The Effect of the determinants of TQM in Higher Educational Institutions on the organizational effectiveness: Case Study on Faculty of business administration -Nahda university- Egypt

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Abstract

This paper aims to explores the effect of the determinants of total quality management on the performance of higher educational institutions, with a focus on the faculty of business administration -Nahda university (NUB) in Egypt. The study assesses how TQM's critical factors such as management leadership, customer focus, strategic planning, human resource management, service design, information and system analysis, continuous improvement, and benchmarking affect the operational and academic performance of educational institutions.

The research adopts a mixed-methods approach, integrating both qualitative and quantitative data collection techniques. The methodology includes a case study of NUB, with data gathered through structured surveys distributed to faculty and administrative staff, in-depth interviews with top management, and a thorough review of institutional documents. Quantitative data were analyzed using statistical tools, while qualitative data were subjected to thematic analysis.

The findings reveal that TQM practices significantly enhance the overall performance of educational institutions. Key outcomes include improved management support, enhanced working environments, increased productivity, higher levels of customer satisfaction, and better internal process integration. Notably, the research highlights the critical role of management leadership and continuous improvement practices in driving these improvements.

While the findings underscore the effectiveness of TQM in improving educational quality and the organizational effectiveness, the research also points to limitations, including its focus on a single institution and the potential bias of self-reported data. Future research is recommended to expand the scope to multiple institutions and to incorporate more objective performance metrics to validate these findings.

Keywords: Total quality management, determinants of TQM, Organizational effectiveness

1.1. Introduction:

Total Quality Management (TQM) is formally described as the process of changing the deep-rooted culture of an organization and redirecting it toward improved quality product or service employing best practices. ***(Padhi, 2020)***

(TQM) is management philosophy that considers all the aspects of the operations in an organization. It has been gaining an increasing attention from researchers to explain and enhance the organizational performance in today's global competitive environment.

TQM, moreover, it has been deemed as a critical factor of competitive advantage for manufacturing and service organizations, as it is considered as a driver of innovation

A determining factor for successful changes and cultural development. Also, according to a comprehensive review of the literature shows that TQM strategy has a universal importance in all types of organizations such as higher educational institutions and in public service organizations, manufacturing organizations; service organizations and small and medium size enterprises.

The concept of quality has existed for many years, though it's meaning has changed and evolved over time. In the early twentieth century, quality management meant inspecting products to ensure that they met specifications.

In the 1940s, during World War II quality became more statistical in nature. Statistical sampling techniques were used to evaluate quality, and quality control charts were used to monitor the production process.

In the 1960s, with the help of so-called "quality gurus," the concept took on a broader meaning

Quality began to be viewed as something that encompassed the entire organization, not only the production process. Since all functions were responsible for product quality and all shared the costs of poor quality, quality was seen as a concept that affected the entire organization. ***(Padhi, 2020)***

The meaning of quality for businesses changed dramatically in the late 1970s. Before then quality was still viewed as something that needed to be inspected and corrected

However, in the 1970s and 1980s many U.S. industries lost market share to foreign competition

In the auto industry, manufacturers such as Toyota and Honda became major players in the consumer goods market, companies such as Toshiba and Sony led the way. These foreign competitors were producing lower-priced products with considerably higher quality.

To survive, companies had to make major changes in their quality programs. Many Hired consultants and instituted quality training programs for their employees. A new Concept of quality was emerging. One result is that quality began to have a strategic meaning.

Since the 1970s, competition based on quality has grown in importance and has generated tremendous interest, concern, and enthusiasm. Companies in every line of business are focusing on improving quality in order to be more competitive. In many industries quality excellence has become a standard for doing business. Companies that do not meet this standard simply will not survive

Total Quality Management is defined as a an integrated effort designed to improve quality performance at every level of the organization

The definition of quality depends on the role of the people defining it. Most consumers have a difficult time defining quality, but they know it when they see it.

Today, there is no single universal definition of quality. Some people view quality as "Performance to standards." Others view it as "meeting the customer's needs" or "satisfying

The customer." Let's look at some of the more common definitions of quality ***(Padhi, 2020)***

Conformance to specifications measures how well the product or service meets the targets and tolerances determined by its designers.

Fitness for use focuses on how well the product performs its intended function or use.

Value for price paid is a definition of quality that consumers often use for product or service usefulness. This is the only definition that combines economics with consumer criteria; it assumes that the definition of quality is price sensitive. For example, suppose that you wish to sign up for a personal finance seminar and discover that the same class is being taught at two different colleges at significantly different tuition rates. If you take the less expensive seminar, you will feel that you have received greater value for the price.

Support services provided are often how the quality of a product or service is judged. Quality does not apply only to the product or service itself; it also applies to the people, processes, and organizational environment associated with it. For example, the quality of a university is judged not only by the quality of staff and course offerings, but also by the efficiency and accuracy of processing paperwork

Defining quality in manufacturing organizations is often different from that of services.

The most common quality definition in manufacturing is conformance, which is the degree to which a product characteristic meets preset standards.

Pillars of quality in manufacturing include:

performance such as acceleration of a vehicle.

Reliability that the product will function as expected without failure, Features the extras that are included beyond the basic characteristics

Durability expected operational life of the product, and serviceability and how readily a product can be repaired.

The relative importance of these pillars is based on the preferences of each individual customer. It is easy to see how different customers can have different definitions in mind when they speak of high product quality.

In contrast to manufacturing, service organizations produce a product that is intangible. Usually, the complete product cannot be seen or touched. Rather, it is experienced.

Examples include delivery of health care, experience of staying at a vacation Resort, and learning at a university. The intangible nature of the product makes defining Quality difficult. Also, since a service is experienced, perceptions can be highly subjective.

In addition to tangible factors, quality of services is often defined by perceptual factors

These include responsiveness to customer needs, courtesy and friendliness of staff, promptness in resolving complaints, and atmosphere. Other definitions of quality in services include time the amount of time a customer has to wait for the service; and consistency the degree to which the service is the same each time.

For these reasons, defining quality in services can be especially challenging. The reason quality has gained such prominence is that organizations have gained an understanding of the high cost of poor quality.

Quality affects all aspects of the organization and has dramatic cost implications.

1.2 Literature Review:

Harris Paterakis, (2022)

This study stated that companies have endorsed the view that vocational training centers should teach TQM knowledge and skills to their employees. It is reasonable to expect business and industry of Taiwan to become more actively involved and extend full cooperation United States.

With vocational training centers in implementing TQM theories and methodologies. It is worthy to note here that in the United States several industry academy partnerships emerged during the 1980s and 90s. Many companies played a major role in making TQM education become increasingly popular in academic institutions within the United States

Radim Farana, (2021)

This study stated that a great number of opportunities for improvements were identified in the orientation on the staff satisfaction. It was very surprising that the faculty did not consider staff needs and expectations in the decision-making process, especially why the importance of the university staff is so high. Then the first achievements of applying the TQM system and the self-assessment process were oriented on improving the university staff satisfaction. The next problem was missing the comparison between the results obtained by different faculties. Perhaps it is a problem of developing countries, and especially in the Czech Republic that we refuse all attempts to obtain an independent university assessment. Maybe we are apprehensive of the expected results and afraid of using the obtained results in the university financing.

Yusuf, Y., Gunasekaran, A., & Dan, G. (2021)

This study titled by The Impact of Total Quality Management on Organizational Efficiency: Evidence from Manufacturing Firms.

This study investigates how Total Quality Management (TQM) practices influence organizational efficiency in manufacturing firms. It finds that TQM dimensions, such as continuous improvement, employee involvement, and

customer focus, significantly enhance resource utilization and process optimization, leading to higher organizational efficiency.

It highlights the importance of TQM as a strategic approach that directly impacts organizational efficiency. It provides empirical evidence that investing in quality management practices can lead to more efficient operations by reducing waste and improving workflow.

Jamal Abdul Nassir Shaari, (2021)

The findings suggest that barriers to TQM Japanese Way were significantly correlated to the adoption of Japanese management style in the companies studied; it could also be the reasons to explain on why JMS variables were not significantly correlated to OP, despite positively correlated to TQM Japanese Way variables. Hence, these signify the importance of overcoming these barriers as means to ensure that adoption of JMS would bring positive result in enhancing quality management practices in Malaysia using Japanese experience. However, after reconciling the difficulties, it is important for us not to ignore the possibility that for these companies operating in a seller" market to find that it is not necessary to practice TQM, they would not be committed to implement it. Thus, the blame should not be on the employees" lack of understanding and/or commitment alone. The awareness of a community which might decide a seller's or buyer's market should also be considered

Auluck, R., (2020)

This paper introduces the practical case that demonstrating the implementation of TQM philosophy in Taipei City Government. And, in the view of a plan executor, it describes the process for public sector to introduce TQM and the key success factors. The EQM21 program introduced in the case is holding the management cycle of PDCA to promote the ideal of quality management ideal into public sector step-by-step. The process of TCG's TQM introduced by this paper should have a certain reference value for the public sector systems in the world which have coercive

Fritsch and Wüllenweber , (2019)

Analyzing determinants of business process outsourcing in the German banking market draw a different conclusion based on their findings. They are able to show that while BPO is still an element of cost cutting strategies it is also pursued by well-performing banks with a high revenue diversification. Thus, they conclude that BPO issued as a strategic element in market differentiation strategies to gain further competitive advantage. Empirical studies on the outcome of outsourcing, especially its effects on firm performance are scarce.

Faisal Talib, Zillur Rahman, M.N. Qureshi, (2019)

The present study attempts to bridge the gap between applying TQM and lack of performance and contribute to the development of conceptual framework and research model particularly for Indian service companies. To carry out this study, the key TQM practices, organization performance measures indicators, and quality performance have been extensively investigated as presented earlier. Based on this review, a research model of TQM implementation in relation to company performance by measuring quality performance has been proposed

Al-Mashari, M., & Zairi, M. (2019)

This study titled by the Role of Leadership in Implementing Total Quality Management to Enhance Organizational Efficiency. It examines the role of leadership in implementing TQM practices and its impact on organizational efficiency. It finds that leadership commitment to TQM principles is crucial for fostering a culture of quality, which in turn improves efficiency across various dimensions, including resource utilization and productivity.

Leadership plays a pivotal role in driving TQM initiatives that enhance organizational efficiency. The study underscores the necessity of strong leadership in ensuring the successful implementation of TQM, leading to sustainable improvements in efficiency.

Peter Materu, (2018)

This study stated that out of 52 African countries, only 16 (31 percent) have quality assurance agencies. These are: Cameroon, Cote D'Ivoire, Egypt, Ethiopia, Gabon, Ghana, Kenya, Liberia, Libya, Mauritius, Mozambique, Namibia, Nigeria, South Africa, Sudan, Tanzania, Tunisia, Uganda, and Zimbabwe. The researcher had difficulty finding sufficient information in the public domain on the extent to which these agencies are implementing quality assurance processes

Based on the review of the previous studies it can be found that:

- The Total Quality Management has brought many kinds of improvements at the performance of different kind of organizations at different aspects regarding productivity, efficiency and effectiveness of decision-making process, documentation cycles, financial costs and etc.
- -TQM is critical to the health of the economy. As they generate a lot of benefits to the economy and society as well.

1.3. Research Problem:

Based on the previous studies the TQM affects every part of business from the starting of the manufacturing process until having the finished products delivered to the final customers

The researcher wants to analyze the major effects of applying TQM on the effectiveness and efficiency of the performance of high educational institutions according to a number of key performance indicators of success of the higher educational sector:

1- Is applying the TQM critical factors of service organizations would enhances the TQM of the educational institute

2- Do the critical factors of service organizations are relevant to the development of educational institutes in Egypt

3- How frequent should the institute allow the emergence of benchmarking values in order to maintain the development of TQM

1.4. Research Objectives:

The main objectives of the proposed study can be summarized in the following points:

1- To find out the role of TQM critical factors in enhancing TQM for educational institutes

2- To investigate the influence of critical factors on educational institutes performance

3- To find out the impact of benchmarking on the overall development of TQM in educational institutes

1.5. Research hypothesis:

Hypothesis of the study is gathered in model (Figure 1) to find out the relationship between NUB quality performance from a side and TQM determinants from the other side.

The model is based on how NUB meet the quality standards for service sector, especially the academic institutes, the study focusses its analysis on the mutual effects between quality standards and educational institute performance in terms of management support, working environment, productivity, customer satisfaction, development, internal integration, and effective MIS

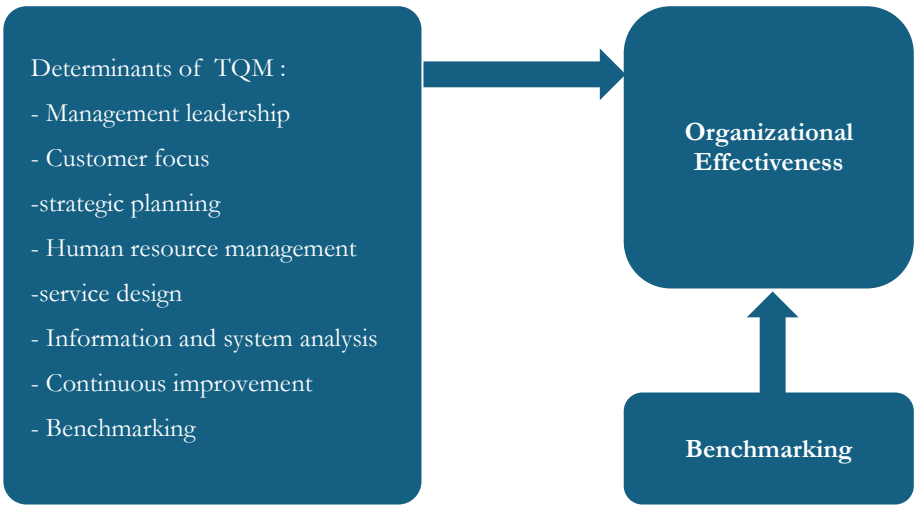

Figure 1.1: Hypothesis Model

Hypothesis 1:

There is a relationship between the determinants of TQM and academic institutions effectiveness in relation to the following dimensions:

(Management leadership, Customer focus, Strategic planning, Human resource management, Service design, Information and system analysis, Continuous improvement and Benchmarking**)**

Hypothesis 2:

There is a relationship between the TQM critical factors & determinants and enhancement of academic organizational effectiveness

Hypothesis 3:

There is a relationship between benchmarking and the opportunity of developing organizational effectiveness.

1.6. Research Limitations:

1- The study is limited in terms of its market analysis since it focuses only on the local market and hence it results cannot be generalized and claims same behaviors on international markets.

2- The study is limited in terms of its time span and hence it does not take into consideration changes in overlapping generations.

3- The study is limited in terms of its selection one academic institute in Egypt; faculty of business administration -Nahda university (NUB) because the researcher is more familiar with the selected institute and its accessible technologies.

4- The study is limited in terms of collected data that depends on surveys techniques not on actual data because of the lack of organized data relevant to the topic of the study.

1.7. Research Population:

The study collects data of:

1: Employees and middle managers and other stakeholders

The study does not select a random sample but it targets the total population size of both groups because of the easy access to their accounts.

1.8. Research Methodology:

The researcher used two approaches in this research:

A. The deductive approach by surveying the previous studies of the effect of the total quality management on the overall performance of high educational institutions

B. The inductive approach though conducting a case study that will be applied on one of the private high educational institutions located in Egypt

Step 1: The case study will involve study of the following institution Egypt: Faculty of business administration -Nahda university

Step 2: Data gathering can include surveys, study of organizational documents such as: Financial reports, administrative reports for such college and quality assurance reports for previous periods and preparing interviews with top management and some key membership of each organization using a questioner or check list as a guide during the interviews process

Step 3: Prepares to collect the data. The researcher will prepare to collect data by first contacting the college to be studied to gain their cooperation, explain the purpose of this study which is to determine the way that the TQM affecting their overall performance as an educational institution and assemble key contact information since

data to be collected and examined includes organizational documents.

The researcher states the intent to request copies of their documents, classification and interviews and survey data.

The researcher will apply the data gathering to the pilot case (one firm) to determine whether the planed time is feasible and whether or not the interviews and survey questions appropriate and effectives

Based on the results of the pilot the researcher makes the adjustments in evaluation and analysis of the data

Step 4: Data field collection, the researcher will first arrange to visit the college and set an appointment with the top managements to start interviews the researcher can take written notes during the interviews and record filed notes after the interviews are completed.

2.1. TQM Overview

Competitive marketplaces require people at all levels in an organization to think of ways to continuously improve the products or services that they deliver to customers.

Organizations that succeed in improving the value proposition for customers and employ best practices usually become the supplier of choice. The specific approaches to continuous improvement tend to be Total Quality Management approaches (TQM).

These approaches to continuous improvement are considered successful and widely implemented in higher education in advanced countries. A wide range of literature also has contributed the discussion of implementation of TQM in management universities. The developed culture of continuous improvements in business education institutes regarding of TQM will equip the business students with skills and capabilities to develop the TQM culture in their organization when they are employed total quality management (TQM) syllabuses have been popularized for changing the culture and performance of service and manufacturing firms.

These universal techniques have also been applied in educational settings to improve administrative processes and have found reasonable success in improving the quality of faculty teaching, research, and service. (Bailey and Bennett 2019, Coate 2020, Costin 2020).

Some management schools particularly in developing countries and universities have faced difficulties implementing TQM because of strong cultural bonds, resistance to change and tenure systems in place.

A rising trend in applying TQM ideology to higher education is being experienced by universities and their accrediting agencies like the American Assembly of Collegiate Schools of Business (Mergan et al. 2021). Organizations that succeed in improving the value proposition for customers and employ best practices usually become the supplier of choice.

A wide range of literature also has contributed the discussion of implementation of TQM in management universities. The developed culture of continuous improvements in business education institutes regarding of TQM will equip the business students with skills and capabilities to develop the TQM culture in their organization when they are employed.

In recent years, higher education in business management is witnessing increasing demand to TQM. Most students are pursuing education after graduation and management education become a popular choice because of its interdisciplinary nature, with admission to the courses open to all categories of graduates.

Many new institutions have exclusively been set up, in particular by the private sector in large numbers, to offer postgraduate courses in management. Besides, many existing institutes have started offering these courses considering the huge demand.

This development, while satisfying the market demand for management education, has also raised a serious debate among management experts, students, academicians and corporate groups, on the quality of education being delivered to business students.

Total Quality Management is a detailed structured system and is used in order to satisfy the internal and the external customers and suppliers.

This is achieved with the combination of the business environment, continuous improvement, and innovations (attacking policy) through development, and maintenance cycles while changing organizational culture.

Furthermore, TQM is combining the knowledge for the customers with other information and use the planning process to organize the future actions, managing the daily activities and achieving company's future goals. The planning process is the liaison that holds together all TQM activity.

The organizations, which want to apply the Total Quality Management, must understand that customers will be satisfied only if every time they receive products and services that accomplish their needs, are delivered at the right time and are priced for value. They are using the techniques of process management to develop processes, which will control the total costs. These processes will be stable and capable in order to achieve customer expectations.

And the final element of the TQM is the whole participation from the employees. Organizations must understand that the success of the project is depending on the employees-managers. Managers-leaders are taking the personal responsibility for implementing, promoting, and monitoring the whole amount of the activities.

The employees are properly trained, capable, and they have an active participation (must not be passive) for the achievement of company's goals. Management and employees are working together in order to create a strong value environment where people are having the primal role.

Education quality is becoming increasingly important for those who are involved in it either directly or indirectly, and for those who use its services. Access to education and quality education are to be regarded as mutually dependent and indivisible needs and rights.

This is primarily achieved by developing creativity, civic and democratic values, as well as by knowledge, abilities and skills needed for everyday and professional life. Basic education is not sufficient or complete, and therefore should be considered only as a basis for learning that needs to be used all lifelong.

Lifelong learning for all has become one of the pillars of development Quality management is a part of management aimed at achieving quality goals through planning, monitoring, assuring and improving quality. Involving all members of the organization brings us closer to total quality control (Total Quality Management, TQM).

Efficient Total quality management system in organization can facilitate quickly challenge in word market. Total quality management realizes target and mission in education of young generation. TQM upgrade management quality and quality of work in education institute in general.

The key points for the improvement of education are scientific and technological development, social changes and organizational changes. Education efficiency and success don't depend just on quantity but as well on quality.

The quality indicator systems of education, as well as the criteria related to the quality indicators help schools to identify the crucial areas of their activities - their own advantages, disadvantages and development opportunities.

So, the researcher can conclude that the key factors of quality are:

Quality management, total quality management, educational system, and quality indicators

Education quality is a key factor for improving the business quality, and

Therefore, strengthening competitive advantage. Lack of education is a basic cause of poverty.

Quality Management is a part of management aimed at achieving quality goals through planning, monitoring, assuring and improving quality. In modern conditions,

Quality management becomes a business function as well as any other function,

Involving people of all profiles and from all the departments of the organization.

The researcher can demonstrate the differences between modern and traditional educational systems according to various criteria among those criteria are Different educational goals, teaching approaches and roles of all participants in the educational process. Efficiency and quality are the key parameters that determine the socio-economic importance of the field of education.

2.2. TQM History and Evolution:

The concept of quality has existed for many years, though it's meaning has changed and evolved over time. In the early twentieth century, quality management meant inspecting products to ensure that they met specifications

The term 'total quality' was used for the first time in a paper by Feigenbaum at the first international conference on quality control in Tokyo in 1969. The term referred to wider issues within an organization.

Ishikawa also discussed 'total quality control' in Japan, which is different from the western idea of total quality. According to his explanation, it means 'company-wide quality control' that involves all employees, from top management to the workers, in quality control.

In the 1940s, during World War II quality became more statistical in nature. Statistical sampling techniques were used to evaluate quality, and quality control charts were used to monitor the production process.

In the 1960s, with the help of so-called "quality gurus," the concept took on a broader meaning (1)

Quality began to be viewed as something that encompassed the entire organization, not only the production process. Since all functions were responsible for product quality and all shared the costs of poor quality, quality was seen as a concept that affected the entire organization.

The roots of Total Quality Management can be founded to the work of Drucker, Juran, Deming, Ishikawa, Crosby, Feigenbaum and a numerous of other people that have studied, practiced, and tried to improve the process of organizational management.

The meaning of quality for businesses changed dramatically in the late 1970s. Before then quality was still viewed as something that needed to be inspected and corrected

In the 1980s to the 1990s, a new phase of quality control and management began. This became known as Total Quality Management (TQM).

Having observed Japan's success of employing quality issues, western companies started to introduce their own quality initiatives.

TQM developed as a catchall phrase for the broad spectrum of quality-focused strategies, programmer and techniques during this period, became the center of focus for the western quality movement.

However, in the 1970s and 1980s many U.S. industries lost market share to foreign competition (2)

In the auto industry, manufacturers such as Toyota and Honda became major players in the consumer goods market, companies such as Toshiba and Sony led the way. These foreign competitors were producing lower-priced products with considerably higher quality.

To survive, companies had to make major changes in their quality programs. Many Hired consultants and instituted quality training programs for their employees. A new Concept of quality was emerging. One result is that quality began to have a strategic meaning.

Since the 1970s, competition based on quality has grown in importance and has generated tremendous interest, concern, and enthusiasm. Companies in every line of business are focusing on improving quality in order to be more competitive. In many industries quality excellence has become a standard for doing business. Companies that do not meet this standard simply will not survive

Total Quality Management (TQM) is management philosophy that considers all the aspects of the operations in an organization. It has been gaining an increasing attention from researchers to explain and enhance the organizational performance in today's global competitive environment (3).

TQM, moreover, it has been deemed as a critical factor of competitive advantage for manufacturing and service organizations, as it is considered as a driver of innovation

A determining factor for successful changes and cultural development (4)

Also, according to a comprehensive review of the literature shows that TQM strategy has a universal importance in all types of organizations such as higher educational institutions and in public service organizations, manufacturing organizations; service organizations and small and medium size enterprises. (5)

Nowadays, there is global attention giving to TQM importance, there has been an increasing understanding of TQM strategy for business performance; hence many organizations initiate huge efforts in the TQM adoption as a response to the stiff global competition and aware and quality-conscious customers

The philosophy of business worldwide has been changed due to the extensive research conducted on TQM since the pioneering work of the quality gurus such as Deming, Juran, and Crosby changed the philosophy of business worldwide (6)

From the practitioners' point of view, TQM practices has gained a great interest from different organizations as their ground to build their distinct capabilities and the main crucial factor to create a sustainable competitive advantage in the market place.

2.3. TQM definition:

According to Gaither Total quality management (TQM) is formally described as the process of changing the deep-rooted culture of an organization and redirecting it toward improved quality product or service employing best practices (7)

TQM had its documented beginnings in the early 1950s with Professor W. Edwards Deming and has become firmly grounded internationally and in all areas of corporate sector. Deming is well known for his "14 points of quality management" that help individuals in organizations to understand and implement quality improvement through both management and employee involvement.

According to suspicion since educational services are different from business organizations Deming (2018), TQM philosophy can be implemented at various levels in virtually any environment including business and industry, government and education.

Studies applying TQM principles to higher education environments include Bailey and Bennett (2019), Coate (2020), Costin (2020), Evans (2021), Marchese (2023), Mergan et al. (2018) and Vazzana et al. (2021). TQM is usually defined as a few fundamental principles: doing things right the first time, striving for continuous improvement, and fulfilling customer needs Harrington, 2018). (8)

Other practices like Sullivan in 2017 include making quality is the responsibility of every employee, working with suppliers to improve the quality of raw materials and having

Established methods to measure the quality of goods or services outputs. A number of other techniques are associated with TQM and may include measurement metrics, brainstorming, diagramming problems and issues, and statistical process control (9)

General subjects in quality management consist of excellence, stability, waste elimination, delivery speed and customer service like Evans and Lindsay, 2019. The purpose of TQM is to build an organization that produces products or services that are perceived of high quality by those who use them.

The degree of meeting customer's expectation is perceived as criterion of high-quality product and services as Gaither said

Mergan etal had point of view regarding TQM that says that Initial focus of TQM was on production and operations management and now extended to service organizations, government, the private sector, healthcare, and educational organizations. TQM is enjoying upward trend in higher education initiated by universities and their accrediting agencies.

Lawler said that TQM has been a positive experience in business organizations

But, Barnard suffering with limited success in educational administration

TQM encourages employees at all levels of an organization to make suggestions on how work should be done and actively improve processes, but Barnard (2022) feels that university faculty view the quality philosophy with

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The definition of quality depends on the role of the people defining it. Most consumers have a difficult time defining quality, but they know it when they see it. (10)

According to Deming a typical definition of TQM includes phrases such as: customer focus, the involvement of all employees, continuous improvement and the integration of quality management into the total organization. Although the definitions were all similar, there was confusion. It was not clear what sort of practices, policies, and activities needed to be implemented to fit the TQM definition. (11)

Today, there is no single universal definition of quality. Some people view quality as "Performance to standards. "Others view it as "meeting the customer's needs" or "satisfying the customer."

Let's look at some of the more common definitions of quality

Conformance to specifications

Measures how well the product or service meets the targets and tolerances determined by its designers.

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For example, suppose that you wish to sign up for a personal finance seminar and discover that the same class is being taught at two different colleges at significantly different tuition rates. If you take the less expensive seminar, you will feel that you have received greater value for the price.

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For example, the quality of a university is judged not only by the quality of staff and course offerings, but also by the efficiency and accuracy of processing paperwork

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Other common definitions of quality in manufacturing include performance such as acceleration of a vehicle.

Reliability that the product will function as expected without failure, Features the extras that are included beyond the basic characteristics

Durability expected operational life of the product, and serviceability and how readily a product can be repaired. (12)

The relative importance of these definitions is based on the preferences of each individual customer. It is easy to see how different customers can have different definitions in mind when they speak of high product quality.

In contrast to manufacturing, service organizations produce a product that is intangible.

Usually, the complete product cannot be seen or touched. Rather, it is experienced.

Examples include delivery of health care, experience of staying at a vacation Resort, and learning at a university. The intangible nature of the product makes defining Quality difficult. Also, since a service is experienced, perceptions can be highly subjective.

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These include responsiveness to customer needs, courtesy and friendliness of staff, promptness in resolving complaints, and atmosphere. Other definitions of quality in services include time the amount of time a customer has to wait for the service; and consistency the degree to which the service is the same each time.

For these reasons, defining quality in services can be especially challenging.

The reason quality has gained such prominence is that organizations have gained an Understanding of the high cost of poor quality. Quality affects all aspects of the organization and has dramatic cost implications

Despite the extensive work conducted in the literature of TQM practices, there is no universal and agreed upon definition of the TQM strategy

However, the definition of TQM is grounded on the approach taken towards quality (13)

On the other hand, the extensive and growing literature of TQM constructs supporting its convergent and discriminate validity also focused on that the historical development of TQM showed that according to Quality management it had many phases started from quality by inspection (QBI), Statistical Quality Control (SQC), Quality Assurance (QA), and currently Total Quality Management (TQM).

To define TQM strategy, different researchers have different approaches resulting in wealth of TQM definitions. For example, there is a definition states that TQM is a management approach that ensures the cooperation and participation of all individuals in an organization to produce products and services that satisfy customers' needs and meet their expectations (14).

Similarly, others defined TQM as the integrated approach that results in high quality outcomes, through maintaining and sustaining continuous improvement processes, to meet the customers' needs. (15)

Other definitions for TQM in the literature are based on TQM principles. For example, Anderson, define the TQM as a holistic approach to the organizational overall quality through major principles such as leadership, continuous improvement, effective process management, product/ service design, customer satisfaction and involvement, and employees' involvement and training. (16)

In line with this view, and from change management point of view, Also, another author Defined TQM as the management philosophy and the way of thinking that can transform the organization through successful change initiatives to achieve the world-class status. (17)

Moreover, it has been described by the same authors as the system that helps an organization to achieve excellence.

Recently, TQM is defined as the holistic management approach integrates all the organizational activities to satisfy customers' needs and meet their expectations towards achieving overall organizational objectives. (18)

The continuous process of reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience and ensuring that employees are up-to-speed with their training. (19)

Total quality management aims to hold all parties involved in the production process as accountable for the overall quality of the final product or service. This can be considered as another comprehensive definition of TQM that is according to the researcher point of view. (20)

Thus, the researcher can conclude that it has become a common practice in the management literature to measure TQM according to some critical factors Combining this with the view of regarding the strategy definition, and TQM can be defined according to the researcher point of view as:

"The management system consisting of several interrelated critical factors that help the organization to develop an effective set of actions resulting in achieving pre-specified organizational goals."

2.4. The Basic Characteristics of TQM:

According to what mentioned before it can be demonstrated that TQM is based on the following characteristics:

- Customization where TQM focuses on satisfying customers' needs and wants
- TQM includes all the levels of the organization
- TQM aims to improving the effectiveness and efficiency of the organization also give the organization a competitive advantage
- TQM depending on collaborative and team work form all the employees inside the organization
- TQM focuses on human resources and to the extent that every employee inside the organization is participating in TQM
- TQM aims at improving the mental ability and the behavior of different individuals works for the organization **(21)**

- Harris Paterakis, 2018 in his study stated that the organizations, which want to apply the Total Quality Management, must understand that customer will be satisfied only if every time they receive products and services that accomplish their needs, are delivered at the right time and are priced for value. They are using the techniques of process management to develop processes, which will control the total costs.

These processes will be stable and capable in order to achieve customer expectations. And the final element of the TQM is the whole participation from the employees. Organizations must understand that the success of the project is depending on the employees-managers.

Managers-leaders are taking the personal responsibility for implementing, promoting, and monitoring the whole amount of the activities. The employees are properly trained, capable, and they have an active participation (must not be passive) for the achievement of company's goals. Management and employees are working together in order to create a strong value environment where people are having the primal role. **(22)**

Based On the previous data the researcher can conclude that:

The Total Quality Management has brought many kinds of improvements at the performance of different kind of organizations at different aspects regarding productivity, efficiency and effectiveness of decision-making process, documentation cycles, financial costs and etc.

TQM is critical to the health of the economy. As they generate a lot of benefits to the economy and society as well.

2.5. Total Quality Management Requirements:

TQM application require the availability of some features and characteristics as follows: (23)

1- **Top Management Support:** They must be convinced with the vital role that TQM plays in the organization's continuous improvements and they must support these applications.

2- **Customer Focus:** Customer satisfaction is considered one of the most important features that TQM focus on either for internal or external factor and this will happen by having a strong and accurate data base system for all the available customers inside the organization.

3- **Organization's Culture & Work Environment:** Means that management is taking into consideration involving all employees at all organizational level

into the process of TQM and give them all the required trainings and orientations to be totally aware of TQM principles and applications and this will be supported with decreasing their resistance to change and adopt new ideas to create new friendly and productive work environment that will sustain a competitive advantage for the organization.

4- **Performance Measurements:** This will happen by using various statistical methods to pinpoint and highlight the difference rates of productivity and take the corrective actions to get rid of these differences.

5- **Human Resources Management:** Effective human resource management can be defined as the one who applies continuous training programs for the employees at all levels also adapt a good motivational technique and involve the employees in raising their own problems and find suitable solutions for it to achieve continuous improvements.

6- **Continuous learning and Training:** Training programs must be given to the employees on a continuous basis in order to let them understand all the principles of TQM.

7- **Adapting Suitable and Effective Leadership Models:** The best model that fits the application of TQM is the one that adapts the idea of team work and create a friendly environment and give a priority to balance between the human resources and the managerial processes.

8- **Employees involvement in production process and quality improvements**: This is achieved by making all the employees in all departments work as a one team with one target to achieve the organization's vision and mission with efficiency and effectiveness.

9- **Effective and Accurate Information System:** It comes by gathering all the available information regarding the customer's needs and desires and to what extent he is satisfied with the services provided and that leads to a coordination between different departments inside the organization.

2.6. Total Quality Management stages:

1- **Preparation phase:** It is considered one of the most important stages of applying TQM since the organization indicates its desires and wants to apply TQM. The top management starts to get training to understand what TQM is about and its concepts and then they start to put the strategic plans and specify the resources required to apply TQM.

2- **Planning Phase:** It is the stage which plans, objects & goals and set the organizational structure also select the board of directors and consultancies who will be in charge of applying TQM

3- **Evaluation & Controlling Phase:** It happens by putting some questions and through its answers managers can provide and afford the suitable work environment to support the effective application of TQM.

4- **Execution Phase:** This is happened by selecting the individuals will be assigned to perform the TQM process and give them the required trainings to be more qualified

5- **Mutual Exchange and spread of Experiences:** And that is by investing and getting the best use of those who apply TQM concepts and apply these models in the organizations and spread it over the organization departments to achieve the effectiveness and efficiency.

2.7. Quality Model:

TQM models are often called Business Excellence Models. Also, TQM itself is now often called Business Excellence. This is to distinguish the "new TQM" from the past work on TQM.

As mentioned earlier, there was confusion as to what TQM was in the 80s and early 90s. This was because any business improvement program was becoming called TQM. Therefore, the name TQM became tarnished.

Business Excellence is really the same as TQM, but with a more clearly defined approach.

TQM processes are divided into four sequential categories: plan, do, check, and act (the PDCA cycle). In the planning phase, people define the problem to be addressed, collect relevant data, and ascertain the problem's root cause; in the doing phase, people develop and implement a solution, and decide upon a measurement to gauge its effectiveness; in the checking phase, people confirm the results through before-and-after data comparison; in the acting phase, people document their results, inform others about process changes, and make recommendations for the problem to be addressed in the next PDCA cycle.

The efficient management of an organization is achieved by using different models. One of them is quality management system.

By quality management system we understand "structure, procedures, processes and other necessary resources required for the application of quality management."

A quality system is inseparable from the international and European norms (Standards) of quality. A standard is a formalization of the basic principles of quality management. An increasing number of entities (not only business related are striving to adapt its own quality system with the requirements, mainly, of the ISO 9000 standards.

TQM system for any organization includes the following:

- **ISO 9000 quality Assurance system:** It is about some procedures and processes that are required for applying TQM approach according to the ISO 9000 standards
- **Internal Quality Assurance System:** It Includes all the policies and procedures related to the organizational activities and resources which are not part of ISO 9000 but it is essential for the application of TQM.
- **Public responsibility Q.A System:** It Includes all the policies and procedures related to degree to which the school is involved with and taking part in the public responsibilities and community services and it is away from and not a part of ISO 9000 standards

2.7.1. ISO 9000 Standards

Increases in international trade during the 1980s created a need for the development of universal standards of quality. Universal standards were seen as necessary in order for companies to be able to objectively document their quality practices around the World. Then in 1987 the International Organization for Standardization (ISO) published its first set of standards for quality management called ISO 9000.

The International Organization for Standardization (ISO) is an international organization whose purpose is to establish agreement on international quality standards. It currently has members from 91 countries, including the United States.

To develop and promote international quality standards, ISO 9000 has been created. ISO 9000 consists of a set of standards and a certification process for companies.

By receiving ISO 9000 certification companies demonstrate that they have met the standards specified by the ISO.

The standards are applicable to all types of companies and have gained global

Acceptance. In many industries ISO certification has become a requirement for doing business. Also, ISO 9000 standards have been adopted by the European Community as a standard for companies doing business in Europe.

In December 2000 the first major changes to ISO 9000 were made, introducing the following three new standards:

- ISO 9000:2000–Quality Management Systems–Fundamentals and Standards: Provides the terminology and definitions used in the standards. It is the starting point for understanding the system of standards
- ISO 9001:2000–Quality Management Systems–Requirements: This is the standard used for the certification of a firm's quality management system. It is used to demonstrate the conformity of quality management systems to meet customer requirements
- ISO 9004:2000–Quality Management Systems–Guidelines for Performance: Provides guidelines for establishing a quality management system. It focuses not only on meeting customer requirements but also on improving performance.

These three standards are the most widely used and apply to the majority of companies. However, ten more published standards and guidelines exist as part of the ISO 9000 family of standards.

To receive ISO certification, a company must provide extensive documentation of its quality processes. This includes methods used to monitor quality, methods and frequency of worker training, job descriptions, inspection programs, and statistical process-control tools used. High-quality documentation of all processes is critical.

The company is then audited by an ISO 9000 registrar who visits the facility to make sure, the company has a well-documented quality management system and that the process meets the standards. If the registrar finds that all is in order, certification is received.

Once a company is certified, it is registered in an ISO directory that lists certified companies. The entire process can take 18 to 24 months and can cost anywhere from $10,000 to $30,000. Companies have to be recertified by ISO every three years.

One of the shortcomings of ISO certification is that it focuses only on the process used and conformance to specifications.

In contrast to the Baldrige criteria, ISO certification does not address questions about the product itself and whether it meets customer and market requirements. Today there are over 40,000 companies that are ISO certified. In fact, certification has become a requirement for conducting business in many industries.

2.7.2. ISO 14000 Standards

The need for standardization of quality created an impetus for the development of other standards. In 1996 the International Standards Organization introduced standards for evaluating a company's environmental responsibility.

These standards that are termed as ISO 14000 focus on three major areas:

- Management systems standards measure systems development and integration of environmental responsibility into the overall business.
- Operations standards include the measurement of consumption of natural resources and energy.
- Environmental systems standards measure emissions, effluents, and other waste systems. With greater interest in green manufacturing and more awareness of environmental concerns, ISO 14000 may become an important set of standards for promoting environmental responsibility.

To be accredited to ISO 9001 (from 2000), an independent auditor has to certify that the organization meets the following requirements of the Standard: quality management system, records keeping, management commitment to quality, resource management, production, and measurement, analysis and Improvements.

Any higher education organization that wants to be accredited to the certificate, must go through several stages:

- The development of a quality system that implements the requirements of ISO 9000:2000
- The selection of an accredited certification body
- Pre-auditing of the quality system by the certification body
- The final audit of the quality system after which the certificate is issued

And after all these steps are done a series of smaller audits at least once a year must be made according to some experiences from the European Union, the

whole process of obtaining a certificate lasts between 12 and 18 months. The certificate is valid for a period of three years.

The European Network for Quality Assurance in Higher Education (ENQA)was established in 2000 with the goal to establish agencies for quality assurance in higher education. In 2004 the Network changes its name into European Association for Quality Assurance in Higher Education.

Its main purpose is to promote European cooperation in the field of evaluation and quality assurance among all the participants involved in the process of quality assurance. Agencies were established in many countries, and their goals are being realized.

For this purpose, Agencies should encourage higher education institutions to improve the quality of education, especially by evaluating it. The evaluation process is divided into four steps:

- The major being self-assessment (provided by higher education Institutions)
- External assessment (by independent experts). The role of the agencies is to initiate and coordinate the process of evaluation.
- Serving as centers where all available information regarding implementation and assurance of quality systems can be found.
- The last function is accreditation. Based on the evaluation, agencies confirm that the standards of quality of institutions/ programs meet the given requirements.

The concept of total quality, introduced by Professor W. Edwards Deming in the 1950s can be applied to almost every organization up to a certain level. The Term stands for the process of shifting the focus of the organization towards a superior quality of products and services.

TQM approach in education involves not only achieving high quality but also influencing all segments of the educational process: organization, management, interpersonal relations, material and human resources, etc. Applying the approach described above quality becomes total (integral).

The introduction of total quality management requires a number of changes in educational institutions. The first changes have to occur in the attitudes and activities of the management, in the organization and monitoring of the educational process, in the evaluation of its results, in the culture of

communication, in the school atmosphere, and especially in the area of interpersonal relations.

The total quality management model includes the following:

Process of planning, management, continual improvements, total involvement and focus on the user.

Total quality management is an efficient management technique that

Requires the full involvement of all employees on all organizational levels, thus representing the organizational culture. TQM stands for a way of life of the organization, which introduces constant improvement of business on all levels and activities, creating the appropriate environment through collaborative work, trust and respect.

It approaches the processes in a systematic, consistent and organized way and applies total quality management techniques.

So, the researcher can summarize and pin point that TQM is all about quality management of the users, leadership and management Loyalty, continuous improvement, prompt response, actions based on facts, the Participation of employees in the TQM culture. If an organization is constantly willing to direct its efforts towards business improvement, the principles Presented above can lead to excellence in quality.

The success of total quality Management depends on its eight components: ethics, integrity, trust, education, teamwork, leadership, recognizability and communication.

Table (2-1): The main differences between the two approaches TQM and ISO 9000

Criteria	**TQM**	**ISO 9000**
Definition	TQM is also a management system, simply know as Total Quality Management however, this system works on the basis that the employee participates in the program on regular basis, and ensures that the tools and technologies are properly managed within the departments.	ISO is basically a management system that has been created to monitor the functions and data of a specific organization, and that works on a monitoring basis to help understand the proper balance required.
	TQM focuses on finding the best and maximum results, and how to get to them. It can be considered to be a management program based	ISO describes the functions and the actions that you need to be able to have the minimum standard of quality systems in place. ISO can be considered

Out put	on quality. TQM does not require any kind of documentation.	as a tool to implement TQM, and also has some basic requirements like strict documentation for audit purposes. You can easily monitor your records with this kind of management program.
Application Focus	TQM is not only a program however; it helps you become involved in the whole process in the proper manner. TQM helps you with your management needs in a more practical manner.	ISO is more of a program to help you with the management process. ISO requires more sophisticated data analysis. ISO systems have not been able to get the same quality standards without the support of TQM.

Source: the researcher

2.7.3. Six Sigma Springs Out of TQM Roots:

Total Quality Management (TQM) has embedded itself in today's corporations. Through the years a number of new quality movements have evolved from the roots of TQM, including the latest methodology known as six sigma.

Six sigma is founded in the principles of TQM and has grown from the many precursor quality movements. Capitalizing on the successes and building on the failures of previous quality initiatives, six sigma expands TQM to include statistical analyses that develop process maps with the necessary level of measurable detail to promote change.

Beginning with Edward W. Deming's total quality management program (TQM) and following through to today's Six Sigma, quality improvement strategies are rooted in the same basic fundamentals. In fact, the evolution of six sigma as it exists today can be likened to a growing tree whose roots are deeply embedded in TQM.

It can be argued that, although its proponents, consultants, and trainers often promote it as a radically new approach to quality improvement, Six Sigma is actually a modified, strengthened, and more focused version of TQM. One could say that the roots of Six Sigma began with W. Edwards Deming and the TQM movement.

Six Sigma is considered as the first significant new approach to quality improvement. The roots of Six Sigma are set in TQM, and there are several common tenets between Six Sigma and TQM. However, Six Sigma, in part, developed in response to TQM inadequacies; and at the same time, Six Sigma introduced substantial new concepts and approaches.

While TQM created "constancy of purpose" and promoted "improving constantly and forever" the product or service, Six Sigma establishes deliverable quality improvement in a specific time frame. One of the "failures" of TQM was that CEOs, whose compensation was being driven by the bottom line, often could not identify measurable quality improvement in product or process over a given period of time other than the company was doing better with quality.

Such company leaders wanted a return for their dollar and time investment in quality programs and often could not find it. It seemed that with TQM, quality improvement was open-ended and open-financed and was a never-ending effort with few identifiable results. In Six Sigma, doable quality improvement projects are identified and tackled.

With Six Sigma, there is a very significant requirement that Six Sigma training be taken by a high proportion of a company's employees as demonstrated by the "belt" system. Some workers spend weeks learning Six Sigma techniques/ philosophies and become designated as "black belts". Most other workers in a Six Sigma company attend at least minimal training and are designated as "yellow" or "green belts".

A timetable for deliverable improvement is set-up. Six Sigma projects run for only four to six months and are usually overseen by a full-time dedicated employee trained as a "black belt" along with a team of cross-functional employees.

Quite often, the resulting quality improvement impact on the company is assigned a dollar figure with many Six Sigma projects claiming to save the company a half million dollars or more annually.

In order to add further structure to the quality improvement process, Six Sigma follows a procedure known by the acronym, DMAIC. This procedure guides the Six Sigma investigators through the specific steps of Define, Measure, Analyze, Improve, and Control. While TQM originally only specified such advice as "Adopt the new philosophy" and "Take action to accomplish the transformation".

Six Sigma adherents carefully define a problem/opportunity and place particular emphasis on measurement. In order to find measurements that are meaningful in discovering variability, Six Sigma team members apply root-cause techniques – purposefully digging deeper than other quality improvement efforts that have gone on before.

The Six Sigma team uses such measurements to analyze problems and thereby improve the process of product. These activities and actions are more focused and more specific than most TQM efforts.

In addition to these, the Six Sigma movement introduced a metric that can be used to generally locate where a process, product, or company is in its quality improvement effort as compared to others. The metric is the sigma level at which a company or its processes are currently operating under.

The TQM movement had no way to quantify the level of quality that a company had attained. With Six Sigma, the sigma level can be used as a benchmark against which a company can compare its improvement.

Because it has been around for almost a decade and is being widely used around the world, Six Sigma is not a mere "branch" on the tree of quality programs but rather is a significant continuous growth extending the trunk of the tree and growing into new branches. It has built on the basic roots of TQM and has added significantly new features that focus quality efforts and make them accountable and measurable.

Six Sigma is the most powerful expansion of TQM because it introduces another level of customer focus and a formal methodology (DMAIC) to execute change across functions. It also engages management and leverages dedicated resources against the projects with the biggest strategic and financial impact.

There is a prize called Deming Prize it is a Japanese award given to companies to recognize their efforts in quality improvement. The award is named after W. Edwards Deming, who visited Japan after World War II upon the request of Japanese industrial leaders and engineers.

While there, he gave a series of lectures on quality. The Japanese considered him such an important quality guru that they named the quality award after him. The award has been given by the Union of Japanese Scientists and Engineers (JUSE)

Since 1951. Competition for the Deming Prize was opened to foreign companies in 1984. In 1989 Florida Power & Light was the first U.S. Company to receive the award.

Six sigma achieves its results by expanding the original tools of TQM to include statistical analyses that develop process maps with the necessary level of measurable detail to promote change. The culmination of TQM, and its successor movements, coupled with the standard intense accreditation and

recognition programs, has shaped this latest quality methodology known as six sigma.

Six sigma is also seeing successor methods and movements come alive. This is promising for today's organizations that are focused on quality. The different methodologies and measurement tools afford organizations a unique opportunity to create their own brand of quality; one that is synergistic with their management style, industry demands and process capabilities. (23)

Table (2-2): The main differences between the two approaches TQM and Six Sigma

Criteria	**TQM**	**Six Sigma**
Definition	TQM is a quality control approach that is usually thought of along with the development, implementation, and continual control of different organizational systems that are used with a number of different processes	Six Sigma is also an approach that seeks to correct and improve the quality of your processes. Six Sigma takes a more holistic approach to quality improvement, working to improve the entire business instead of focusing on individual processes and operations within segregated departments.
Function focused	TQM is based on a particular organizational approach, an approach that zones in on how to keep already existing quality standards at a high while simultaneously improving quality. Essentially, TQM is meant to focus on the culture of a business. What TQM strives to do is to get different departments in your business-	Six Sigma is a statistical and data driven approach that measures and analyzes data in an effort to discover how variations and defects can be reduced to the level where when you are running a process, there are less than 3.4 defects per million cycles or million products. Six Sigma is used along with Statistical Process Control,
Different quality Prospective	TQM defines quality as the level to which a process or a product meets standards produced inside the company. What TQM strives to do is to get different departments in your business-whether manufacturing, service, or something else-to work together so that you can all help improve the quality of processes and products.	Six Sigma shifts the definition of quality to a relational one, emphasizing that quality is based on the fewest number of defects, which must be removed as much as possible. However, Six Sigma's quality is also defined in large part by the customer, who determines the value of the process or the product.
Technicality levels	TQM does not require this type of complete, full-time dedication to the quality management system chosen by your company.	Six Sigma's approach needs a professional who are certified in Six Sigma techniques

Source: the researcher

2.8. Regarding the Education Quality:

The word quality comes from the Latin word "qualitas" which means (property, quality, value, characteristic, feature, ability) quality has become the key factor of survival in the market, of profitability and development, not just for individual sectors and organizations and that is due to the high competition that increase the consumer demands and etc.

Education quality is a dynamic, multi-dimensional concept that refers not only to the educational model, but also to the institutional mission and its goals, as well as to the specific standards of the system, facility, program or event.

In education it is only possible to determine the quality by comparing the results with the given goal, or by comparing it with previously established standards.

Any human activity is identified by the quality of its product. The same rule applies to education. The quality of education is therefore responsible for the quality of its "product": students. Various forms of education are present in different places, at various times, under different circumstances and terms, intentional and unintentional, organized and unorganized, with or without a program.

one of the key problems is the unification of standards and quality evaluation criteria. The key components of the evaluation process are the methodological approach in applying good methods and procedures of data collection, and the definition of key concepts and their relations with the concept of quality.

The fundamental precondition for quality improvement is the establishment of an active system of internal and external evaluation. Internal evaluation implies a significant role of the judgment of students as active participants in the process also by being conducted to external evaluator (independent expert) to ensure that work is being applied according to quality standards.

Education quality is to be understood as the most important asset for Strengthening market competitiveness, and thus as the accelerator of the total economic growth and development.

Quality must be consciously managed in order to satisfy quality demands.

From the previous claim the researcher can conclude that quality management is "an integral part of management, whose role is to reach quality objectives, which are reflected not just in providing but also in improving quality.

This is achieved by managing the activities derived from the established quality policies and plans, and is carried out within the quality system, using, among other things, the appropriate quality monitoring plan."

2.9. Indicators of Quality in Education:

The system of indicators of quality in education, as well as the quality criteria associated with the indicators, help schools to point out the important areas of their own activities - their own advantages and disadvantages and development opportunities. There are some general indicators such as (classes capacity, working hours, the percentage of students to the lecturers, percentage of students to the teaching assistants) School quality team can debate about representation and Development of particular indicator aspect and search for method for upgrade.

The indicators are grouped into seven areas with specific topics:

1- Curriculum

- Structure of the curriculum (program/goals, tasks, focus on development of functional tasks, focus on students' activities, integration of programs within and between areas)
- Courses and programs
- Key competences that students develop in the given school

2- Achievements (evaluated by external, independent agencies)

- Achievement quality compared with the set goals

3- Learning and teaching

- Teachers' work
- Students' work and experience
- Meeting the needs of the students
- Monitoring and evaluating the work of students and teachers

4- Students' support

- Students' personal, social and spiritual growth
- Progress and achievement monitoring
- Support in all aspects of learning progress, students and teachers' personal development

5- School ethnic culture

- School policy
- School atmosphere and relations
- Specific goals of each individual school
- Orientation towards students', teachers' and parents' satisfaction

6- Resources

- School resources
- Teachers, professional associates, the principal; their education,
- Teamwork, cooperation; being open to innovation
- Material resources and premises
- Efficient human and material resources

7- Management, leadership and quality assurance

- Approaches to leadership and management.

2.10. Traditional and Modern Educational Systems:

According to TQM a quality product comes from a quality process. This means that quality should be built into the process. Quality at the source is the belief that it is far better to uncover the source of quality problems and correct it than to discard defective items after production.

If the source of the problem is not corrected, the problem will continue.

Quality at the source exemplifies the difference between the old and new concepts of quality. The old concept focused on inspecting goods after they were produced or after a particular stage of production. If an inspection revealed defects, the defective products were either discarded or sent back for reworking. All this cost the company money and these costs were passed on to the customer. The new concept of quality focuses on identifying quality problems at the source and correcting them.

The educational system provides educational services ranging from Preschool to primary, secondary, higher as well as adult education.

Lifelong Learning is particularly important as a tool for stimulating adults, especially the Unemployed, to join the flexible educational programs and take active part in the labor market.

In the traditional educational system, the goal is the acquisition of information.

Students' activities basically consist of listening and watching. This kind of lecturing is tiring and generates a multitude of unnecessary facts that students need to memorize resulting in the fact that students are generally dissatisfied with the school.

Information memorized in this way can't be successfully stored

In the long-term memory. The curriculum related to individual subjects and methods of teaching, emphasizes factual knowledge and passive learning,

Thus, not enabling students to acquire the technical, technological and social knowledge skills needed in a competitive economy. One the one hand the number of compulsory subjects is too large and on the other elective subjects are almost nonexistent.

As there are no national standards, no impartial External evaluation or testing, schools test the knowledge of their students based on their grades not their knowledge

The traditional system has three and Four-year educational programs, special programs for under-skilled workers or students with special needs and the dual system of education combined with Work. Due to technological development, the majority of the mentioned Professions are becoming unnecessary.

The curriculum is focused too much on Special skills, expertise and views of a specific profession. Vocational education didn't adapt fast enough to the changes in the economy and the needs of small and medium-sized companies.

Higher education institutions are not Autonomous, as funding and employment decisions are largely controlled by the Ministry of Education. University programs are not sufficiently open to the needs of the labor market.

There are no good university standards related to education and its effects. Participation in lifelong learning, in the traditional educational system is very poor.

The number of those who completed only the Shorter or less demanding vocational programs (lasting two or three years) is incredibly high. However, shorter and less demanding programs do not guarantee the competitiveness needed in the contemporary workplace.

The traditional educational system seems not to provide a sufficient number of workers with the necessary knowledge and skills. The need for modern technology is not emphasized enough. New technologies change education with the development of E-learning.

In the modern educational system understanding is therefore more important than memorizing, and teaching activities are variable and subordinated to students' needs. Students acquire smaller amounts of facts and generalizations

Which they compare with their experience and apply in problem solving exercises. Understanding and application of the facts allows knowledge systematization and its durability, as it is stored in the long-term memory.

Teaching skills are changing and gradually transforming into the art of teaching children to teach themselves.

The main result of studying is, therefore, to learn How to study. In times of rapid social and economic change, resulting in Changes in the market, it was crucial to coordinate and connect pre-primary, primary, secondary and higher education, as well as adult education and Training. Learning while working is becoming an extremely important form of Professional development, and innovations are often interdisciplinary and come As a result of team work.

Linking education to the world of work is a key factor in changing the educational system and making it capable of meeting the market and society requirements, and by doing so increasing employment possibilities. Higher education is linked with other segments of the educational system. The outputs of secondary education are inputs for higher education,

Making its quality dependent on the quality of secondary education. Higher education, particularly universities should, therefore, participate in establishing an external evaluation system of students' achievement, in the production of high-school programs and textbooks, and in ensuring the educational quality of teachers.

Higher education institutions are places of permanent education of

Higher educated employees, i.e. their further formal and informal education is a part of the lifelong educational system. Higher education institutions organize further training in co-operation with educational services of companies and other organizations and with professional associations. With the progress of knowledge, education possibilities are becoming increasingly varied. Limited state funding encourages an increasing number of institutions to look for different models of funding, primarily from private sources.

There are an ever-increasing number of private higher education facilities on the market. They attract only wealthy students, while those who can't pay several thousand for tuition go to public universities. Except institutional program also internet become most propound media of education.

By applying the postulates of TQM to education, we state that education is not a social activity, but a market-competitive activity as well as any other services provided.

2.11. Applications of TQM:

In order to assess the efficiency of total quality management in education, there was research that has been carried out during 2006/07 in 60 primary and 30 secondaries schools in the Republic of Croatia.

The research covered the following areas:

Education quality based on total quality management, the assessment of quality applying the standards of quality management in education, NUKO 9001:2007 and the relation between total quality management and the efficiency of education.

The study also aimed at determining the opinions of the participants on the management, the managing and directing of the employee's professional potentials, the policy and strategy, resources, key processes, user satisfaction, social reputation and the key results of institutions before and after the application of total quality management based on the Standards for quality management in education NUKO 9001:2007.

The research results show that by using total quality management, educational institutions successfully distribute their accumulated knowledge and increase their efficiency.

Total quality management helps achieving the goals and tasks of education of young generations. TQM not only improves the quality of management but also of the entire educational institution. One of the possible uses of total quality management in education in the Republic of Croatia is the approach based on Standards for quality management in education, NUKO 9001:2007.

Standards For quality management in education, NUKO 9001:2007 showed their validity and can be rightfully recommended as a model that provides educational quality to the users of institutions that apply it.

Its wide application in the Republic of Croatia, as well as abroad, in the time ahead, confirms that its introduction in the integrated educational system is justified.

The researcher comes up with that the term quality, which encompasses economic, social, cognitive and cultural aspects of education, is perceived as an integral feature of the educational process and its results. By providing high quality educational services, educational institutions play an important role in the development of the

National economy, of the society as a whole and of its individual members.

Total quality can only be achieved by establishing an innovative organization, one that is flexible, which can adjust quickly to changes in its environment and is capable of learning.

Also, to improve education quality, an essential factor of economic and social development in the 21st century, is it is crucial to reduce the huge amount of knowledge students are supposed to master, focusing their attention to a system that will improve their skills that will enhance their career and let them know how to compete in the market after graduation.

2.12 Critical factors of TQM strategy:

Some other researchers defined TQM based on its critical factors.

For example, there are who looked at TQM strategy through its principles, including teamwork; continuous improvement; and customer focus, practices, and encompasses customer relationships; process control; and group training and skills, and finally techniques such as quality control and team building techniques.

To identify the critical factors of TQM, according to various reviews of the literature that were conducted by different researchers who identified some critical factors such as human resources focus; management structure; quality tools; supplier support; and customer orientation as the major critical factors based on which TQM should be defined.

On the other hand, many other researchers such as Dean and Bowen (1994); Black and Porter (1996); Rao et al. (1999); Flynn and Saladin (2001), although they have different definitions for TQM, they consider Malcolm Baldrige National Quality Award (MBNQA) a defining model for TQM **(24)**

Quality at the source exemplifies the difference between the old and new concepts of quality. The old concept focused on inspecting goods after they were

produced or after a particular stage of production. If an inspection revealed defects, the defective products were either discarded or sent back for reworking. All this cost the company money, and these costs were passed on to the customer.

The new concept of quality focuses on identifying quality problems at the source and correcting them.

The benefits of the development of such a diagnostic model will be of direct benefit to TQ managers, senior executives, TQ researchers, and to the society as a whole.

3.1. Organizational efficiency

Organizational efficiency refers to the ability of an organization to achieve its goals with the minimum amount of resources while maintaining high levels of quality in its outputs. It involves optimizing processes, reducing waste, and utilizing resources such as time, money, and labor effectively to produce the desired results.

3.2. Dimensions of Organizational Efficiency:

1- Resource Utilization: Efficient use of financial, human, and material resources to maximize output.

2- Process Optimization: Streamlining processes to eliminate redundancies and improve workflow.

3- Time Management: Effective management of time to ensure tasks are completed within the set timelines.

4- Cost Efficiency: Minimizing costs without compromising the quality of products or services.

5- Quality Output: Maintaining or improving the quality of output while minimizing resource input.

6- Productivity: Enhancing the productivity of employees and systems to achieve higher output levels.

3.3. TQM and performance of service organizations:

TQM and Performance of Service Organizations As the society becomes higher in income, more knowledgeable, and matured culturally, the demand for high quality and innovative products and services it become more vital for all organizations to apply TQM and it is indicators. **(25)**

Currently, TQM practices have been attracting an increasing attention from researchers, who try to study their applicability in different service industries such as higher education institutions, health care industry, and public service organizations. **(26).**

However, it has been widely argued that TQM principles, in support to the contingency model of TQM application, are equally applicable to different environments.

In the TQM literature, there has been a significant support for the effect of TQM practices and organizational performance relationship through many empirical conducted studies worldwide.

However, it has been argued that the application of TQM practices in service organizations require modified models should be made compatible to enable the service organization to reap the utmost potential benefits.

In addition to that, it has been emphasized by many researchers (e.g. Al-Mansour, 2017; Huq and Stolen, 2018; Prajogo, 2018) that the behavioral factors of TQM

As leadership, customer focus, empowerment, and involvement are crucial factors in service-oriented organizations.

3.4. Basic Principles of Total Quality Management Especially in higher educational institutes:

The basic principles for the Total Quality Management (TQM) philosophy of doing business are to satisfy the customer, satisfy the supplier, and continuously improve the business processes.

Management schools applying TQM in higher education have different points of view on its application. Some universities perceive it as a management system with customer or student satisfaction as the central element.

Others see TQM as a philosophy nurturing change in an organization or management institution. Extensive use of information technology, a more global curriculum, diverse student populations, are fostering change and causing need of TQM (Alstete 2020).

TQM advancement in all management settings is persuaded by growing international competition, increasing students' awareness, considerations of employer and changing attitudes toward education quality.

The cultural change in management schools associated with TQM application is one of the most difficult obstacles to use TQM principles in higher education. Evans and Lindsay (2017) described the TQM tools as: a systematic progress in practices, rearrangement of rewards and assessment systems, decentralized decision making which helps top management leadership to develop a quality education culture.

Bringing change in culture also demands improvements in infrastructure, practices, and extensive training of faculty and management staff. Management universities can learn from corporate sector about improving their delivered services to students, resources productivity, and cost effectiveness (Skirk and Miller, 2022).

The quality measurement in management education is more difficult then production processes and mostly depends upon faculty teaching, their research and overall schools provided services. Engelkemeyer (2021) recommended

A review of the relevant TQM literature shows that researchers have different approaches in the conceptualization of TQM and organizational performance constructs

While some researchers considered TQM construct as a multidimensional construct, others used the one-dimensional operational definition for TQM construct. **(27)**

Based on that some of the major TQM factors used to study the effect of TQM strategy on the organizational performance of service organizations are:

Management leadership:

Management leadership is one of the most important factors of TQM that have been studied by researchers as the base of any TQM initiative. The literature of TQM emphasized the crucial role played by the top management and the necessity and importance of their full commitment to the success of any organizational initiatives

The importance of top management comes from the role of top management in the development of supporting organizational culture that is based on effective communication, teamwork spirit, empowerment, participative decision-making process, and effective training.

Therefore, the literature of TQM empirically recognized the management leadership- organizational performance relationship

Thus, it is highly expected that the top management support and commitment can enhance the organizational performance of an educational institution.

Customer Focus:

As has been widely reported in the literature, the ultimate goal of TQM strategy is to satisfy the customers' need and meet their changing expectations. However, if the TQM strategy implementation does not add value to the customers, the TQM strategy redeemed failure.

Towards achieving the customers' satisfaction, there should be a continuous and effective communication between organizations and customers and customers should be actively involved in products and service design. To be able to get the full involvement of customers in all the marketing activities, there should be long-life relationship strategies with customers through direct interaction.

Moreover, all organization, especially educational institutions should develop reliable customer related databases on customers' needs and expectations alongside continuous monitoring of their satisfaction level.

Since educational institutions are completely driven by customers and seek their satisfaction through innovative and high-quality services, customer focus factor of TQM strategy is expected to help them to achieve better performance and provide better educational services.

Strategic Planning:

Although strategic planning encompasses the activities through which an organization formulates, implement, and evaluate all other strategies to achieve organizational goals, it is used to align TQM strategy with all other organizational strategies. Moreover, TQM-strategic planning will consider the organizational capabilities, such as adequate funds, skilled employees, and adequate time, to achieve the goals of executed strategies. Since the business of banks is mainly built on attracting new customers besides retaining the existing ones, banks have no other alternative than quality strategic planning approach.

Human Resource Management:

There is a researcher who Defined HRM as an element of TQM strategy to be the employee involvement; employee training; and employee empowerment. However, he argued that the human resource of an organization is the building block for competitive advantage. **(28)**

In relation to that, it has been widely acknowledged by the researchers that TQM implementation requires changing the organizational culture to support the suitable TQM model adopted by an organization. In other words, any organization should develop a suitable TQM model based on HRM practices that help all the employees to accept and successfully implement any intended quality initiatives

In TQM initiatives, the human element has been playing a vital role as employees are the factor behind the continuous improvements that to be delivered to customers to acquire their satisfaction and then loyalty which is the pillar of successful business.

Service Design:

It has been clear from the literature of TQM that good service design contributes significantly to the performance of an organization through improving its reputation and consequently customer satisfaction.

From the researcher point of view, proper design of the service offered by an organization lead to a better work process, reduce the wasted time, and increase customer satisfaction level and hence business profitability.

Information and Analysis System:

As it has been emphasized by the literature of TQM that effective information system is among the critical factors that contribute significantly to the success of any TQM initiatives.

The importance of information system as the combination of hardware, software, people, and procedure drove most of the national quality awards to state the importance of information systems as one of the main criteria that must be effectively managed and utilized by organizations.

Therefore, for any kind of organizations especially service organizations like educational institutions, having and updating an effective information system is mandatory to be able to keep pace with the changing customer's needs and requirements.

Continuous Improvement:

Basically, the TQM strategy has been defined as the management philosophy that seeks to satisfy the customers through continuous improvement efforts at all organizational levels

Therefore, organizations should expand their continuous improvement practices to cover all kind of processes including management activities and styles.

You can never be satisfied with the method used, because there always can be improvements. Certainly, the competition is improving, so it is very necessary to strive to keep ahead of the game. As the quote says "Working smarter, not harder" **(29).**

Some organizations have tried to improve by making employees work harder. This may be counter-productive, especially if the process itself is flawed. For example, trying to increase worker output on a defective machine may result in more defective parts. Examining the source of problems and delays and then improving them is what is needed. Often the process has bottlenecks that are the real cause of the problem. These must be removed.

Some organizations consider the employees as a source of continuous improvements. They can provide suggestions on how to improve a process and eliminate waste or unnecessary work. by applying many quality methods, such as just-in-time production, variability reduction, that can improve processes and reduce waste. **(30)**

The principles of Total Quality Management are to seek to satisfy the external customer with quality goods and services, as well as your company internal customers; to satisfy your external and internal suppliers; and to continuously improve processes by working smarter and using special quality methods.

Benchmarking:

Some organizations use a benchmarking strategy to be able to catch up in the market by comparing their performance to that of the leading and successful organizations.

However, the essence of benchmarking practice is to analyze the products, services, and techniques that are being used by other competitors in the same industry or other industries to gain competitive advantage.

Cost savings, process efficiency, employees' satisfaction, and customers' satisfaction are among several criteria that can be benchmarked by an organization.

Based On the previous and the above information the researcher can reach that

Total quality management (TQM) is defined as the process of bringing change in the culture of an organization and better services quality. These approaches of continuous improvement are considered successful and widely implemented in higher education in advanced countries.

The quality of education offered in many management schools is questioned by students and prospective employers. The efforts to improve quality appear insignificant, resulting in no improvement in overall quality deployment in management schools.

The integration of TQM practices within an organization significantly enhances its efficiency by optimizing resource use, streamlining processes, improving productivity, and maintaining high-quality outputs. This connection is well-supported by empirical research, as shown in the studies discussed.

4.1. Research Methodology:

This part describes the methodology of the study. More specifically, it presents the research population, method of collecting data and hypothesis testing.

Research population the research population consists of two populations. The first population represented by the managers of the outsourcing process and the other population consisted of the employers how are responsible for achieving the outsourcing process.

4.2 Method of collecting data:

It has been relied in collecting data for the study on the questionnaire method and personal interviews with the TQM and general managers at the selected organization. When designing the questionnaire, the following points have been taken into consideration:

- The questionnaire was based on relevant literature to explore important points at the TQM approach.
- The questions were presented in a simple and clear form which contributes to achieve the research objectives.

4.3. Data collection, recording and analysis

The researcher collected the data after preparing the interviews with fixed time with the managers and respect their opinions and promised them to deal with their information with highly levels of security.

The researcher has used the statistical techniques in order to analyze the collected data and test the research hypotheses. The researcher analyzing the results and matched it with the hypotheses mentioned at the research. The researcher used the statistics techniques (the arithmetic mean) (Chi^2) to analyze the data which the statistical analysis was done using Chi^2-test for determination the incidence of answers (of strongly agree, agree, N/A, disagree and strongly agree) on the different questions in the questionnaire According to (SAS, 2004).

About the Questionnaire

The objectives of the questionnaire was to gather information to measure the effect of the application and determinants of TQM approach on the performance of higher educational institution .it will enable to understand and analyze the following;

1- To find out the role of TQM critical factors in enhancing TQM for educational institutes

2- To investigate the influence of critical factors on educational institutes performance

3- To find out the impact of benchmarking on the overall development of TQM in educational institutions

4.4. Data Analysis and Hypotheses Test

The results in Table (2) and Fig. (1and 2) , cleared that, the results of the different answers of the questions of this questioner on scope and benefit analysis differ significantly ($P < 0.01$) in its relationships with its effect on TQM.

The question (1) . **Is there is a system for incentives and bonus for the employees**, showed that, strongly agree individuals 28 (35 %), agree 48 (60 5) , N/A 0 (0 %) , Disagree 4 (5 %) and strongly disagree 0 (0 %).

These results indicated that, the educational institution take a special system for incentives and bonus for the employees and this improve the total quality management among educational institutions. These results agreed with those of ***(Hall, 2018 and Juran, 2019)*** where they reported that, the institution to obtain a high successful management we take a special system for improvement of the conditions of the workers an employee.

While, the results of the questioner about the question number **2- Do you believe that the management takes into consideration the input of the employees in making decisions.** Indicated that, strongly disagree 32 (40 %), agree 32 (40 %), N/A 8 (10 %), disagree 8 (10 %), strongly disagree 0 (0 %).

These results indicated that the most educational institutions managers before taking any decision making put in their considerations the number and input of the employees in the institution.

These results agreed with those of (***Deming, 2000 and Murray, 2013***), where they reported that, the employees and workers is main resource that make on improvement of TQM and improvement the efficiency of the firm.

While, the number of persons that answer about the question number **3-Do you think that TQM approach leads to an increase in the competitive advantage of the organization** the strongly agree answers were 40 (50 %), agree 32 (40 %0, N/A 4 (5 %), disagree 4 (5 %) strongly agree 0 (0%) from the total number of answers that include 80 answers.

These results agreed with ***(Deming, 2000 and Murray, 2013)*** where they reported that, the application of TQM approach in the firm improve the production and firm efficiency with improvement of the organizational efficiency.

While, the results on the answers of the question **4- Do you think there is a relationship between TQM application and organizational effectiveness,** the strongly agree answers were 24 (30 %), agree 40 (50 %) 4 (5 %0 12 (15 %), strongly agree 0 (0 %) from the total numbers of answers that include 80 answers.

These results attributed to the good TQM application depend mainly on application of effective organization. And this point is one of the main points for success of quality management.

These results agreed with those of ***(Deming, 2000)*** where he reported that, the effective of quality management in the firm mainly depend up on the effectiveness of the organizations found in the firm.

And the answers of the question number **5. Does the organization is taking into consideration the demands and the needs of the surrounding environment**

The answers were strongly agreed were 40 (50 %), agree 16 (20 %), N/A 8 (10 %), disagree 16 (20 %) strongly disagree 0 (0 %0 from the total answers that include 80 answers.

These results attributed to the good quality management must be depend on the process of capability that depend on the management voice is intimately positive to the voice of the consumers and their demands. These results agreed

with those observed by *(Deming, 2000),* where he reported that the voice of the management must be parallel with voice of the consumers and customers must.

The answers on the question 6-is there **is a clear organizational structure for the organization** the answers were strongly agree were 28 (35 %), agree 44 (55 %), N/A 8 (10 %), disagree 0 (0 %) strongly is agree 0 (0 %) from the total answers that include 80 answers.

These results attributed to that the good management must be of clear organizational structures that help in improvement quality management. These results agreed with those of ***(Deming, 2000)*** where he reported that the structure of the management and its performance is the main item for improvement of the quality management in any firm.

The answers on the question **7-. Do you participate in the TQM process in your organization** the answers were strongly agree were 32 (40 %), agree 32 (40 %), N/A 8 (10 %), disagree 8 (10 %) strongly disagree 0 (0 %) from the total answers that include 80 answers. These results attributed to the good quality management apply and participate the basis of organizational structures. These results agreed with those of ***(Padhi, 2020)*** where they reported that, the firm and management must be participating the management quality to improve quality and efficiency.

The answers on the **question 8. Do you think there is an effective and strong link between the school and the parents** the answers were strongly agree were 28 (35 %), agree 40 (50 %), N/A 4 (5 %), disagree 8 (10 %) strongly disagree 0 (0 %) from the total answers that include 80 answers. These results attributed to the all individuals commonly considered the success of the education and the student in the school commonly originated from the house, from the parent's education that help in the success of the student in the school and colleges. These results agreed with those of *(Murray, 2018)* where he reported that, the importance of the parents in the house with education ethics help in the development of quality management in the children with improvement of TQM among the student in the house.

The answers on the question **9. Does the school has a role in community service** the answers were strongly agree were 40 (50 %), agree 36 (45 %), N/A 0 (0 %), disagree 4 (5 %) strongly disagree 0 (0 %) from the total answers that include 80 answers.

Table (3-2): Answers on the questions of Scope and benefit analysis about outsourcing.

Scope and benefits t analysis	Strongly agree		Agree		N/A		Disagree		Strongly disagree		Total
1. Is there is a system for incentives and bonus for the employees	28	35	48	60	0	0	4	5	-	-	80
2. Do you believe that the management takes into consideration the input of the employees in making decisions.	32	40	32	40	8	10	8	10	-	-	80
3. Do u think that TQM approach leads to an increase in the competitive advantage of the organization	40	50	32	40	4	5	4	5	-	-	80
4.Do you think there is a relationship between TQM application and organizational effectiveness	24	30	40	50	4	5	12	15	-	-	80
5. Does the organization is taking into consideration the demands and the needs of the surrounding environment	40	50	16	20	8	10	16	20	-	-	80
6. Is there is a clear organizational structure for the organization	28	35	44	55	8	10	0	0	-	-	80
7.Do you participate in the TQM process in your organization	32	40	32	40	8	10	8	10	-	-	80
8. Do you think there is an effective and strong link between the school and the parents	28	35	40	50	4	5	8	10	-	-	80
9. Does the school has a role in community service	40	50	36	45	0	0	4	5	-	-	80

$Chi^2 = 77.49^{**}$ ** = Significant at ($P< 0.01$)

These results attributed to the most individual commonly believe and considered the basic educational items that the students learning it in the school and bred on it is the main community services that used in development of the

home .and improving the management. These results agreed with those of *(Deming, 2000)* where he reported that, the educational demands commonly began from the individual with education school learning that developed the management education.

Our results concluded that, the application of TQM basis in the firm and in education firms and schools it will improve the efficiency of the firm and educational management basis in the schools.

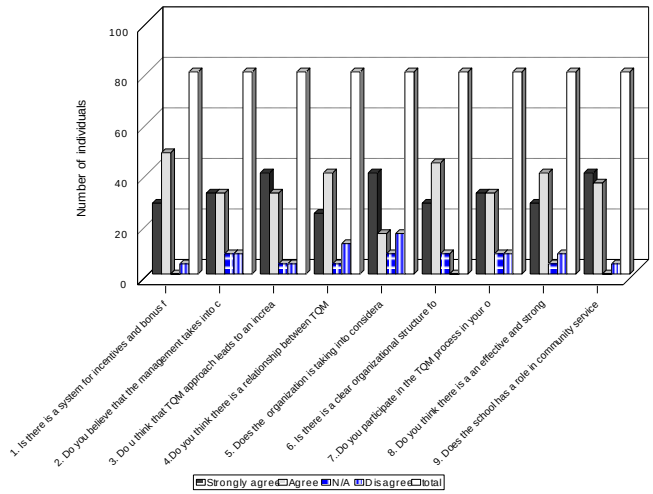

Fig. (1): Scope and benefits analysis about Total Quality Management (TQM)

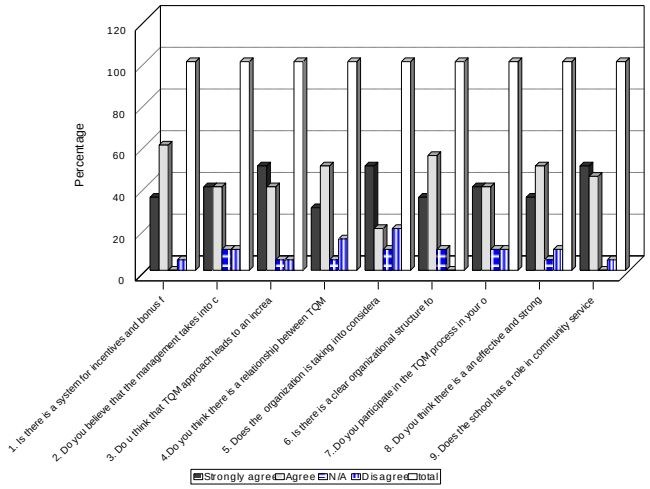

Fig. (2): Scope and benefits analysis about Total Quality Management (TQM)

recommendations

This study was carried-out to throw the light on the importance of TQM, and the most important factors effecting on TQM and the effect of TQM on educational institutions under Egyptian conditions.

- The Total Quality concept is important for businesses to be successful in the future. Over time continued pressure on quality products will force businesses to adopt certifications proving they are adhering to the total quality concept. This will ultimately be a good thing for businesses because it will divide the successful from the unsuccessful.
- The Total Quality Management has brought many kinds of improvements at the performance of different kind of service organizations at different aspects regarding productivity, efficiency and effectiveness of decision-making process, documentation cycles, financial costs and etc,
- TQM is critical to the health of the economy. As they generate a lot of benefits to the economy and society as well.

Successful companies understand that quality provides a competitive advantage. They put the customer first and define quality as meeting or exceeding customer expectations.

The most obvious consequence occurs when poor quality creates dissatisfied customers and eventually leads to loss of business there are areas where TQM provides a needed change initiative along with others.

In addition, once most companies treat improving their processes as a priority TQM ceases to give a competitive advantage since it becomes a basic entry point into the competition. Furthermore, TQM is combining the knowledge for the customers with other information and use the planning process to organize the future actions, managing the daily activities and achieving company's future goals. Eventually the planning process is the liaison that holds together all TQM activity.

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