

The Impact of Total Quality Management on Academic Accreditation (An Analytical Study of Some Employees at the University of Nahrain, College of Business Economics)

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Abstract

The research aimed to know the total quality management and its impact and relationship with academic accreditation in higher education institutions. The research community included the administrative staff and teaching staff at the College of Business Economics - University of Nahrain, and to determine the role of the research variables of total quality management and its dimensions (supporting senior management, continuous improvement, focusing on students, building work teams, training and empowering employees) and the second variable, academic accreditation, in the success and education of educational institutions and achieving scientific and educational goals in terms of job qualifications and their impact on the institution in addition to improving the solidity of these educational institutions. The research shed light on the academic accreditation system, which is considered one of the main and important systems in managing the activities and programs of higher education institutions. To achieve the research objectives, the descriptive analytical approach was used, as studies and research related to the research variables were used in the theoretical aspect. As for the practical aspect, the researcher used the questionnaire to analyze and describe the paragraphs of the questionnaire and the dimensions and variables of the research, and to shed light on the variation and distribution of these elements in the College of Business Economics. The researcher formulated a set of hypotheses that show the relationship of correlation and influence between the variables. The researcher distributed the questionnaire to the research sample of the teaching and administrative staff, whose number was (136). To analyze this questionnaire, the statistical program SPSS and AMOS, one of the SPSS add-ons, were used. This program was used to reach the results and confirm the validity of the hypotheses. In conclusion, a set of conclusions and recommendations were reached, the most important of which is that the teaching staff enjoys efficiency and excellence, which qualifies them to provide a distinguished scientific level. In addition, the college suffers from a shortage in periodic maintenance programs for equipment and means. As for the recommendations, we summarize them by providing material and moral support to faculty members to participate in scientific research and publish in prestigious journals. And encouraging cooperation between departments and various research centers to enhance interdisciplinary research.

Keywords: *Total Quality Management, Academic Accreditation.*

Introduction

Total Quality Management is one of the most recent management concepts, as it is based on a set of concepts and standards adopted by the institution to achieve the best presentation. It gives educational institutions total quality to process each information source and training course result, and sets principles for estimating data sources and educational interaction results (Rabie, 2012: 219). Total Quality Management is one of the most important trends that attract great attention from leaders, managers, practitioners and academic researchers as one of the prevailing and desired administrative concepts in the current period due to its great contribution to developing society and advancing it towards the better to keep pace with the renewed needs that appear in human societies by providing it with technical cadres qualified scientifically and practically and by preparing leaders for the future in various fields (Al-Karaawi, 2014: 85). In addition, comprehensive quality is considered a tool for achieving privilege in all fields, more specifically in education, where academic excellence was a central value in higher education and accreditation was raised to develop and improve the quality of education in the academic world (Almurayh: 2022). Therefore, it has become very important that we do our utmost to provide all the necessary energies to achieve a qualitative leap in education in general and higher education and its institutions in particular. All of this happens in the shadow of a known society capable of employing science, knowledge and modern technology to provide distinguished educational and research services that keep pace with modern advanced systems, including academic accreditation and comprehensive quality systems (Hafez, 2015: 125).

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Chapter One

First: Research Problem

Implementing Total Quality Management (TQM) has become a crucial necessity for the survival and continued excellence of higher education institutions, especially in light of their continuous efforts to improve. The relationship between TQM and its role in developing academic accreditation, as well as its application in higher education institutions in Iraq, is of great importance. This is due to the large number of public and private universities in the country, as well as the diversity of academic disciplines that have been introduced, alongside leadership changes in higher education institutions that have led to instability in administration and academic accreditation. Furthermore, TQM has not received significant attention from administrative leaders and academics in educational institutions in Iraq.

Therefore, the research problem can be summarized by the following main question: Is there a statistically significant correlation and impact between Total Quality Management and academic accreditation at Al-Nahrain University, College of Business Economics?

Second: Importance of the Research

The main objective of this research lies in understanding the concept of Total Quality Management (TQM) and academic accreditation systems, which will help determine the extent to which educational institutions in universities achieve their goals. It will also highlight areas that need strengthening and areas of weakness that need to be addressed. This research will aid higher education institutions in coping with the changes and challenges surrounding them by enhancing their knowledge of strategic planning and its dimensions. Furthermore, it will benefit researchers, academics, and staff in various institutions by supporting their personal development. The topic is timely, as it has recently begun to emerge in educational and university institutions in developed countries. The need to apply modern and advanced management concepts to achieve institutional goals has become critical, in addition to the pressing necessity of applying academic accreditation in educational institutions to keep up with other educational institutions around the world.

Third: The Purpose of the Research

The main objective of the research is to test and determine the relationship between total quality management and academic accreditation in higher education institutions, to identify total quality and academic accreditation as important factors in all higher education institutions, and to review the types of academic accreditation and the obstacles that hinder the application of total quality management. In addition, Identifying the strengths and weaknesses in the application of total quality management and academic accreditation in educational institutions, the scientific desire to study a vital topic related to total quality management and its relationship to academic accreditation, and increasing interest in identifying ways to help develop total quality management and improve academic accreditation in Iraqi higher education institutions.

Fourth: Research Objective

This research assumes that there is no statistically significant positive correlation and impact between TQM and academic accreditation. In other words, the effective adoption of TQM will lead to the enhancement and development of academic accreditation at the University of Nahrain, College of Business Economics.

Fifth: Research Population and Sample

The research community consists of two types of jobs (administrative, academic) who work at the University of Nahrain, College of Business Economics, where a simple sample of (136) employees in the organization under study will be selected from this class.

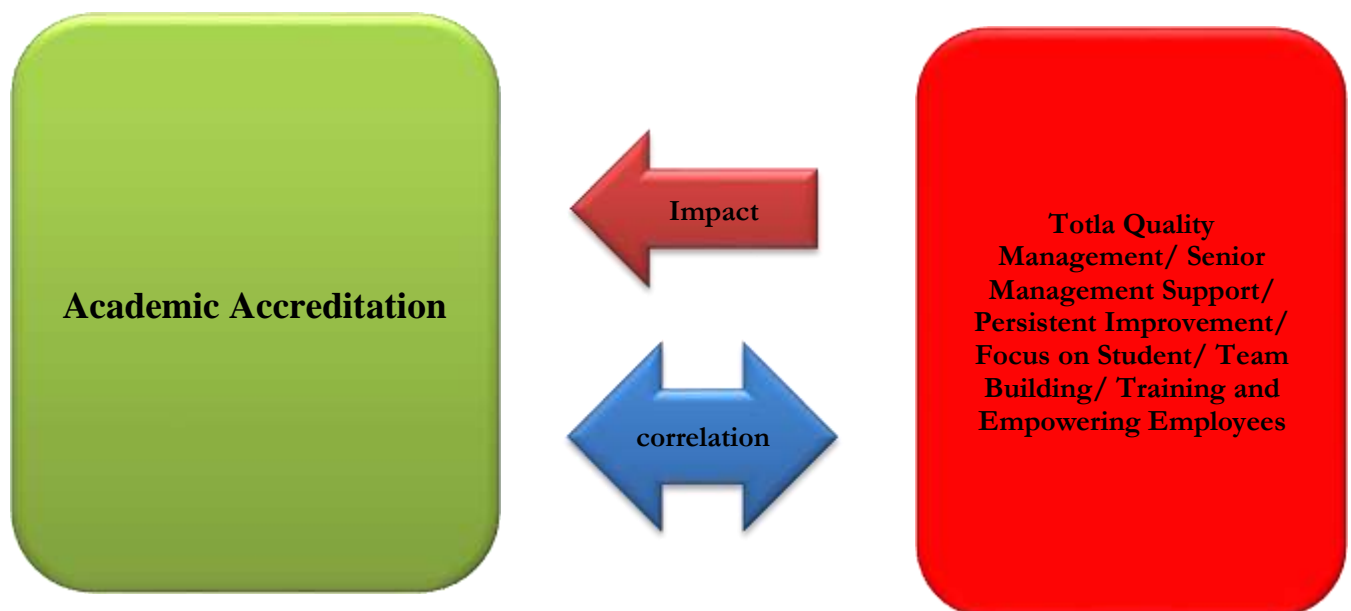
Sixth: Data and Information Sources

In order to achieve the research objectives, information was collected using the following methods: The first aspect: The theoretical and academic aspect: We can rely on all available local, Arab and foreign sources that include scientifically validated research and studies, books and a number of published research papers on the study topics.

The second aspect: Practical and applied: Statistical equations were used to identify the impact of total quality management on academic accreditation at the University of Nahrain, College of Business Economics. The statistical method was used through the program (V26 SPSS), (Microsoft Excel 2010), to reach the results.

Seventh: Research Model

The researcher used a five-point Likert scale to classify the respondents' answers to each statement in the questionnaire. Accordingly, the researcher built the hypothetical plan for the research that clarifies the nature of the relationship between the variables of the current research, as shown in Figure (1).



Chapter Two: Theoretical Review

First: Total Quality Management Concept

In the theoretical framework of Total Quality Management (TQM), it is known as a process that was successfully applied in industries in the United States in the 1980s. Using this process, many companies, such as Texas Instruments, Xerox, IBM and Motorola, were able to improve their business positions by overcoming threats from global competition and other changes in the business environment (El at , 2010: 129- 130 -131 Gopal). The implementation of the core principles of Total Quality Management (TQM) in a university depends on the presence of an appropriate quality culture among all employees. The university's organizational culture significantly impacts the process of delivery within the framework of its quality strategy, which is not explicitly disclosed but is manifested through its results. These outcomes help consolidate the culture, values, beliefs, and behavioral norms that have proven beneficial to universities in the past, thus contributing to its identity and reputation. Furthermore, this approach fosters a form of student life, with the model emphasizing the enjoyment of learning (Todorut, A.V., 2013: 1106).

In 1999, Al-Khateeb defined TQM as relying on professional technology, fundamental management tools, and innovative efforts to enhance performance levels, focusing on continuous improvement and development. Another perspective on the TQM concept posits that it requires a fresh approach to beneficiary performance, aimed at updating traditional management methods. This includes long-term commitment, goal alignment, teamwork, and the active participation of all organizational members (Al-Nasser, 2010: 53).

Second: The importance of total quality management in higher education

Adopting TQM is beneficial for higher education institutions to remain competitive in the twenty-first century. Most higher education institutions around the world face almost the same problems and overcoming challenges is very important for competition and survival over the years and achieving excellence. It enables them to achieve the concept of TQM by achieving various advantages such as improving the quality of services and products, reducing costs and increasing production capacity (Al-Aseel: 2009). In addition, higher education plays an important role in the economic and cultural development of the country. Over the past few years, many ideas have been put into practice. The performance of academic and educational standards. The goal is continuous progress. If organizations seriously want to develop the quality of the system in higher education, they need to focus on the importance and concept of total quality management in higher education, 2018: 489) (chosh).

Third: Total Quality Management Objectives

For Total Quality Management (TQM) to succeed in higher education institutions, it must have specific objectives to achieve, as follows:

1. **Market Identification:** This can be crucial for the institution; therefore, it is essential to identify new markets and understand their nature. This data is considered critical for the institution's strategic planning (Haji, 2022).
2. **Market Penetration:** Any organization must have the goal of attaining the market share it aims for (Al-Batul, 2015).
3. **Service Portfolio:** The portfolio must be aligned with market identification and penetration. If there are not enough course offerings and programs, this could hinder success.
4. **Portfolio Development:** If the institution faces a shortage of accredited programs for the target market, it is clear that a strategy and timeline for development are required. This will involve the creation of new programs as well as flexible methods to deliver existing ones.
5. **Institution's Long-Term Advanced Strategy:** There are a number of common strategies that institutions can adopt after identifying the services and markets they aim to enhance (Todorut, A.V., 2013: 1107).

Fourth: Aspects of Total Quality Management (TQM)

1- Top management support: (Cobbinah & Agyemang, 2020:22) confirmed that good academic achievement is possible with strong and effective institutional leadership.

2- Continuous improvement: It is a gradual change that focuses on the efficiency and effectiveness of the organization's discipline over time.

3- Focus on students: Quality education does not necessarily mean giving students what they want. Their point of view stems from their point of view that students are mostly engaged in obtaining short-term satisfaction. (20: 2019, Aboodi).

4- Team building: Team building is an important element in any work environment, and its focus should specifically focus on bringing out the best in the team, ensuring personal development, positive communication, leadership skills, and the ability to work closely together as a team. Rewards and recognition are key factors for employee achievement, and good team building skills enable employees to unite towards a common goal and achieve higher productivity.

5- Training and empowering employees: Training and skills development play an important role in the effectiveness of the organization and in evaluating employees in the workplace. (Fapohunda,2013:01)

Fifth: Academic Accreditation

It means an assessment by a non-governmental or private entity of the quality of the entire higher education institution or a specific educational program to ensure that it meets pre-determined minimum standards or criteria (Al-Najjar: 2015). In (2010), CHEA defined academic accreditation as a process and a status for both. In this context, the activities are represented in following up on universities and governmental institutions in higher education and their programs by assessing the quality of their education based on previously determined specifications. The status is the result of those activities. According to the National Board of Accreditation (NBA) of India, accreditation is a quality assurance and development process whereby each educational institution or scheme is given its due recognition based on pre-defined conditions. Accreditation can be defined as an activity under the authority whereby an educational institution or scheme is subjected to an evaluation process to determine its adherence to the conditional criteria/standards, which are identified, reviewed and critically evaluated by the economic advisors/peer group for quality assurance of higher education institutions/scheme (Sywelem el at, 2020: 2-1).

Sixth: Academic Accreditation Objectives

There are objectives related to academic accreditation, including the following:

1. Verifying the efficiency of academic programs, i.e. that educational institutions or their programs achieve the minimum controls and conditions.
2. Verifying that the academic institution has reached a good level of educational performance in the programs prepared by higher education institutions.
3. Meeting the needs of society by spreading the spirit of cooperation and participation among academic institutions.
4. Motivating academic institutions and working to periodically monitor personal evaluation and their financial capabilities.
5. Providing the minimum level of control over certificate forgers (Amin, 2012: 293).

As for (Hayward), he mentioned new goals, including:

- 1- Strengthening external accountability processes targeted by higher education institutions.
- 2- Strengthening credit operations and transferring balances between the various countries of the world to which students return.
- 3- Working to establish common standards for academic programs worldwide.
- 4- Confronting the challenge of diversity and expansion in educational institutions' systems. (Obaid: 2021).

Chapter Three: The Practical Aspect

First: Stability / Cronbach's Alpha Coefficient

The researcher used the Cronbach's alpha method to measure the degree of stability of the questionnaire, where the average internal correlation between the statements it measures can be expressed, and its value ranges between (1-0), and the acceptable value for it is considered 0.70 or more, and the closer the scale's degree is to the correct one, the higher the degree of stability of the tool and its suitability for use, and the results were as shown in Table (1).

Table (1) shows the results of the Cronbach's alpha test to measure the reliability of the questionnaire.

Research Variables and Dimension	Items	Cronbach's Alpha Coefficient	Decision
Investment policy	1 – 15	0.852	Stability: Good
Economic development	16 – 33	0.825	Stability: Good
Total Stability	1 – 33	0.905	Stability: Good

Source: Prepared by the researcher based on SPSS V26 program

The previous table shows that the values of the Cronbach's alpha coefficient for the Total Quality Management variable reached (0.852), for the Academic Accreditation variable (0.825), and for the scale as a whole (0.905). These values exceeded the threshold (0.70), indicating the stability and consistency of the study data. Thus, the researcher has confirmed the validity and consistency of the research questionnaire, which makes him completely confident of the validity of the questionnaire phrases and their suitability for analyzing the results and the possibility of answering the research questions and testing its hypotheses.

Second: Normal distribution test

The researcher conducted a test to determine the type of data distribution for each variable. Based on this analysis, the researcher was able to make a decision about the appropriateness of using descriptive statistics, whether the data distribution was normal or non-normal. Based on the type of data distribution, a decision was made to use parametric or non-parametric statistics. The distribution of the data of the TQM and academic accreditation variables was examined using the Kolmogorov-Smirnov test to assess the validity of the data distribution from the study sample. The test results showed that the value of the statistic was (0.072) at the number of items (136) and the significance rate (0.200*), which is higher than the statistical significance level (0.05). This indicates that the data of the TQM variable follow a normal distribution. The test results showed that the value of the statistic was (0.121) at the number of items (136) and the significance rate (0.069), which is higher than the statistical significance level (0.05). This indicates that the data follow a normal distribution. As shown in Table (2).

Table (2): Normal distribution For Total quality management and academic accreditation Variables		
Test result	Number of Items	Significance
0.072	136	0.200*
0.121	136	*0.069

Third: Descriptive research results: Total Quality Management and Academic Accreditation

The results of Table (3) showed that the independent variable Total Quality Management: obtained an arithmetic mean of (3.326), which indicates a relatively moderate availability. The standard deviation was (0.430), indicating a slight dispersion of opinions, while the coefficient of variation was (12.93%), indicating a slight variation in opinions. The researcher attributes this to the fact that the senior management at the university under study supports the efforts of total quality management and is keen to cooperate with all

administrative levels to implement it. The results of the table below showed that the dependent variable, academic accreditation, obtained an arithmetic mean of (3.245), indicating a relatively moderate availability. The standard deviation was (0.514), indicating a moderate dispersion of opinions, while the coefficient of variation was (15.83%), indicating a moderate variation in opinions. The researcher attributes this to the fact that the university under study has a program to continuously improve its services and is working to develop it in line with global developments.

Table (3): Descriptive analysis for study variables				
No	Variable	Mean	St. dev	C.V
1	Independent Variable: Total Quality Management	3.434	0.585	17.02%
2	Dependent Variable: Academic accreditation	3.245	0.514	15.83%

Fourth: Analysis of the Correlation Relationship Between The Research Variables

Prelude

The main objective of the correlation scale is to determine the strength of the relationship between the variables and to indicate whether the correlation is strong, weak, or there is no relationship, in addition to determining the direction of the relationship between the variables, i.e. indicating whether the relationship is positive or negative, as the study of correlation is the basis for studying and analyzing causal relationships. Correlation scales are also important indicators in measuring validity and reliability due to their great importance in ensuring the integrity of tests and data collection procedures.

Testing the main correlation hypothesis (first) which states

(There is no statistically significant correlation between Total Quality Management and Academic Accreditation)

Table (4) shows that the value of Pearson's correlation coefficient between Total Quality Management and Academic Accreditation reached (**0.892), which is considered a high coefficient. With a number of items reaching (136), the value of the probability of error for this test was (0.000), which is much less than the value of the statistical significance followed (0.05). Based on these results, it appears that there is a strong correlation between Total Quality Management and Academic Accreditation, which prompts the researcher to reject the first main hypothesis and accept the alternative hypothesis which states (There is a statistically significant correlation between Total Quality Management and Academic Accreditation)

The researcher attributes this to the fact that the administration of the university under study works to create the appropriate conditions to enable faculty members to perform their duties efficiently.

Table No. (4) Results of the analysis of the correlation between the variable of total quality management and academic accreditation

	Total quality management (X)
Academic accreditation (Y)	.892**
Significance level	0.000
N	136
**. Correlation is significant at the 0.01 level (2-tailed).	

Fifth: Testing the influence relationships between research variables

Prelude

In practical analyses, the researcher will answer the hypotheses related to the relationship of influence to show the effect between the variables and their direction. The positive effect between the variables is that the increase in one of the variables is met with an increase in the other variable, while the negative effect analysis indicates that the increase in one of the variables is met with a decrease in the other variable, and it is shown in the following hypothesis.

Testing the main effect hypothesis (first) which states

(There is no statistically significant effect relationship between total quality management in academic accreditation)

It appears from the results of Table (5) that the value ($\alpha = 0.298$) represents the lowest possible value for the academic accreditation variable. In addition, the value ($\beta = 1.065$) indicates that there is a direct effect of total quality management in academic accreditation, and the coefficient of determination ($R^2 = 0.796$) shows that (79.6%) of the variance in the academic accreditation variable can be explained by total quality management, while (20.4%) of this variance is attributed to other variables outside the scope of the research. Based on the value of the (F) test of (521.649), it is clear that there is a statistically significant effect of total quality management on academic accreditation, meaning that there is a clear impact relationship between the two variables, and thus the null effect hypothesis is rejected and the alternative hypothesis is accepted in the form of proof, which is (there is a statistically significant impact relationship between total quality management and academic accreditation). The researcher attributes that the senior management at the university under study is working to promote the philosophy of total quality management in its strategic plan to strengthen academic accreditation in a positive direction.

Table (5): The effect of total quality management variable on Academic accreditation variable							
Variable	Academic accreditation						
	α	β	t(β)	Sig.	R2	F	Sig.
Total quality management	0.298	1.065	22.840	0.000	0.796	521.649	0.000

Chapter Four: Conclusions and Recommendations

First: Conclusions

1. It is clear that the support of senior management reflects a real commitment to enhancing the quality of education and services at the university. This commitment is an essential element in the success of any comprehensive quality management initiative.
2. It was found that promoting the philosophy of comprehensive quality management in the strategic plan without taking actual actions indicates a lack of real commitment by senior management to implementing comprehensive quality principles.
3. The results showed the existence of a service improvement program that reflects the university's commitment to adopting a culture of continuous improvement, which enhances the quality of education and services provided.
4. It is clear that there is a lack of a comprehensive and integrated strategy to address obstacles, which makes the efforts made uncoordinated and ineffective.

5. The university is keen to build good relationships with its students, which leads to increasing their satisfaction with their educational experience and the services provided, which enhances the university's reputation.
6. The results showed that periodic reviews of educational plans are insufficient, which leads to failure to achieve the required continuous improvement and development in the curricula.
7. The university provides an appropriate environment for work teams that contributes to increasing the productivity of teams, which enhances the university's ability to achieve its academic and administrative goals.

Recommendations

- 1- Senior management is required to develop and adopt a clear vision for TQM that is known and understood by all university employees.
- 2- Senior management should demonstrate an actual commitment to TQM principles by allocating the necessary resources and supporting practical initiatives to improve quality.
- 3- The scope of the continuous improvement program should be expanded to include all aspects of academic and administrative services, ensuring the comprehensiveness of improvements.
- 5- Establish direct and effective communication channels between the administration and students, such as electronic portals, dedicated applications, and periodic meetings to ensure continuous and rapid interaction.
- 6- The university is required to develop a comprehensive and regular review system for educational plans that ensures continuous evaluation and permanent improvement of curricula.
- 7- Promote the culture of teamwork and cooperation among team members by organizing workshops and training sessions that focus on teamwork and communication skills.

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