitive advantage in institutions and business organizations.

2-Total quality management can be considered as a modern management method in institutions that serves their competitive position, after it has proven to be one of the means and methods of achieving the various objectives of the institution.

3-The pillars of total quality management are characterized by integration. It is not possible to apply one principle and abandon the other, as each principle complements the other.

4-The application of total quality management requires continuous education and training for all human resources working in the institution, because the success of quality management depends on the human resource.

# The applied side: As for the applied study, it has been shown:

1-Most of the requirements and means of adopting total quality management are available at the University of Maysan, according to the viewpoints of the respondents.

2-The results of the field study showed that the administrative leadership at the university is working to achieve continuous improvement as well as improving the quality of educational services provided to the customer.



3-The university seeks to achieve the principle of cooperation and collective participation of workers, and it is interested in training them and working to include them in training courses to develop their skills and raise their efficiency.

4-It is necessary to work to increase the awareness of workers and employees in the university about the importance of total quality management and its role in achieving competitive advantage.

#### Second: Recommendations

# Theoretical aspect: Based on the results of the study, a set of recommendations were identified in this aspect, as follows:

1-The need to pay attention to the continuous development and improvement of all activities, especially in light of the challenges of the era of speed, technology and the knowledge economy.

2-Work to create the appropriate organizational culture for the application of total quality through continuous improvement and according to the requirements.

3-Paying more attention to the quality of the product to achieve customer satisfaction, as the latter is the source of the organization's profitability.

4-Work to achieve teamwork in business organizations due to its great role in creating creativity and excellence in operations and products.

# The applied side: Through the field study, a number of recommendations were proposed as follows:

1-The necessity of supporting research and development activity and establishing a special department for it at the University of Maysan, and allocating all the necessary resources for it due to its importance and need for the university.

2-The need for higher managements in the university to raise awareness among employees of the importance of total quality management as an applied management method that works to improve performance and quality to achieve goals and thus the competitive advantage.

3-Work to achieve worker and employee satisfaction as the critical element in the success of applying total quality management at the university.

4-Work to adopt a culture of quality, disseminate it, and work with it, starting from the higher administrations, through all the workers and employees at the University of Maysan.

5-The need for the university's administrative leadership to apply total quality and view it as a future strategic basis, if it works to achieve continuous improvement in all activities and thus improve the quality of its services provided to customers and gain their satisfaction and achieve the competitive advantage of the university within the atmosphere of escalating competition.



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