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THE EFFECTIVENESS OF THE APPLICATION OF TOTAL QUALITY MANAGEMENT STANDARDS IN ACHIEVING CONTINUOUS IMPROVEMENT IN EDUCATIONAL INSTITUTIONS: AN ANALYTICAL STUDY OF A NUMBER OF IRAQI UNIVERSITIES

Taicir Moalla Loukil
Laboratory of Modeling and Optimization for Decisional Industrial and Logistic Systems MODILS, Faculty of Economics and Management Sciences. Sfax, Tunisia.
Taicir.loukil@fsegs.usf.tn

Hasanain Hadi Saeed
Faculty of Economics and Management Sciences. Sfax, Tunisia
hasanianhadi@gmail.com

A B S T R A C T

Higher education is considered the basic foundation for advancing the future of societies and achieving their ambitions and goals in various economic, political and social fields through the functions performed by its institutions. Higher education institutions in our contemporary world are not only considered a field of teaching, but their functions have expanded to become centers for research and planning for the future and preparing specialized human resources to confront... The needs of current and future social and economic development programs. The function of higher education institutions does not stop at merely preparing the human resources necessary for the comprehensive development process, but rather goes beyond raising the level of graduates' performance and developing them to suit future development needs, in addition to contributing to providing solutions to current and future problems and facing the challenges and requirements of the times. Disseminating knowledge and expanding its horizons. To achieve the objectives of the study, the researcher used the descriptive analytical method and the questionnaire as a tool for collecting information and data, which was applied to a sample. (310) questionnaire forms were randomly distributed to faculty members, employees, and quality assurance departments. (233) questionnaires were retrieved when the questionnaires were subjected to the auditing stage. It was found that there were two questionnaires that were not suitable for entry into the statistical analysis stage, so they were excluded, and thus the size of the research sample became (231) respondents from those targeted in the research. The data will be analyzed and processed statistically using the statistical program SPSS.V22.

K E Y W O R D S

Quality Management, Total Quality Management, Total quality management standards, continuous improvement, Study methodology, Conclusions and recommendations, List of sources.

Introduction:

Arab societies are currently witnessing many noticeable changes in various fields that force their administrative organizations to change their traditional methods of management and adopt modern administrative concepts if they want to achieve their goals efficiently and effectively. Among these changes is the increase in global competition between productive institutions and the rapid technological development in The world in various fields, especially in communications, computers and laser technology. In addition to economic agreements between neighboring countries, the transformation of some undeveloped industrial countries into developed countries and the establishment of the new world order, and the changes that occur in companies such as merging or twinning companies, controlling other companies, and restructuring educational structures in institutions from centralization to decentralization. In addition to the social changes that occurred in the values, principles, and lifestyles of individuals. This requires achieving development and advancing scientific research, building scientifically qualified human resources in various types of leadership sciences, and leading society intellectually, socially, and politically. This leadership and leadership in building society will only be achieved with the presence of scientific and educational institutions that carry out their functions and achieve their goals in the required manner, according to the requirements and needs of society. Where these institutions operate and their needs. From here it is clear that education is a set of processes that take place in order to train and develop the individual's knowledge, skills and thinking through various educational institutions in order for the individual to fulfill his duties towards himself and towards the society in which he lives.

Therefore, Arab societies have at the present time urged many noticeable changes in various fields that have forced their administrative organizations to change their traditional methods of management and adopt modern administrative concepts if they want to achieve their goals efficiently and effectively. Among these changes is the increase in global competition between organizations and productive institutions, and rapid technological development. In the world in various fields, especially in communications and computers, in addition to economic agreements between developed countries. Therefore, higher education is considered one of the important fields in life in which quality is carefully taken care of by all sectors of society because of the direct relationship between the quality of higher education, societal growth in general, and economic growth in particular. Therefore, the focus has become To apply comprehensive quality standards as a starting point for continuous improvement in order to advance the level of high civilization. Therefore, it was necessary to adopt some modern concepts that were concerned with aspects of improvement and development in various scientific and cognitive fields of education. Total quality management is considered one of the most important modern concepts and methods that aim to develop the performance of learning organizations by building distinct cultural foundations within them, by establishing a comprehensive method for organizational development.

Therefore, advanced administrations find themselves from time to time facing challenges that force them to shift towards modern methods in the field of development and improvement in terms of building strategies that are concerned with applying modern standards, principles and methods to educational institutions and organizations, with the aim of raising them to high levels of performance and raising the efficiency of the service provided. (Abdel-Gawad, 2016, 2).

First: Study Problem

Improving the performance of university education institutions is a global concern in all countries of the world, and one of the most important characteristics that distinguishes any society from other societies is its ability to manage its vital institutions and programs, not only effectively and efficiently, but also fairly and innovatively. So that the size and quality of services in university education institutions are linked to the administrative system that makes the university's mission the compass of movement through the guiding principles and university ethics. The success of any institution is the success of its management. Hence the importance of the management of university education institutions' commitment to a comprehensive philosophy of continuous improvement in order to reach Comprehensive quality in universities, which requires participation from everyone to ensure the survival and continuity of universities, so most universities, educational institutions and higher administrations in Iraq seek to adopt the concept of comprehensive quality management standards and this matter prompted that educational institution to develop its inputs and operations continuously, in order to work to improve Performing its functions and linking it to its community in order to obtain the best outcomes in a shorter time and at a lower cost.

Total quality management in educational institutions is an administrative process that depends on a set of values and derives its energy from information that employs the talents of employees and invests their intellectual abilities in the various levels of education in a creative manner to ensure continuous improvement of the university's performance. Therefore, quality in education is the driving force required to advance the system. Education Forward effectively achieves its goals and mission (Al-Titi, 2011). Therefore, the problem of the study is that the lack of these standards in Iraqi universities will consequently lead to the outputs of those departments lacking the lowest levels of quality, which will leave its effects on the level of development, and through the presentation it is possible to formulate.

The problem is in the following question: -

First: - What is the extent of senior management's commitment to applying comprehensive quality management standards in educational institutions in Iraq?

Second: - What is the impact of strategic planning for comprehensive quality management in improving the performance of Iraqi educational institutions?

Third: - Does the participation of employees in applying comprehensive quality management standards in educational institutions in Iraq contribute to the process of continuous improvement?

Fourth: - What is the extent of the impact of training and education that would contribute to the process of continuous improvement of educational institutions

Fifth: - Does operations management contribute to the application of quality standards in educational institutions?

Sixth: - What is the extent of the influence of effective leadership that would contribute to the process of continuous improvement in educational institutions?

Seventh: - What is the extent of the impact of changing culture in educational institutions, which contributes to the process of continuous improvement of educational institutions

Eighth: - Does preventing errors contribute to the process of continuous improvement in educational institutions?

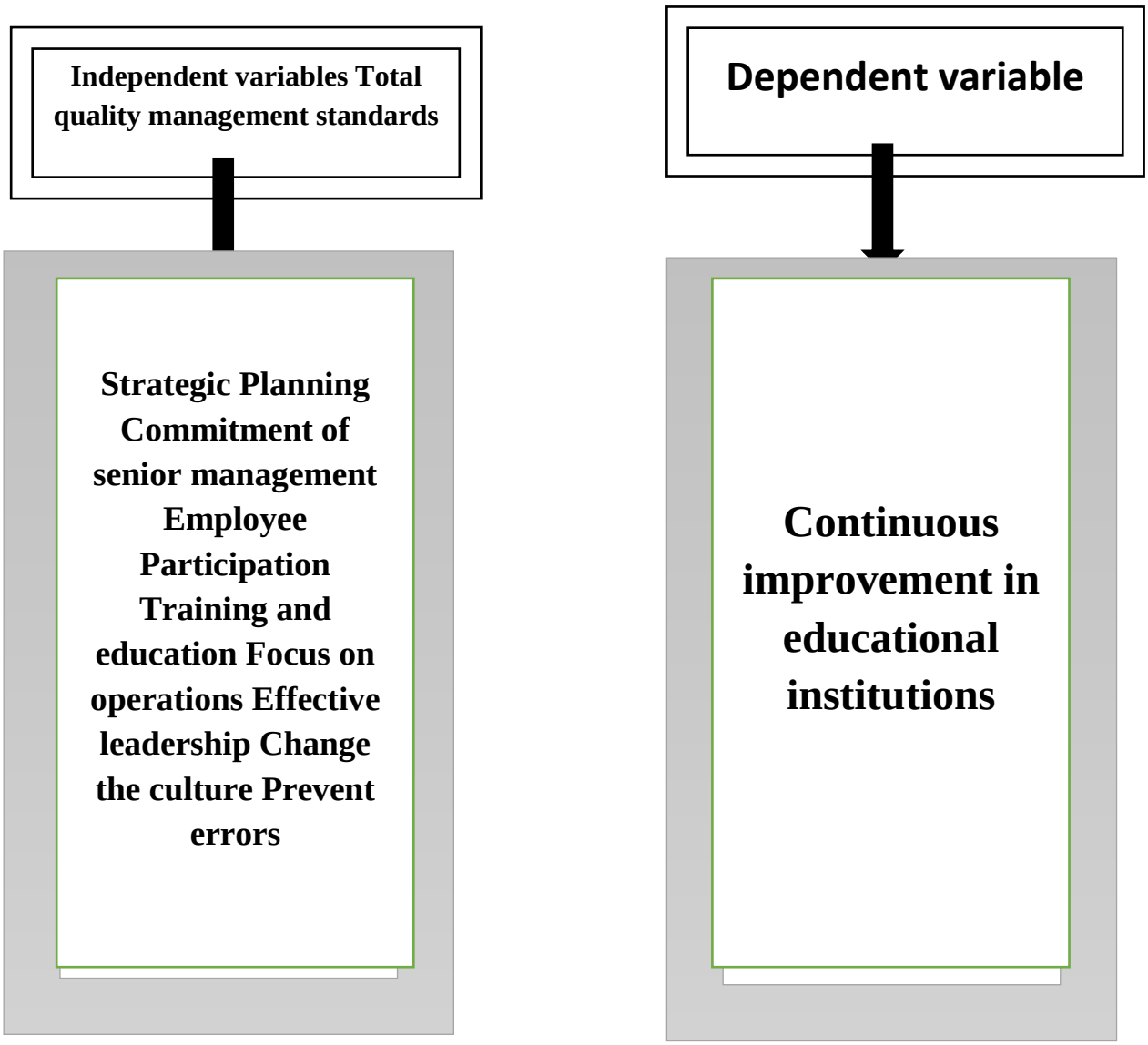
Second: The importance of the study.

The importance of the quality of educational services receives great attention from senior administrations because of the benefits and mutual benefits it provides to its users of human resources. It is a preventive methodology that prevents errors from occurring and is treated according to scientific methods that take into account the capabilities and capabilities of educational institutions in order to achieve stability and excellence through the provision of creative and conscious human resources. To the labor market in terms of quality to improve performance. Educational institutions have become more competitive at the present time at the local and international levels due to the quality of their educational services they provide, starting with the selection of students and education programs, all the way to conformity with the requirements of the contemporary work environment. The importance of the study in practical terms stems from the importance of the role. The role played by total quality management standards and their impact on improving organizations and their overall survival and continuity. As Iraqi universities need, more than others, contemporary approaches and curricula that achieve high levels of performance, whether at the organizational or human level, in order to keep pace with rapid transformations and developments and be in harmony with the challenges and changes in the world and ways to deal with them, and then achieve the organization's goals efficiently and effectively.

Third: Objectives of the study

The primary objective of this study is to try to identify the effectiveness of applying comprehensive quality management standards in educational institutions in Iraq and the extent of the application of service quality in them. The objectives of the study can be summarized through the following: - - Defining the concept of quality, managing it, and carrying out continuous improvement in higher education - Establishing standards for building and managing quality and continuous improvement in Iraqi educational institutions -Explaining the quality requirements in higher education and the obstacles to their implementation The quality of educational services is a process of integrated interaction between the outcomes of the educational process, including specializations, experiences, and accumulated knowledge, and the processes performed by different organizations in accordance with their philosophy and orientations. Applying quality standards to educational services is often limited to reducing errors before they occur, as it gives institutions a solid scientific standing in achieving continuous improvement of their services. -Learning about the experiences of some countries in the field of applying the comprehensive quality management system in higher education - Identifying the aspects of total quality management in higher education institutions.

Fourth: Study model



Source: Prepared by the researcher based on administrative literature

Default Search Scheme

Study hypotheses: -

In light of the research problem, the following hypotheses can be determined:

First: The first main hypothesis:

There is no significant correlation between comprehensive quality management standards and continuous improvement of educational institutions (universities).

The following sub-hypotheses have emerged from it:

-There is no significant correlation between strategic planning and continuous improvement in educational institutions

-There is no significant correlation between the commitment and support of senior management and the continuous improvement of educational institutions

- There is no significant correlation between employee participation and continuous improvement of educational institutions.

-There is no significant correlation between training and continuous improvement of Iraqi educational institutions.

- There is no significant correlation between focusing on operations and continuous improvement of Iraqi educational institutions.

- There is no significant correlation between effective leadership and continuous improvement of Iraqi educational institutions.

-There is no significant correlation between culture change and continuous improvement in Iraqi educational institutions.

- There is no significant correlation between preventing errors and continuous improvement of Iraqi educational institutions.

Sixth: Limitations of the study Objective limits: The subject of scientific research was limited to studying the standards of total quality management through the dimensions represented (commitment and support of senior management, leadership, operations management, organizational culture, efficiency of employee performance, focus in the process, harmonious work teams, strategic dimension) of continuous improvement in Iraqi universities Spatial boundaries:

The spatial boundaries of the study are represented in some universities (Baghdad, Babylon, Al-Qadisiyah, Al-Mustansiriya) for the purpose of conducting the field aspect.

These universities were chosen because of their distinguished scientific standing among Iraqi universities and distinguished professors and employees who support the scientific movement and the labor market. Seventh: Tools for collecting information and data.

The researcher will rely on the use of statistical methods (arithmetic mean, standard deviation, and percentage) of the questionnaire as the main tool (the five-point Likert scale, which is one of the most widely used methods in the administrative and social sciences, which is characterized by accuracy and clarity in identifying options and the ability to choose alternatives, to obtain The data necessary to conduct statistical analyzes and determine their results with the aim of indicating the conclusions drawn from them as well as recommendations related to them.

Preface: -

The search for comprehensive quality in various fields of work was not the result of a specific period of time, but rather is a continuous and essential activity for the performance of societies and individuals, and the process of searching for quality has developed as a result of new circumstances and changing needs. Most countries of the world have become interested in comprehensive quality as one of the pillars of modern management models that ensure adaptation to rapid changes, keeping pace with international and local variables and adapting to them, with the aim of continuous improvement and development and achieving the highest possible levels in practices, processes, results and services, and rely on the application of advanced methods of quality management (Al-Adadi (2010 AD, p. 4). Total quality management is considered one of the most important tools used

by large organizations to overcome their competitors. What does it mean for an organization to produce the best goods or provide the best services while not respecting delivery dates, contract terms, and after-sales services (Barakat, 2007, p. 22). The importance of total quality management is evident from the success achieved by Japanese companies at the expense of American companies in the eighties of the twentieth century. As a result of its application of the concept of total quality management, the application of this concept in Japanese companies has contributed to achieving a good reputation in the field of quality, and this is what prompted American companies and others to move at a rapid and rapid pace in applying the concept of total quality management.

First: Quality management

The term quality is essentially an economic term that emerged based on industrial and technological competition between advanced industrial countries with the aim of monitoring production and gaining the confidence of the market and the buyer. (Daoud, 2010, p. 20).

Quality is defined as: "the suitability of the product for use, that is, the ability to provide the best performance and truest qualities" (CGE and Akpobire, 2013, p106).

Quality is linguistically: He who is good at doing good in words or deeds and is good at something "will have a good fate" (Ibrahim, p. 145). Quality in the language means sound composition and mastery of workmanship, and "jad and ajad" ((I bring good)) (Al-Fayroozabadi 1994, p. 1215), and good is the opposite of bad, and "jad is good" meaning ((it became good)) (Ibn Manzur 1992, p. 411). And the quality of it in dhamma and fatha is good (Al-Fayoumi 2008, p. 76).

The concept of quality goes back to the Latin word Qualities: It means the nature of the thing or person and the degree of its goodness. As for the word "quality," from the origin of the language, it refers to "type" more specifically than the genus, and the thing may vary in types. The word "quality" expresses the presence of certain features and characteristics in the good or service. If these features are present, they satisfy the desires of those who Buy it or use it. (Al-Taie et al. 2009, p. 56). A number of scholars and international organizations have defined quality, and each of them defined it as: Deming refers to it as (compatibility with consumer needs and requirements, whatever they may be, and it also means continuous improvement in all activities and continuous reduction of losses and costs) (Bukmish 2011, p. 14).

Second: - Historical development of quality

Concern about quality is ancient and began with the appearance of man on Earth. As soon as ancient man chose the simple tools that he used from animal bones and stones, he would choose the best ones... that is, his choice would be based on quality.

A look at ancient history shows us that the first country in the world to care about quality was Iraq through King Hammurabi when he placed his famous obelisk in the eighteenth century BC, which includes explicit texts emphasizing the necessity of paying attention to quality.

The heavenly religions include clear and explicit references to quality, including our true Islamic religion. Attention to quality began in a scientific, systematic and precise manner with the outbreak of the industrial revolution in Western European countries in 1776 AD with the invention of the steam engine by the scientist (James Watt) and the entry of that machine into the fields of transportation and manufacturing. The Arab-Islamic civilization also provides us with abundant evidence in various fields of Muslims' interest in mastering work, products, and services and their existence. Examples

of these include (Al-Samarrai: 2012: 41): In irrigation engineering, the construction of streams, and the laying of canals, they had a long history in it, and it reached its peak during the era of the Abbasids. During the time of the Abbasids, Iraq's irrigation reached the peak of its progress and prosperity, and was the source of well-being for the entire country. In the field of education, in the late Abbasid era, the first school (university) appeared, which was Al-Mustansiriya University, which was opened by the Abbasid Caliph Al-Muntasir Billah in the year 625 AD after its construction lasted 6 years and at a cost of seven hundred thousand dinars (Al-Haddad: 2009: p. 55), and which still stands tall with the beauty of its architecture. Overlooking the bank of the Tigris River, it was the first university to take care of and apply quality standards in its construction, its teachers, its students, its curricula, its library, and the provision of sufficient material supplies for its employees, including teachers, students, and workers. On the intellectual level, we find, for example, the scholar Ibn Khaldun saying in his introduction, “As much as the quality of education and the mastery of the teacher The learner will be the most skilled in the industry and achieve his mastery.” In the eighteenth century AD, with the emergence of the Industrial Revolution, which became an important event in modern human history, and to its results, part of the development in the concepts of quality and methods for dealing with it is attributed.

Third: The importance of quality: Quality Importance Quality is considered of vital and strategic importance for the consumer and organizations of all activities and sizes, and it plays an important role in the strategy of competition in local, regional and global markets (Mohamed Nour 2008, p. 25). When the intensity of competition between companies increased, the trend towards globalization increased, as well as the invasion of foreign companies into global markets more and more as a result of the number The enormous profit opportunities available to them changed companies from their competitive priorities. After these companies were paying most of their attention to reducing production costs, the need for other goals through which the company could achieve excellence over its competitors appeared. Thus, companies seeking excellence adopted the goal of quality, as they relied on focusing on production. High quality products to compete, increase market share and improve profitability The importance of quality for organizations can be explained through its impact in the following paragraphs: (Al-Haddad 2009, p. 21)

1. Company reputation: company reputation The organization’s fame is derived from the level of quality with which it produces its products. This gives the organization a good reputation and the wide spread of its products. The failure of management to give sufficient attention to quality results in harming the organization’s reputation and possibly losing a large number of its customers (Al-Taie et al. 2009, p. 73).
2. Legal responsibility for quality. The number of courts that consider cases of institutions that design products or provide services that are not good in their production or distribution is constantly increasing. Therefore, every production or service institution is legally responsible for any damage that befalls the customer as a result of his use of these products.

Fourth: Quality objectives

Successful organizations and institutions seek to achieve their goals by applying the quality system as an effective administrative system in the organization. Organizations have divided quality goals or quality-related goals into types and classifications. There are two types of quality goals (Al-Sarawi 2014, p. 34) Objectives that serve quality control: These are related to the standards that the

organization wishes to maintain. These standards are formulated at the level of the organization as a whole, using lower-level requirements related to distinctive characteristics such as safety and customer satisfaction.

Quality improvement goals:

They are often limited to reducing errors and developing new products and services that satisfy customers more effectively. Hence, both types of quality objectives can be classified into five categories:

1. Objectives of the organization's external performance: Includes markets, environment and society.
2. Product or service performance objectives: These address the needs of customers and competition.
3. Operations objectives: address the capabilities, effectiveness, and controllability of operations.
4. Internal performance objectives: They address the organization's ability, effectiveness, and extent of its response to changes And the work environment.
5. Performance objectives for employees: Addressing the skills, abilities, motivation, and development of employees.

Quality costs:-

Quality costs: are all the costs paid by the producer or facility for the purposes of determining the level of quality attained by the product, controlling it, and evaluating the extent of conformity between the product specifications and the desires of the consumer. It can also be defined as the costs expended by the facility for the purposes of placing products and services in the hands of the consumer in line with With his requirements and desires. Added to this is the value of failures resulting from failure to conform product specifications with quality requirements, whether at the internal or external level of the facility. It is noted that studying quality costs is one of the most important ideas included within total quality management. It integrates with any quality program implemented by production facilities. (Al-Hayari: 2016) Many industrial or service institutions use four types of quality costs: prevention costs, performance costs, internal failure costs, and external failure costs.

A definitional introduction and concept of total quality management:- Total quality management is one of the most important and important intellectual concepts and leading scientific and philosophical frameworks that has been widely used by specialists, researchers, administrators and academics who are particularly interested in developing and improving the expected performance in services provided in various fields. Perhaps the concept of total quality management (TOM) is one of the most administrative concepts that has many concepts, ideas, and definitions in every view, whether it is the view of a researcher, an academic, a specialist, an administrator, or others. It represents: "Developing and maintaining the institution's capabilities in order to improve quality on an ongoing basis, and to meet and exceed the beneficiary's requirements, as well as searching for quality and applying it in any aspect of work, starting with identifying the beneficiary's needs and ending with knowing the extent of the beneficiary's satisfaction with the services provided to him," and it can be defined. However, it exceeds the performance of making consumers happy through the work of managers and employees with each other in order to achieve or provide consumers with valuable quality by performing the right work in the right way, from the first time, and at all times. (Al-Samarrai: 2012) The concept of total quality management also expresses "a set of principles, methods, and skills that aim to continuously improve performance with regard to the organization's processes, functions, products, services, and individuals, using financial and human resources, through commitment, discipline, and continuity to meet the needs and expectations of current and future customers and

achieve their satisfaction" (Abdullah, 2005). , p. 25). Total quality is considered a management philosophy that aims to continuously improve the quality of products, services and processes, by focusing on customer needs and expectations, to enhance customer satisfaction and the performance of organizations (Sadikoglu and Olcay, 2014). Researchers and writers have disagreed about a specific definition of the concept of total quality management, but they agree on some aspects of this concept, and these definitions include: The British Quality Organization (BQA) defines total quality management as the administrative philosophy of an organization through which it realizes both the needs of the consumer and the goals of the project together (Radwan, 2012, p. 23). Known as Steven Cohen and Ronald Bernard. Total quality management means developing and maintaining the organization's capabilities in order to continuously improve quality and meet and exceed the beneficiary's requirements, as well as searching for and applying it in any aspect of work, starting with identifying customer needs and ending with knowing the extent of the beneficiary's satisfaction with the services and products provided to him, as for Edward Demenig. (Edward Deming) defined it as: a management philosophy based on customer satisfaction and achieving his needs and expectations, present and future.

By analyzing the three words that make up total quality management, we find that: (Al-Karawi: 2016: p. 89) Management: It is the activity and art of exercising planning, organizing, controlling, and other functions.

Quality: The degree of excellence provided by a product or service. Comprehensive: includes all parts and components.

Thus, comprehensive management is the art of managing all parts and components of the organization in order to achieve excellence and comprehensive quality. It is defined as a philosophy and a set of principles that represent the basis for the organization that pursues continuous improvement, which is the application of quantitative methods and the effective use of human resources within the framework of the organization in order to meet the needs of... Customers and more, current and future.(Manachehri;2014) Figure No. (2-1) shows the most important trends in which the concept of total quality management is reflected.

Source: (Al-Khatib: 2006: p. 110) The form of trends in which the concept of total quality management is reflected.

The importance of total quality management:

- The importance of total quality management can be summarized in the following points (Faisal 2009, p. 28): -
- Improving productivity, increasing productivity, reducing costs and increasing profitability as integrated goals.

- Enabling management to study customer needs and meet those needs. Obtaining some international certificates such as ISO 9000 and others.
- Participate in making decisions and solving problems easily.
- Strengthening cohesion and coordination between the facility's departments as a whole.
- Overcoming obstacles that hinder employee performance in providing high-quality products.
- Developing a sense of group unity, team work, and interdependence between individuals and feelings Belonging in the work environment.
-Providing more clarity to workers as well as providing feedback to them and building confidence Among members of the organization as a whole. Objectives of total quality management:

Total quality management aims to develop the quality of products or services while reducing costs, which improves customer service and meets their needs.

The objectives of total quality management are summarized in the following: (Aqili 2009, p. 41).

- Understanding the client's current needs and desires, anticipating his future desires, and working to achieve them
- Continuous cost reduction through improving quality and reducing the rate of waste and spoilage in operations.
-Achieving greater flexibility to face changes in customer needs, the labor market, and the environment surrounding the organization (Mohamed Nour 2008, p. 101).
- Developing the performance of all employees by developing the spirit of collective cooperative work with the aim of benefiting from all the energies and all employees in the facility (Al-Qahtani 2011, p. 38).

Pioneers of total quality management:

Edward Deming: He is considered the father who led the Total Quality Management revolution, as he made many meaningful contributions to the development of quality in the United States and Japan through the application of statistical control maps.

He focused on the need for the organization to reduce the deviations that occur during work.

He was awarded the Walter Shewart Medal by the American government in the year 1956. His contributions greatly influenced the West.

The United States of America has established a quality award called the Deming Quality Award.

His philosophy was directed towards the administrative process and he focused on the importance of reducing variation in the process and established two types of causes for this variation, general and specific. (Naidu: Babu 2006 p33). Deming proposed a continuous cycle of activities called the Deming cycle or wheel, which represents the framework of the continuous improvement process and consists of four continuous stages, which are (Al-Naimi et al. 2009, p. 50):

1. Plan: In this stage, the process is studied, problems are identified, and how to solve them is planned.
2. Do: DO In this stage, the plan is implemented, improvement is measured, and results are documented.
3. Examine: Study In this stage, the plan is evaluated to confirm whether it achieves the goals established in the first stage, and to confirm whether it reveals new problems.
4. Execute: Act Here, part of the natural process is carried out, then the process returns to the first stage in order to start the cycle again to verify the emergence of new problems and thus develop plans to solve them.

- Joseph Juran

He is considered the first quality teacher in the world and one of the first engineers. He contributed greatly to quality management during World War II, as he focused mainly on wasted time and defects and errors during the production process. In 1951, Juran published his most famous book, entitled Quality Control Handbook. One of his most important contributions is the Juran Quality Triangle, which includes three stages: the quality planning stage, the quality control stage, and the quality improvement stage. (Abdul Rahman: 2018: p. 62) Juran also summarized his ideas about quality in ten points, as follows:

1.-Building awareness of opportunities and necessity for improvement. 2.-Determine the objectives of the improvement process.

3.- Organizing to reach goals (establishing a quality council, identifying problems, selecting projects, appointing teams, appointing facilitators). 4.- Providing training.

5-. Interest in implementing projects that help the organization solve its problems.

6.-Attention to submitting reports on the organization's performance.

7.-Encouraging employees and urging them to improve performance by appreciating their work.

8.- Paying attention to the communication process between the organization's departments and to feedback.

9.- Maintaining the level.

Expanding the construction of continuous improvement and making it part of the organization's system and operations. Oakland 2003 p19)

-Philip Crosby

Crosby is considered one of the most famous pioneers in the field and methods of development, as he focused on total quality management by emphasizing outputs, by reducing defects in performance. He was the first to advocate the idea of zero defects. Which contradicts the idea of acceptable levels of quality and permissible percentages of errors and defects. Crosby emphasized the importance of senior management in supporting quality and achieving a high level of it. He also considered the basic performance criterion to be "zero defects," meaning the absence of any errors. Crosby divided the costs into two categories: acceptable costs, which are those costs that contributed to Improving the level of quality, and unacceptable costs, which are those that were spent and did not achieve the required level of quality (Jawda, 2004, p. 53).

Crosby is famous for four basic principles in total quality management:

1. The definition of quality is consistent with meeting the customer's needs.

2. Quality is achieved through prevention rather than performance evaluation.

3. The standard for quality performance is "Zero Defects", that is, perfecting the work from the first time.

4. Quality is measured by the price achieved from non-compliance with standards and not by specific indicators.

Total quality management standards:

1- Strategic planning
2- Commitment of senior management
3- Participation of employees in the organization
4- Training and education
5- Focus on operations

6- Effective leadership
7- Changing the culture
8- Prevent errors

Total Quality Management is a customer-focused process that aims to continuously improve business processes, and strives to ensure that all employees work towards common goals of improving the quality of the product or service provided, as well as improving established procedures for production. Particular emphasis is placed on fact-based decision making, using performance metrics to monitor progress; Comprehensive quality standards are defined as: a set of characteristics, attributes, and specifications that are required to be available in the organization's complete system. With the aim of achieving comprehensive quality, knowing that these qualities and characteristics include: the extent of preparing the environment, the appropriate climate, and determining the requirements needed by the client, or the beneficiary of the organization's work, in addition to planning for the quality of goals, and the quality of both management, plans, and program content in the organization, Determine the quality of the institutional staff, and the suitability of the facility to work requirements. Therefore, there is no single set of accepted standards for total quality management, and likewise there are no specific standards for implementing the methods and tools of total quality management. Therefore, organizations are free to use the standards they deem appropriate to implement their system. Therefore, the opinions of some writers on comprehensive quality standards in organizations will be clarified through Table (1) shown. (Al-Rubaie, et al.: 2018, p. 61) Total quality management standards in organizations.

author	Total quality management standards
European Quality Awrd (EQA)	Leadership/strategic policy/employee engagement/operations management/top management commitment/work environment/communication/culture/suppliers/training/
Malcolm Baldrige	Leadership / information analysis / strategic planning / use of human resources / ensuring quality of services / achieving customer satisfaction
Deming	Education and training/organizational policy/commitment of senior management/formation of work teams/communication and communication/leadership/future plans/
Gulf Quality Mangerial Award (GQMA)	Communication / Management Commitment / Leadership / Strategic Plans / Work Environment / Training and Learning / Development / Resources / Work Teams.
Tamimi,	Communication/Senior Management Commitment/Education and Training Supplier relationship management
Black:Porter,	Customer relationship management/partnership with suppliers/communication and communications/work teams/quality planning/quality culture

Joseph, et.al	Supplier relationship management/quality policy/training technology/organizational compliance/human resources management Supplier relationship management.

The source was prepared by the researcher with reference to other sources Al-Khatib (2008: p. 114) Al-Otaibi (p. 32: 2010).

Strategic Planning: Strategic planning is a major process for determining the efficiency of operations, and it also contains multiple strategic complexities because it determines the organization's competitive priorities with regard to operations capacity, flexibility, and cost. In addition to the quality of work life and the image of the customer, and through strategic planning, the organization can be helped in achieving a low-cost strategy, rapid response, or any other strategy. (Heizer & Render 2008: 342). Total Quality Management adopts strategic planning as a means of unifying activities towards a specific goal. Planning for Total Quality Management is a strategy that is derived from business strategy planning, through which the organization's mission, goals, and means to achieve those goals are determined. And the strategic plan It must provide a feature that supports the organization's competitive advantage through innovation, innovation, and non-acceptance of the status quo (Linde: 2020, p. 68).

Commitment of senior management: The importance of supporting senior management is not limited to merely allocating the necessary resources, but extends to the organization setting a set of priorities. If the organization's senior management is unable in its long-term commitment to support the program, it will not succeed in implementing total quality management, and decisions related to quality It is one of the strategic decisions, and therefore the commitment of senior management is the most important basis for the success of the total quality management system (Al-Sarawi 2014, p. 96)

Participation of workers in the organization: Participation and delegation of authority to workers means activating their role in a way that makes them feel important and achieving actual benefit from their capabilities. The intended participation here is substantive, not formal, participation, as it is necessary for participation to achieve two things:

First. It increases the possibility of designing a better plan.

Second, it improves the efficiency of decision-making through the participation of thinking minds, which is the key to business problems. Delegating authority does not only mean the participation of individuals, but rather their participation must be in a way that gives them a real voice through work structures and allows workers to make decisions that are concerned with improving work within their own departments.

The success of total quality management depends on the participation of employees in the organization with senior management in making decisions. And carrying out work, which makes individuals feel their importance and contribution to the implementation and success of work because they will consider it a success for themselves. (Al-Qahtani 2011, p. 40).

Training and education: Education and training for all employees is the basis for continuous quality improvement. The organization must provide appropriate training for everyone, each in his specialty, and the education must be continuous. Education and training raise the level of their ability to perform

their jobs. Thus, only very few errors appear to us and we guarantee quality. Free from defects (Al-Naimi et al. 2009, p. 54)

Focus on operations: The modern trend emphasizes the importance of the operations manager, as operations management has become a reality that everyone must understand and realize, and it has become the basis through which the customer decides to accept or reject the products of that organization. The process is a group of interconnected or interacting activities that transform inputs into outputs. In order for the organization to achieve a high level of quality in its products, this may require partially or completely redesigning the processes so that the processes are consistent with the requirements of total quality management. (Jawda 2009, p. 50)

Effective leadership: Effective leadership is the process of creating a long-term vision, formulating goals, developing strategies, achieving cooperation and influencing others, and mobilizing enthusiasm to work to achieve goals. Leadership within the concept of total quality management means the ability to motivate and encourage individuals to have the desire and ability to achieve goals. (Al-Azzawi: 2008: 65)

Changing the culture: The big dilemma in quality management is spreading awareness of the importance of quality among all employees and motivating them to improve it. According to the principles of total quality management, every worker should participate in making total quality improvements, starting with the manager who seeks to achieve savings in production and sales representatives who learn methods for discovering customer needs. In other words, (TQM includes all functions related to the good or service. Therefore, every individual in the organization should view quality as an end in itself, and that errors and defects should be discovered and corrected from the source before they pass to the customer. This philosophy is called (source quality). (Al-Najjar, and others: 2010:280).

Preventing errors: The philosophy of total quality management is based on the principle that quality is the result of the prevention process and not the inspection process. In traditional management theories, we find that quality control or inspection at the level of goods and services takes place after the manufacturing process or service provision. This method mobilizes a lot of Human energies and financial resources in order to detect defects or errors in the production process. However, in the case of applying total quality management, this will lead to reducing costs and increasing profitability by introducing an element of prevention into the production process by monitoring deviations of various kinds and trying to correct them in time to avoid falling into error. These deviations (Al-Muhaidib, 2015: p. 38).

Continuous improvement arose:

The roots of continuous improvement go back to (Kaizen), which means change towards (better) or (better). It is a word consisting of two syllables in the Japanese language, as it has been adopted by a number of industrial companies for the purpose of achieving continuous reduction in production costs and achieving competitive advantage by making improvements in a way that... Gradual and simple reforms in the operational activities that production units go through, especially since the main goal of its use is limited to reducing costs and amounts spent during the year at agreed upon rates. In order for this to be achieved, it is preferable to take into consideration when conducting continuous improvement processes, reducing the costs of activities that do not add value and eliminating them. Those that do not add value and the costs of loss, damage, and reductions can be achieved by

shortening the time it takes to manufacture the product because this contributes to trying to achieve the required goals (Hilton, 2005: p234).

The concept of continuous improvement: Continuous improvement is an administrative philosophy that seeks to work on developing processes and activities related to machines, materials, individuals, and production methods on an ongoing basis (Ahmed, 2008, p. 181).

Continuous improvement is defined as "a method of strategic cost management and is considered one of the administrative methods according to which managers and workers are committed to the related aspects." quality, cost and time." He defined Kaizen as "a Japanese term that refers to the gradual and continuous improvement to reduce the costs of an existing product through the manufacturing stage of the product's life cycle" (Hilton, 2008: p265).

The goal and mechanism of continuous improvement:

The goal of continuous improvement is to reach the highest level of efficiency in production or service by making continuous improvements in the company's production processes or service, especially since the difficulty in achieving this goal requires following the following: (Sharqi: 2017: p. 32)

1. Using benchmarking technology, through which one can search for the best applications and practices in the field of industry among competing companies in a way that is reflected in achieving the best performance, which is the essence of the continuous improvement process.
2. Monitoring and controlling operations through the use of some measures, such as reducing the percentage of spoilage and reducing the product turnover time, as well as the use of control maps.
3. Improving processes efficiently and effectively, with the ability to modify them, as well as the ability to search for sources of problems that hinder these processes.
4. Continuous examination of activities and processes that do not add value with the aim of reducing or eliminating them.
5. Anticipate the customer's needs to make improvements gradually to achieve his satisfaction.

Continuous improvement in university education institutions:- The importance of university education has increased in light of the concepts and applications presented by globalization, which are enhanced by the rapid developments of communication and information systems. This has led to pivotal transformations towards adapting to the knowledge society, and competition has moved from companies to universities, causing them to rethink their strategies, systems, and everything that might affect Its capabilities to be able to enter the global competition with strength (Bani Ahmed, 2015, p. 103), and continuous improvement is essential in all productive and service organizations, including the university, because it contributes effectively to making the organization in a state of continuous superiority and distinction. It is a continuous, renewed work with a comprehensive dimension in which it participates. All employees at administrative levels, all Al-Obaidi.

The most important rule in continuous improvement is the organization's ability to achieve distinguished quality in its operations and products, and organizational knowledge is the basis for continuous improvement, as it is the main determinant of quality (Al-Tawil et al., 2010, p. 6).

Previous studies

(Arabic and English) Arabic Studies –

Hayat bin Muhammad bin Saad's (2004) study of comprehensive quality management as an approach to the development of Saudi universities (a study of the trends of the Saudi academic body towards applying its principles, and their point of view on the extent to which this application contributes to

the development of the university). The study reached many results, the most important of which are: The trends of the body tended The academic study sample agreed to an above average degree on the application of the principles of total quality management in Saudi universities. The principles of strategic planning for quality, effective leadership, and continuous education and training were at the forefront of the principles that the study sample agreed to apply in Saudi universities to an above average degree. The study sample agreed that applying The principles of total quality management contribute to the development of Saudi universities to an above-average degree. The principle of effective leadership and the principle of strategic planning were at the forefront of the principles that the study sample unanimously agreed on in their contribution to developing the university to an above average degree. Study recommendations: In light of the results reached, the study presented many recommendations in order to contribute to adopting and consolidating the total quality management method. In Saudi universities

- Study by Amir Muhammad Zaki (2012) The role of comprehensive quality standards in the development of educational institutions. Through the descriptive approach based on collecting studies, reports, periodicals and books, the study concluded that the research hypothesis, which states that comprehensive quality standards have an effective role in developing educational institutions and preparing qualified cadres for markets The work has been achieved. The researcher also came up with an integrated proposed vision of the main aspects that any educational institution should consider with interest, so that it can identify the places of progress and defects in the comprehensive quality system within the educational institution. The researcher also recommends developing an integrated strategy for comprehensive quality, by defining quality objectives. Comprehensive and formulating the necessary policies and procedures for this, and emphasizing the importance of continuous monitoring, follow-up and evaluation of the established plan to ensure that what was planned is implemented efficiently and effectively.

English Studies

- Study by Juha Kettunen 2011) “Strategy and quality maps in higher education”: The purpose of this study is to develop conceptual frameworks for the integration of strategic management and quality assurance in higher education institutions. It was exposed to the possibility of describing the value chain in strategy and quality maps as two graphical representations, respectively, of the strategic plan and the quality assurance system. The results showed that the strategic map is a graphical representation of the strategic plan that describes the views of the balanced scorecard, the strategic objectives, and the links between them. From it we can conclude that the quality cycle is directly linked to internal processes and customer perspectives, because management develops processes and faculty plans and implements education and feedback, but it indirectly corresponds to the financial and organizational learning perspectives of the Balanced Scorecard.

- Study (Fauzi Hussin Muhammad Naveed Jabbar 2019) “Quality management as a strategic tool to enhance the relationship between leaders’ behavior and job satisfaction”:

The study aimed to determine the interrelated role of service quality management on the relationship between leadership behavior and job satisfaction. The study is quantitative in nature. Public university lecturers in Punjab, Pakistan were the population of this study. 396 public university lecturers were selected as a sample from public universities in Pakistan, and a stratified random sampling technique was adopted to collect data. A proportional percentage of 15% was adopted to select the study sample, and a survey method was used to collect data from respondents via a questionnaire.

The third section:

Study methodology (statistical analysis) Introduction:

The current study aimed to demonstrate (the effectiveness of applying comprehensive quality management standards in achieving continuous improvement in educational institutions). Accordingly, in this chapter, the procedures and methodological steps that were taken in the field of field study will be presented, and the study population and the sample to which the study was applied will be presented, in addition to "To clarify the tools used in the study, its steps, methodology, and the statistical methods that were used to analyze the data.

Description of the research population and sample: Description of the research sample The study population consists of all faculty members, employees, and quality assurance departments in Iraqi universities, which are (University of Mosul, Al-Mustansiriya University, University of Karbala, University of the Legacy of the Prophets, Al-Safwa University, Al-Qadisiyah University), and the size of the sample population was determined randomly for the universities studied, as The selection process for the sample was carried out through the vision of achieving the research objectives, based on the nature of the study and the objectives that it seeks to achieve, which are to identify ((the effectiveness of applying comprehensive quality management standards in achieving continuous improvement in educational institutions)). The process of selecting (233) teaching staff and employees was carried out by simple random sampling in order to survey their opinions regarding what is related to the research topic. (310) questionnaire forms were distributed randomly to faculty members, employees, and quality assurance departments. (233) questionnaires were retrieved when the questionnaires were subjected. During the audit stage, it was found that there were two questionnaires that were not suitable for entering the statistical analysis stage, so they were excluded. Thus, the size of the research sample became (231) respondents from those targeted in the research.

Tests the validity and reliability of the questionnaire

The following tests were conducted on the questionnaire to verify its validity and reliability, as follows:

1. Testing the validity of the questionnaire

A- Apparent honesty The concept of honesty represents one of the necessary foundations for building any scale, and apparent honesty is one of the most important of these standards, which lies in presenting the items of the scale to a group of experts and arbitrators. To achieve this principle, the questionnaire was presented to a number of gentlemen arbitrators and specialists, numbering 5 (arbitrators, whose names are indicated). In Appendix (), those who submitted their comments and opinions, in order to make the questionnaire more appropriate to the desired objectives of the research, and most of their opinions and comments were taken into account regarding adding or deleting what they deemed appropriate.

B- Content veracity In order to test the validity of the questionnaire's content, this criterion was calculated according to the end-to-end comparison method by finding the total of its questions and arranging them in ascending order and dividing them into two parts: the upper part and the lower part. (27%) was taken from the upper end, and (27%) was taken from the lower end's data. The averages of the two parties were compared by testing the difference between the averages of the two parties, and the results of the statistical analysis showed that there is a significant difference between the averages of the upper and lower parties, because the calculated T value of (8.998) is greater than its tabulated counterpart of (980.1) at a significant level (05.0) and degree of freedom (122). This

indicates that the scale is valid, meaning that it is able to distinguish between answers with large values and answers with small values.

C - Confirmatory construct validity To verify the structural validity of the questionnaire, confirmatory factor analysis of the scale adopted in measuring the main and sub-variables was adopted to ensure the validity of the theoretical constructs of the variables and their accuracy in the field, as it is the most prominent statistical method used in evaluating the ability of the factor model to express the actual data set in comparison between factor models in this field using... Confirmatory Factor Analysis (CFA), this method is done by finding several criteria and indicators that must be achieved.

A- Confirmatory construct validity of the comprehensive quality management criteria variable Confirmatory factor validity for the Total Quality Management Standards variable was conducted using the ready-made program (AMOS v.24) and the results were obtained as in Table (2), which shows the model conformity indicators adopted in the confirmatory factor analysis for the Total Quality Management Standards variable.

Table (2) shows the conformity indicators for the comprehensive quality management standards model

Indicator	Optimal range	the value
Chi-square value	**To be moral**	**7620.591**
Degree of freedom	**Any value**	**1770**
The ratio of chi-square to degree of freedom	**Do not exceed (5) good**	**4.30**
CFI Comparative Conformity Index	**Ranges between (0.9 – 1)**	**0.93**
TLI Toker-Lewis Indicator	**Ranges between (0.9 – 1)**	**0.95**
RMSEA is the root mean square error of approximation	**Ranges between (0 - 0.08)**	**0.04**

Sarce :Everitt, Brian S,(2010), " Multivariable Modeling and Multivariariate Analysis for The Behavioral Sciences", CRC bress, Taylar& Francis,6000, Broken,Sound Barkway NW, Suite 300,Boce RATON,USA,211.

From observing the table above, it is clear that the Total Quality Management criteria variable has achieved all the required standards. Therefore, the factor analysis can be conducted according to the maximum potential method, as the results of the factor analysis through the use of the two programs (SPSS v.24) and (AMOS v.24) were as they are. Shown in Table (3)

Table (3) shows the results of the factor analysis of the short management scale

Scale paragraphs	Factor saturations					

	first factor	second factor	third factor	Fourth factor	Fifth factor	Sixth factor	seventh factor	eighth factor
Strategic Planning								
1	0.63							
2	0.34							
3	0.65							
4	0.49							
5	0.58							
6	0.43							
7	0.76							
Commitment of senior management								
1		0.54						
2		0.39						
3		0.80						
4		0.61						
5		0.71						
6		0.43						
7		0.39						
8		0.73						
Employee participation								
1			0.58					
2			0.61					
3			0.66					
4			0.42					
5			0.61					
6			0.70					
7			0.59					
8			0.71					
Training and education								
1				0.38				
2				0.44				
3				0.35				
4				0.55				
5				0.51				
6				0.39				
7				0.50				
Focus on operations								
1					0.72			
2					0.77			
3					0.61			
4					0.76			
5					0.59			
6					0.64			
1						0.81		
2						0.76		
3						0.39		
4						0.57		
5						0.62		
6						0.60		
7						0.73		
Change the culture								
1							0.49	
2							0.43	
3							0.52	
4							0.47	
5							0.69	
6							0.41	
7							0.53	

8							0.60	
9							0.51	
Prevent errors								
1								0.75
2								0.83
3								0.69
4								0.77
5								0.80
6								0.58
7								0.78
8								0.66
The value of the latent root	19.670	2.770	2.276	1.883	1.780	1.593	1.498	1.258
Percentage of variance explained	42.784	4.617	3.793	3.139	2.967	2.655	2.496	2.096
Percentage of cumulative variance explained	42.784	47.401	51.194	54.333	57.300	59.955	62.451	64.548

Through Table (3) of the confirmatory factor analysis, there are (8) factors for the variable of comprehensive quality management standards, and there are (8) subparagraphs (questions) for each of the dimensions (senior management commitment, employee participation, error prevention), and there are also (7) sub-paragraphs (questions) for each of the dimensions (strategic planning, training and education, effective leadership), and there are (9) sub-paragraphs or questions for the culture change dimension, while there were (6) sub-questions or paragraphs for the dimension (focus on operations).) within the comprehensive quality management standards variable out of the 60 items contained in that measure.

Note that all items achieved acceptance due to the fact that their saturation with the main variable exceeded (0.30), and this exploration is consistent with the assumptions of previous literature regarding the dimensions of this scale. It is also noted from the table that the values of the latent roots achieved by each factor exceed the correct one and are identical to the previous hypotheses. As for the value of the total variance explained, the six factors together were able to explain a percentage of variance amounting to (64.375%), which is a percentage that approached two-thirds of the total variance and this. A good indicator is provided by factor analysis to support the construction of this scale.

Confirmatory construct validity of the continuous improvement variable

In order to adopt a variable measure of continuous improvement, the indicators mentioned previously were calculated as follows:

Table (4) Conformity indicators for the continuous improvement model

Indicator	Optimum range	the value
Chi-square value	**To be moral**	**321.42**
Degree of freedom	**Any value**	**66**
The ratio of chi-square to degree of freedom	**Do not exceed (5) good**	**4.87**
CFI Comparative Conformity Index	**Ranges between (0.9 – 1)**	**0.94**
TLI Toker-Lewis Indicator	**Ranges between (0.9 – 1)**	**0.97**
RMSEA is the root mean square error of approximation	**Ranges between (0 - 0.08)**	**0.06**

From observing the table above, it is clear that the continuous improvement variable has achieved all the required standards. Therefore, the factor analysis can be conducted according to the maximum potential method, as the results of the factor analysis were as shown in Table (5).

Table (5) shows the results of the factor analysis of the continuous improvement scale

Paragraphs the scale	**Factor saturation**
continuous improvement	
1	0.53
2	0.58
3	0.66
4	0.46
5	0.52
6	0.62
7	0.39
8	0.48
9	0.46
10	0.63
11	0.58
12	0.60
The value of the latent root	**9.037**
Percentage of variance explained	**50.147**
Percentage of cumulative variance explained	**50.147**

From Table (5) of confirmatory factor analysis, there is one factor represented by the continuous improvement variable, and this main factor contained twelve items or questions. Note that all items have achieved acceptance because their saturations exceeded (0.30), and this exploration is consistent with the assumptions of previous literature regarding the dimensions of this scale. It is also noted from the table above that the value of the latent root achieved by the worker exceeds the correct one and is identical to the previous hypotheses. As for the value of the total variance explained, the worker was able to explain a percentage of variance that slightly exceeded half of the total variance (50.147%) of the total variance, and this is a fairly good indicator. What does factor analysis provide to support the construction of this scale?

2. Reliability of the questionnaire The concept of reliability refers to the extent of consistency in the results of the scale, as the strength of the reliability in the questionnaire indicates the closeness or equality of the results of application in two different time periods on the same individuals targeted in the research. The greater the value of the reliability coefficient (0.70), this indicates stability and reliability of the results. For this research, the reliability coefficient was calculated according to two methods: -

A- The half-split method The questionnaire's (72) items were divided (of course, demographic or general information is not included by consistency) into two equal homogeneous halves, and for all (231) questionnaires, the first half included the odd items, while the second half included the even items, and by calculating The Pearson correlation coefficient between the two halves was (864.0), and using the corrective Spearman-Brown equation, the value of the reliability coefficient according to the half-splitting method was (85.0) for the first half and (81.0) for the second half. These are very good reliability values that call for adopting and generalizing the research results. In future studies.

B- Test and retest method This method depends on the consistency of the answers of the same respondent from one paragraph to another. A deliberate sample of respondents was used, amounting to (57) respondents whose opinions were polled on the research topic. The

questionnaire was returned to them after a period of three weeks, and then the Cronbach's alpha coefficient was calculated for each axis. of the questionnaire's axes, in addition to the general reliability coefficient for all questionnaire items. The test results showed that the value of the reliability coefficient (Cronbach's alpha) reached (84.0), which is a very good percentage that confirms the adoption of these results in this research and subsequent future studies.

Table (6) shows The value of the reliability coefficient for the research resolution.

Table (6) shows the value of the reliability coefficient for the research questionnaire

Questionnaire variables	Value of Cronbach's alpha coefficient
Total quality management standards	0.87
continuous improvement	0.85
Total	0.84

3- Analysis of reliability and validity of the dimensions of comprehensive quality management standards It represents an analysis of the internal consistency of the data and ranges between (0-1), as the value of the (Cronbach's alpha) coefficient was calculated to determine the extent of internal consistency of the dimensions of comprehensive quality management standards, given that the value of the reliability coefficient must be (0.70) or more. To move forward, rely on the results that will result from the research, according to the criteria (CR) (AVE) (MSV) and (ASV) and as in the following table

Table (7) shows the results of the network analysis and the validity of the dimensions of the comprehensive quality management standards variable

The dimension	CR Composite stability coefficient	AVE Average variance extracted	ASV Adjusted covariance	MSV Greatest common variance
Strategic Planning	0.822	0.748	0.658	0.513
Commitment of senior management	0.718	0.607	0.532	0.446
Employee participation	0.790	0.665	0.535	0.487
Training and education	0.812	0.729	0.633	0.509
Focus on operations	0.749	0.641	0.588	0.471
Effective leadership	0.761	0.644	0.539	0.489
Change the culture	0.801	0.687	0.599	0.456
Prevent errors	0.781	0.624	0.5305	0.428

It is clear from the table above that all reliability (CR) values are greater than (0.70), and the standard indicators for all dimensions range in value between (0 - 1), which indicates the presence of reliability or validity through which the course of statistical analysis of the comprehensive quality management standards variable can be completed later.

4- Network analysis and validity of the continuous improvement variable.

It represents an analysis of the internal consistency of the data and ranges between (0 – 1), as the value of the (Cronbach's Alpha) coefficient was calculated to determine the extent of the internal consistency of the continuous improvement variable, given that the value of the reliability coefficient must be (0.70) or more to move forward with Relying on the results that will result from the research, according to the criteria (CR) (AVE) (MSV) and (ASV) and as in the following table Table 8: Results of network analysis and validity for dimensions of continuous improvement

The dimension	CR Composite stability coefficient	ASV Average variance extracted	ASV Adjusted covariance	MSV Greatest common variance
Organizational culture	**0.852**	**0.779**	**0.630**	**0.544**

It is clear from the table above that all reliability (CR) values are greater than (0.70), and the standard indicators for the continuous improvement variable range in value from (0 – 1), which indicates the presence of reliability or validity through which the course of statistical analysis of the continuous improvement variable can be completed.

First: Testing the hypotheses of the correlation between the investigated variables.

1- The first main hypothesis of the research: "There is no significant correlation between comprehensive quality management standards and continuous improvement."

In order to make a decision on the first main hypothesis of the research, which consists of eight sub-hypotheses, the relationship will be found by calculating the Spearman correlation coefficient for the rank correlation between each dimension of the total quality management standards (strategic planning, senior management commitment, employee participation, training and education, focus on... Operations, effective leadership, culture change, error prevention) and the continuous improvement variable, and then test that relationship by using the T-test to show the significance of the correlation coefficients calculated via the statistical program (SPSS), as shown in Table (30), and the interpretation of the results is as follows:

Table (9) Values of the Spearman correlation coefficient and the (T) test for the significance of the relationship between the dimensions of comprehensive quality management standards and the continuous improvement variable

Y	X Dimensions of total quality management standards	Spearman correlation coefficient) r(	Calculated T value	The significance
continuous improvement	Strategic Planning	0.577**	10.690	Morally significant
	Commitment of senior management	0.623**	12.052	Morally significant
	Employee participation	0.527**	9.383	Morally significant
	Training and education	0.497**	8.667	Morally significant
	Focus on operations	0.596**	11.231	Morally significant
	Effective leadership	0.628**	14.111	Morally significant

	Change the culture	0.655**	13.117	Morally significant
	Prevent errors	0.741**	16.698	Morally significant
	Total comprehensive quality management standards	0,753**	17.317	Morally significant

The tabular (T) value is at a significance level of (05.0) and a degree of freedom (229) = 1.970
The tabular T value is at a significance level of 0.01 and a degree of freedom of 229 = 2.597.
(*)Significant effect at a significance level of 0.05.
(**)Significant effect at a significance level of 0.01.

When testing the overall correlation relationship between the Total Quality Management standards variable and the continuous improvement variable, the results shown in Table (30) showed that the value of the Spearman correlation coefficient between the two variables reached (753.0), which is a positive value that reflects the presence of a strong direct relationship with significant significance at a significant level (05.0) and (0.01) due to the fact that the calculated (T) value of (17.317) is greater than its tabulated counterpart of (1.970) and (2.597) respectively at the same significance levels (05.0) and (0.01). The interpretation of this result indicates that Paying attention to the dimensions of comprehensive quality management standards in the universities under research and developing them as a whole will lead to raising the efficiency of continuous improvement in them and vice versa. Thus, the first main hypothesis of the research is rejected and its alternative hypothesis is accepted, which states: “There is a significant correlation between comprehensive quality management standards and improvement.” "Continuous"

Conclusions and recommendations

Conclusions:

1 -The investigated universities must generally pay attention to all dimensions. Therefore, Iraqi universities must work in the future to improve their reality and develop and improve their internal systems for the purpose of raising the level of quality of job performance, especially (employee participation, training and education, as well as effective leadership), and to further advance all dimensions and make them to the optimum degree. In the future.

2-Quality management standards work by adopting best practices to improve performance in Iraqi universities, based on a regulatory environment based on facts and realism in collecting and analyzing data, making it a sound basis for making and making decisions, and by using them in an integrated and highly effective manner, which allows for the embodiment of more Opportunities for continuous improvement of educational institutions.

3- The investigated universities must generally pay attention to all dimensions. Therefore, Iraqi universities must work in the future to improve their reality and develop and improve their internal systems for the purpose of raising the level of quality of job performance, especially (employee participation, training and education, as well as effective leadership), and to further advance all dimensions and make them to the optimum degree. In the future.

4-Comprehensive quality standards cannot be achieved except in a positive climate in which human relations and mutual trust prevail between subordinates and workers, making each one of them feel fully responsible for the quality of the institution in which he works.

Recommendations

1 -The researched universities should pay broader attention and greater focus to the contents of the integration of comprehensive quality management standards, since their uses are appropriate opportunities for improvement and development that are consistent with the aspirations of the universities under study in dealing with the data of building and strengthening the quality assurance system and performance development.

2- Spreading awareness of the importance of applying the method of comprehensive quality management standards, tools and techniques to develop higher education institutions for the purpose of continuous improvement of their work by holding seminars, workshops and seminars for senior administrations in universities and workers and following up on developments in the field of comprehensive quality on an ongoing basis.

3-The need to convince those in charge of the higher education sector in Iraq of the importance of applying the comprehensive quality management standards method to address the issues and problems of education and confront the many and complex challenges.

4-Taking into account all ideas, suggestions and opinions presented by workers in the higher education sectors as one of the requirements that contribute to continuous improvement.

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