# Total quality management in higher education



Total Quality Management (TQM) has become a frequently used term in discussions concerning quality. TQM is considered to be an important management philosophy, which supports the organizations in their efforts to obtain satisfied customers. However, there exist extensive numbers of examples of failed or badly performed implementation processes of TQM. This is a problematic phenomenon, which negatively affects organizations, irrespective of size, in their development towards excellence and ultimately survival in a competitive environment. Furthermore, diversity among researchers exists regarding the actual benefits of TQM.

Total Quality Management (TQM) has been adopted by many organizations worldwide, its implementation in non-profit organizations, such as higher education institutions, presents more challenges and difficulties than those encountered in business organizations. A critical step in TQM implementation is the process of customer identification. In addition to customer identification, there are other issues such as leadership, cultural, and organizational issues that tend to create difficulties for TQM implementation in higher education.

In this article it has been tried to bring out a clear status of higher education and emergent needs to enhance the quality of higher education. Globalization of higher educational services has become an area of key focus for many countries. In order to fuel the socio-economic development of the country, higher education is playing a more active role in our country and this requires a paradigm shift in terms of governance and service delivery. These issues along with the role of students from a quality perspective and performance measure for higher education in Pakistan are discussed, and suggestions are made for their resolution.

Higher education institutions must become more innovative leading to quality institutions of knowledge production and dissemination. Realizing the importance of higher education, a lot of innovative experiments are being done to improve the performance of this sector. Application of TQM concepts is one of such measures, which will go a long way in revolutionizing the higher education system. The paper attempts to theoretically conceptualize TQM in higher education.

## BACKGROUND

TQM is, compared to other concepts such as quality control or quality assurance, wider since it embraces the whole organization instead of focusing on parts of the product or service. TQM has been acknowledged as an important subject in management theory and practice and has become a frequently used term in discussions concerning quality. The use of TQM among many western organizations has been relatively high during the 1990s, but there exists a diversity of opinion among researchers regarding the actual benefits of TQM. Research results that claim that there exists positive effect on performance can be found in e. g., Allen and Kilmann, for instance, express a more pessimistic view regarding the benefit of TQM investments [3].

## **INTRODUCTION**

The application of Deming quality management principles in educational institutions throughout the world as a successful paradigm for school

restructuring and reengineering has been widely documented [9]. Multiple positive effects of TQM on increased student achievement tests and teacher made tests, increased student self-esteem, increased teacher morale, and increased parent and community involvement in the institute. Profound knowledge consists of appreciation for a system, knowledge about variation, theory of knowledge, and psychology. Hence, one of the purposes of this article is to study the implementation of TQM in Pakistan's higher education.

TQM is a management philosophy adopted from industry which has been applied to higher education in many countries throughout the world. TQM, also referred to as continuous quality improvement, is not without controversy and is far from being universally accepted in education. TQM philosophy entails forming quality improvement teams which investigate problems, suggest solutions, and realize quality improvement. TQM strives for continuous quality improvement in organizations.

The popularity of TQM, some institutions and companies has found it difficult to implement this program successfully. An examination of the literature suggests that only one-third to one-half of organizations have observed significant improvements through TQM programs [10, 11]. This lack of significant success is often not a failure of the TQM concept, but a failure to pay sufficient attention to the cultural and structural variables that influence TQM. Unlike other programs, TQM involves changing the way people interact and work in institutions. As such, it is a context-dependent program, the success of which depends to a large extent on cultural and structural factors. Hence, another purpose of this critical study is to identify the cultural and structural issues involved in implementation of TQM in Pakistan's higher education.

TQM in the classroom has been successful. The historic role of teacher, lecturer and provider of knowledge has been replaced with a new role: teacher as mentor, facilitator and classroom manager. The goal is no longer simply to impart knowledge to students; teachers and students must design and deploy education together. If students are active participants in the classroom, it is more likely that true learning is really taking place. The study of the Literature suggests to accomplish collaborative learning with technology, new metaphors for teaching – e. g. teaching as choreography or teaching as maneuvering – must emerge as teachers focus more on structuring the learning and social environment to encourage active participation and group self-reliance in completing team work [2].

The importance of education for the development of excellence, expertise and knowledge leading to overall development in economy cannot be undermined. This has necessitated a sound strategy for the development of higher education in almost all countries of the world. Establishing leadership and educational governance quality in the world is possible only when we have a developed system of higher education in which efficiency and effectiveness remains the sole criterion to evaluate educational, instructional quality and institutional performance. The system of higher education is found efficacious in making available to the society a dedicated, committed, devoted and professionally sound team of legislatures to decide the future of any nation. This is possible only when the principles of quality management are inculcated in the system of education. TQM in education. It deals with issues pertaining quality in higher education and moves on to identify variables influencing quality of higher education.

Based on the discussed research dimensions and overall purposes, this article focuses mainly on the four concepts TQM, Implementation, Institutional Culture and Change, and Institutional overall performance. Although the aim of this article does not include a formal analysis of these concepts, a general discussion will be held in order to outline the overarching research area within present research.

## **RESULTS AND DISCUSSIONS**

## **Total Quality Management**

Dale, describe TQM as an umbrella of concepts and ideas in various contexts related to the quality field [6]. Furthermore, TQM is described as the mutual cooperation of everyone in an organization and associated business processes, in order to produce products and services which meet, and hopefully exceed the needs and expectations of customers. Oakland describes TQM as an approach to improve competitiveness, efficiency and flexibility for a whole organization [20]. TQM may be defined as an evolving system, consisting of practices, tools, trainings, and methodologies for managing organizations in a rapid evolutionary context. According to the authors, the system provides customer satisfaction and improves the

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performance of organizations by e. g. eliminating product defects and speeding service delivery.

As the definitions of TQM vary, so does the interpretation of the fundamental constituents. Many authors within the TQM area consider values to be elemental for the concept. However, the number of values, as well as the formulation, differs slightly between different authors. For example, the Malcolm Baldrige National Quality Award is based on eleven core values and concepts [19]. Furthermore, Sila & Ebrahimpour found in their extensive theoretical investigation that the following factors were the most frequently addressed within TQM definitions: (A) Customer focus and satisfaction. (B) Employee training. (C) Leadership and top management commitment. (D) Teamwork. (E) Employee involvement. (F) Continuous improvement and innovation. (G) Quality information and performance measurements. Still, there is a base of values, which seems to be common to most authors, consisting of the six values illustrated in Figure-1 [25].

## **TQM As A System**

Some authors have suggested a system approach to the concept of TQM, see e. g. Hellsten & Klefsjo, declare that TQM not only consists of values, such as process focus, customer focus or people commitment [13]. The values are supported by techniques, such as process management, customer focused planning, or target-oriented groups, and tools, such as control charts, the quality house or Ishikawa diagrams, see Figure-1. The choice of TQM core values is supported by the findings of Sila & Ebrahimpour [25].

Aim: Increase external and internal customer satisfaction

#### with a reduced amount of resources

## **TECHNIQUES**

**Quality Circles** 

Policy Development

Self-Assessment

Process Management

Benchmarking

**Employee Development** 

**Quality Function Deployment** 

## TOOLS

Ishikawa Diagram

Design Matrix

ISO 9000

Tree Diagram

**Control Chats** 

Criteria of MBNQA

Process Maps

## VALUES

Top Management Commitment

Focus on Processes

Improve Continuously

Base Decisions on Facts

Focus on Customers

Let everybody be Committed

## Figure-1: TQM seen as a continuously evolving management system consisting of values, techniques, and tools.

The discussion held by Hellsten & Klefsjö implies that TQM can be defined as a management system that consists of three units, which means a network of dependent units with a joint goal. The three units are the core values, techniques and tools. The goal of TQM is, according to Hellsten & Klefsjo, " increased customer satisfaction with a reduced amount of resources" [13]. This implies that TQM is relevant in all fields of our society, not only in companies but also in health care, educational institutions, defense authorities.

## **Interpretation of the Core Values**

A strategy for TQM in an organization must be built on the management's continuous commitment to questions concerning quality. According to Bergman and Klefsjö, the management must establish a quality policy and support quality activities economically, morally and by managing resources

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[4]. But management should also set a good example by actively taking part in the practical work. Successful work towards TQM must be built with the management's continuous involvement as a basis. The core values are important parts of this work. However, the use of core values for managing an organizational change and cultural development is not unquestioned. According to my point view the management can stimulate the individual values by managing resources, supporting quality activities and by systematically working with techniques and tools that support the core values.

## **Top Management Commitment**

Working with TQM and keeping up the quality improvements demands total commitment of the management [1, 5, 22]. The management must initiate planning for implementation and participate in the work including evaluation of processes and results. All senior leaders in the organization must create a customer orientation and set clear and visible quality values. The importance of the role of senior managers as advocates, teachers and leaders cannot be overstated. These leaders must serve as role models throughout the organization, thus reinforcing the quality values at all levels in the organization by choosing and applying appropriate techniques and tools.

## **Focus on Customers**

A central core value in TQM is that all products and processes should always have a customer focus. Quality should be valued by the customers and should always be put in relation to their needs and expectations [20]. This signifies that quality is a relative concept, which, among other things, is set by the market competition. The organizations need to be dedicated to https://assignbuster.com/total-quality-management-in-higher-education/ satisfying customers. To focus on the customer means, therefore, that one tries to find out the customer's needs and values by conducting market analyses and then trying to fulfill the market expectations while systematically developing and implementing the services. Focusing on the customer does not only apply to the external customers. Every employee has customers within the organization, internal customers, and in order to do a good job their needs also have to be fulfilled.

#### **Base Decisions on Facts**

An important core value in TQM is to make decisions based on facts that are well founded and to not allow random factors to be of decisive importance. This calls attention to the importance of knowledge regarding variation and ability to handle and control variation. The improvement program called Six Sigma, with origins from Motorola in the 1980s, is one approach for considering variation within organizations. The different measurements required to obtain multiple facts can be classified as measurements of customer satisfaction including employee satisfaction, measurements of market position, development process and operating measurements. When the organization receives the described information it is in a position to quickly determine how well it is performing, compare its performance to that of competing or benchmarked organizations, and decide the action that is now convenient.

#### **Focus on Processes**

Much of the work within an organization can be looked upon as a process, which means a repetitive sequence of activities [4]. The goal of the process is to produce services, which should satisfy the customer. The corollary of https://assignbuster.com/total-quality-management-in-higher-education/

focusing on processes is that the focus is not on results. Instead the result is the dependent variable. The result comes from whatever process is followed; process drives result. The process generates data that indicates how well the process is satisfying its customers. The process orientation and focus has become even more focused on in the currently dominating improvement program Six Sigma.

## **Continuous Improvement**

It is not enough for an organization to do better than it did previously. The external demands an organization faces are continuously increasing. Consequently, an organization needs to continually try to improve the quality of its services/products and processes. The continuous improvement of the process leads to customer satisfaction, which results in an external quality improvement. The Deming cycle, or the PDCA-cycle, is a model for process analysis and improvement and serves as a symbol for continuous improvement. The PDCA-cycle consists of the four phases; plan, do, check and act [8].

## **Everybody's Commitment**

If the organization's quality strategy should be successful, all of the organization's employees should be engaged in the work of satisfying the customer with a continuously improved quality. Everybody's commitment means that continuous improvement should be practiced everywhere in the processes and that the involvement of all employees at every level should be facilitated. The work is based on the skills and participation of every employee and his or her understanding of what is required. Educating and training all employees provides the knowledge needed on the mission, https://assignbuster.com/total-guality-management-in-higher-education/

vision, direction, and strategy of the organization as well as the skills they need to secure quality improvement and resolve problems.

## Maturity Levels of TQM

If we consider TQM as a management system that can be implemented in an organization, we must be able to form an opinion of different levels of adoption to the system. Lascelles & Dale describe six different levels of TQM adoption (or lack of it), which they have termed:

Uncommitted

Drifters

Tool-pushers

Improvers

Award winners

World class

## **Figure-2: Levels of TQM adoption. (Lascelles & Dale, 1991.)** These levels are not necessarily the stages through which organizations pass on their TQM journey; they are characteristics and behaviors which organizations display in relation to TQM (Dale, 1999). The levels described by Lascelles & Dale are intended to support organizations in identifying their weaknesses and addressing them, as a part of the continual challenge of continuous improvement throughout the organization [17].

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As discussed by Lascelles & Dale one level of TQM adoption are quality award winners [17]. Quality awards have been established over the last decades in order to stimulate TQM work and by appointing award recipients honor them for good work. This is used as inspiration for others. Many organizations choose to work towards TQM by means of the award criteria, for instance, by taking part in a quality award process. The types of quality awards extend from international, national, regional, branch-wise and incompany quality awards. An example of an international quality award is the European Quality Award, which was developed in order to sustain business excellence efforts among organizations within a European context.

## **TQM and Organizational Performance**

Organizational performance is possibly the most widely used dependent variable in organizational research today. However, at the same time it remains one of the most vague and loosely defined constructs. Performance is a multifaceted concept, which can be measured at a organization or system level. While company's performance has its standardized indicators, it is more difficult to select for performance indicators of a system of organization and people.

Previous research regarding TQM and performance has covered both soft and hard performance measurements, where hard measurements as accounting variables are in majority. However, one may argue whether financial figures are better at measuring the consequences of yesterday's decisions than they are at indicating tomorrow's performance. The importance of soft performance measurements, as the organization's intangible and intellectual aspects, cannot be neglected. Activities may, at https://assignbuster.com/total-guality-management-in-higher-education/ times, lead to favorable outcomes on one performance dimension and unfavorable outcomes on another performance dimension. Considering TQM, with its relatively extensive focus on intangible and intellectual aspects, one may argue that a study aiming at linking TQM to performance should include soft measurements. As McAdam & Bannister maintain " both hard and soft measures of performance are needed within the TQM framework" [18].

Logically, the choice of performance measurements relies on the actual interest in what to examine. Furthermore, studying performance development in the context of TQM implementation necessitates a study of the impact of historical management decisions. Consequently, theoretical issues regarding performance and TQM investment will be the point of departure in the forthcoming discussion.

One approach to study the relationship between TQM implementation and performance development is to compare quality award recipients with different control companies. However, sometime there was no significant difference between the quality award recipients and control companies during the implementation period. Another approach is to investigate the development of the share price on the stock market for quality award recipients.

## **Implementation and Organizational Change**

The common standard dictionary definition of the term implementation is plainly " to put into effect according to some definite plan or procedure". Based on that definition, implementation can be considered as a deliberate and sequential set of activities directed toward putting a strategy or policy into effect, making it occur. As a consequence one could view implementation as a process of interaction between the settings of goals and actions geared to achieve them. This means that implementation also can be considered as a form of organizational change. The above descriptions discuss implementation as a set of activities or a process. When considering TQM implementation, a definition that implies that implementation is a process of activities seems most suitable. This is due to the fact that the subject in this case, i. e. TQM, is, according to the definition, a thorough management system that includes all parts of the organization, and consequently is a process of activities needed.

There must be a starting point when implementing. If no action is started, implementation cannot take place. There must also be an endpoint. Implementation cannot succeed or fail without a goal against which to judge it. Failure to implement may result either from overestimation of what can be accomplished or from underestimation of ability to implement.

## What Initiates the Change Process

The ability for change and renewal is important and necessary in order for the organizations to maintain their long-term efficiency. A condition in this respect is that the change and renewal process brings improvements. Improvements demand changes but all changes do not bring improvements. An important aspect that affects the nature of the change process is the question concerning what factors initiated the change process. In addition to four main causes for strategic change namely environment, business relationships, technology, and people.

## **TQM Implementation in the Organizational Development Context**

To implement a management system, such as TQM, requires an extensive organizational change, provided that the organization does not unconsciously work according to the system. Organizational Development includes TQM, the Excellence movement, culture management and business process reengineering. As a result, these change initiatives have tended to borrow fragments of the Organizational Development approach. This has had both positive and negative consequences. On the positive side, it has made aspects of Organizational Development more widely known. On the negative side it has tended to misunderstand and misapply much of the underpinning theory, methodology and intervention practices of Organizational Development. This has, according to Grieves, often resulted in radical authoritarianism or radical democratized programmed approaches, rather than culturally democratic or pluralistic approaches to change [12].

## The Change Process – TQM Related Recommendations and Strategies

There has been much written concerning implementation of TQM. The books and articles extend from very tangible and detailed descriptions, e. g. Deming, Juran, NIST, [7, 14, 19]. The theory describes both obstacles for working towards TQM and several strategies for implementing the concept in an organization. The recognition of quality as a strategic issue in business planning is critical for a successful TQM implementation. TQM implementation should be clearly aligned with the organization's strategic priorities and goals and be planned properly [3, 15, 24]. The planned implementation appears to incorporate many initiatives that address soft https://assignbuster.com/total-quality-management-in-higher-education/

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aspects, such as team work, employee involvement and culture. Failure of

TQM implementation is, according to some authors, not due to flaws in TQM principles but in inadequate systems for executing TQM properly, implying the importance of tangible aspects. However, Saad & Siha maintain that the reasons for failure in implementing TQM are mainly due to how it is implemented, i. e. the implementation phase [23]. While TQM principles appear obvious, many organizations have found them very difficult to execute, reportedly due to the fact that the implementation is cumbersome, time-consuming, and frequently lacking focus. Some of the resistance to TQM may be understood as typical resistance to any change. This may be more severe if the organization is successful, if there is a particularly deepseated culture, if there has been a great deal of change already, or if the change lacks legitimacy, education and communication. A well-defined implementation structure and clear resource allocation are therefore essential.

Implementation of TQM is a complex process since all employees, starting with top management, need to accept a fundamental organizational change [18, 24]. The issue of management commitment is stated as a critical factor for successful TQM implementation [1, 20]. The management is not only obliged to be committed in order to change the organization towards TQM, it is also imperative that the management ensures that the employees are permeated with the same quality commitment and managers therefore need to focus on and work with the intangible aspects to a large extent. TQM applications across developed countries reveal that the tangible aspects,

TQM effectiveness compared to the largely hidden and intangible aspects such as values, attitudes and perceptions. The use of teamwork during the quality development process is therefore of major importance.

Senior managers may begin the task of process alignment by series distinct but clearly overlapping steps. This recommended path develops a selfreinforcing cycle of commitment, communication, and culture change. The order of the steps is important because some of the activities will be inappropriate if started too early. In the introduction of total quality for managing change, timing can be critical.

## **Organizational Structural and Cultural Impacts on TQM Implementation**

The impacts of the company's culture and structure on TQM implementation is examined through seven building blocks of TQM: management leadership, employee involvement, responsibility for quality at source, elective teamwork and coordination, focus on customer, benchmarking and continuous improvement [9, 14].

Management leadership: In companies with control-oriented cultures and mechanistic structures, management's role is to plan, organize, direct and control employees. This does not match the TQM concept, which suggests that management should lead and create a vision rather than plan, empower rather than direct, and partner and delegate rather than organize and control. TQM philosophy directs management to create a vision that incorporates quality as integral to the business, and to establish policies, practices and structures consistent with that vision [9, 14].

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Employee involvement: Since TQM de-emphasizes status distinctions and empowers employees to make decisions and use their own intelligence [9], It is less likely to succeed in organizations with control-oriented cultures and mechanistic structures that centralize decision-making authority in managerial hands. Organizations with flexibility-oriented cultures and organic structures, in contrast, show a better fit with TQM practices such as employee involvement, empowerment, teamwork and coordination across functional areas.

Responsibility for quality at source: TQM implementation requires employees to identify and diagnose quality problems and take corrective action without going through the management hierarchy [9]. This should be easier to implement in organizations that decentralize decision-making, empower employees and provide employee training in quality control techniques, than in organizations that centralize decision-making and focus on vertical controls.

Elective teamwork and coordination: TQM emphasizes horizontal coordination based on flow of work processes across functional areas [9]. Organizations with flexibility-oriented cultures and organic structures have existing horizontal coordination and communication networks, and should be more successful at implementing TQM compared to the organizations with control-oriented cultures and mechanistic structures that have mainly vertical coordination and control channels.

Focus on customer: Organizations with control-oriented cultures and mechanistic structures have an internal focus and pay less attention to the

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organization's interdependence with the environment. This does not match the TQM philosophy of obtaining customer feedback, meeting and exceeding the needs of external as well as internal customers, and blurring boundaries between the organization, suppliers and customers [9].

Benchmarking: The TQM concept of benchmarking industry best practices is more likely to be successful in organizations with flexibility-oriented cultures and organic structures that consider themselves interdependent with other entities in the environment, and less likely to succeed in organizations with control-oriented cultures and mechanistic structures that largely ignore what is happening outside their boundaries.

Continuous improvement: Organizations with control-oriented cultures and mechanistic structures focus on permanence, since it increases expectedness which, in turn, increases control. This does not match the TQM emphasis on change and learning through strategies such as benchmarking, employee training, cross-functional teams and experimentation. The `kaizen' philosophy of small and continuous improvements finds a better match in organizations with flexibility-oriented cultures and organic structures.

## **Challenges In TQM Implementation In Higher Educational Institutions:**

The main focus of the article is to identify and deliberate the critical issues and considerations of TQM implementation in the area of higher education. Critical issues in implementing TQM in higher education include leadership, customer identification, cultural and organizational transformation. Unlike business organizations, chancellors and departmental heads of higher

educational institution do not enjoy ultimate authority in hiring and firing of personnel, process of allocation of resources and distribution of responsibilities and authorities. Lack of necessary authority makes it difficult to deploy their concepts, opinions, values and goals through layers of higher education institutions. Deep rooted traditions dating back to centuries, a rigid departmental model, inter departmental competition for resources, lack of market focus are the cultural and organizational reasons that makes it difficult to tune in with TQM transformation. Ambiguity in customer identification also creates hurdles in TQM implementation. While most administrators tend to perceive students as customers of faculty in classrooms, many faculty staff resent this metaphor as being too commercial. Without a well-defined customer and a customer focus, guality efforts may be easily diffused. Owlia and Aspinwall concludes that customer orientation is a more problematic principle of TQM when applied to universities because of special nature of many academics whose motivation to work is often independent of market issues [21]. The effectiveness of leadership is adversely affected by individualism among academic staff and due to absence of team working. Impact of TQM in higher education is small due to organizational inert