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Total quality management implementation, and its barriers in Education system

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Abstract

The main purpose of this paper is to specify the thoughts of the modern era paradigm on Total quality management "TQM" and its application in the field of education. This research starts with the background theory/ literature review and then outline the result of the study, conducted by the students to obtain the different perspective on Total quality management in education. This sector needs improvement. It means that adoption of TQM in education gives you an excellent result in the overall system. As we can say that adoption of total quality management in education can ascertain more effective institutional change with success. As a result, this research proposed a theory which is obtained from TQM like institutional change environment, sustainable success, and innovation which express the relationship between the educational institutions and the role of total quality management.

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Introduction

Education is a key which establishes consciousness, forbearance, trust, belief, and guidelines to choose right way at the right time. Education is the best cure for all the diseases of society. School plays a very important role in preparing the children from nothing to future successful person. Due to school education, students can able to learn base foundation which they need to learn higher education from colleges and universities because the higher education depends on school education. Only quality of

education can formulate the students so that they can easily face the global market challenges. Total Quality Management (TQM) is recognized as an effective management philosophy which is used as a strategy for business excellence [1,5]. Although the concept of total quality management was advocated by Dr. W. Edwards Deming in the late 1950's in the USA; however, Japan was the first national who embraced this concept to recover their economy after the World War II. The success of TQM in Japan made this concept famous in many countries across the world. Originally, the concept was developed for manufacturing organizations; later on, it gained popularity to other service institutions, including bank, insurance, non-profit organizations, health care and so on. Lunenburg comments that TQM is also relevant to corporations, service organizations, universities, and elementary and secondary schools [3]. Now, TQM is recognized as a generic management tool and applicable to any organization. In this age of intense competition, quality education is a major concern [2]. The pressure and demand for quality education are increasing. All concerned parties of the education are actively considering implementing TQM in education because it is believed that quality education is one of the fundamental building blocks of economic development. Regarding the applicability of TQM in education, there is a serious debate since this concept was initially developed for manufacturing organizations. It is essential to resolve this problem. While conducting an initial investigation it was also revealed that there are critical challenges in implementing TQM in education. It is also imperative to explore the nature of those challenges so that academic institutions can take proper measure proactively while pursuing TQM in education. Therefore, the education institutions must scrutinize numerous hurdles sensibly for the effective execution of TQM for attaining continuous perfection and sustainability

Methodology

Research methodology aims to show the approaches and methods of collecting the data. Basically it provides a guideline to a research.

Total Quality Management Implementation

TQM is a proactive approach, to confirm quality into the product, service and design of the process and then to continually improve it [4]. According to these definitions, TQM is a plan, a systematic approach to ensure quality and continuous improvement. Deming describes TQM is a never-ending cycle of progress in the system of production should change into gaining better performance and quality standards for the product [5]. TQM is a set of practices that focuses on the systematic improvement, satisfying the customers' needs, and decreasing rework [6]. TQM is a system and set of practices which are aimed at relentless quality improvement and better business performance. TQM views an organization as a collection of interrelated processes. It (TQM) is a method by which management and employees are involved in continuous improvement of the production of goods and services. TQM consists of relentless improvement activities, involving everybody in the business in a totally integrated effort towards improving performance at every level. TQM strives to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives. TQM is a strategic action that focuses on managing the total organization to provide products or services that fulfill their customer requirements by utilizing all resources [11,15]. TQM is the holistic management approach that incorporates all the organizational activities to satisfy customers' needs and achieving overall organizational objectives as outlined [7].

In TQM customer is an exclusive issue and customer satisfaction is considered as a major source of business success. TQM advocates about the people development very explicitly because business excellence largely depends on the extent employees of an organization are capable in their respective fields. TQM uses employee capabilities in all activities and processes and makes collaboration feasible and real as comprehended [18,22]. It leads continuous improvement of the capabilities of the employees. TQM promotes a quality culture because it can ensure improved product and service quality. Gaither believes that TQM is the process of changing the basic culture of an organization and redirecting it towards superior product or service quality [19]. TQM helps in creating a culture of trust, participation, teamwork, quality-mindedness, enthusiasm for continuous improvement, constant learning and as a result, a working culture that contributes towards a firm's success and existence [20]. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work. As specified by British Standard Institution, TQM is composed of a "management doctrine and company patterns which intent to rein the human and material resources of an organization in the most efficient way to attain the goal of the organization" [15,22]. From these definitions, it is easily possible to identify the essential characteristics as well as the significant offerings of TQM, such as: continuous improvement; integration of people, functions and resources; systematic and structured approach; quality control at every level of the organization and at every step of the operating process; developing human and organizational capabilities; efficient utilization of resources; people participation; customer satisfaction; creating a quality culture and so on.

TQM in Education

The literature on the usefulness of TQM in education are differing [24]. There are some authors who are very much confident about the applicability of TQM in education. The values of TQM are similarly appropriate in higher education [25]. TQM principles are compatible with higher education [27]. The finding of James and James is very noteworthy; they opine that TQM is naturally relevant to higher education, because it is a process oriented approach that is designed in increasing productivity, decreasing costs and improving quality [28]. Deming enunciates that the adoption of TQM will help institutions of higher education to maintain their competitiveness, eliminate inefficiencies in the organization, help to concentrate on the market needs, attain high performance in all areas, and fulfill the needs of all stakeholders [29]. Education can be improved through quality management [10]. Peak maintains that TQM improves educational organizations in many ways, such as improving education process, making the educational environment motivating, improving educational curriculum, boosting the speed of training services and reducing costs [16]. TQM is a way of achieving and maintaining excellence in higher education as realized [32]. Even though TQM developed within the manufacturing environment, the benefits are equally applicable to service organizations such as higher education institutions [4]. Murad and Rajesh perceive TQM is a general management philosophy and a blend of various tools which induce educational institutions to pursue a description of quality and the means to achieve it [6]. Others believe that TQM is to some extent applicable in education [9].

TQM values are only somewhat useful in a dynamic and changing environment which is a characteristic of modern higher education as observed [17]. Although higher education institutions are not like companies but, some of the basic principles and tools are applicable as these are instruments at the service institutions and their governance and management boards subject to the institution's academic mission, goals and strategies as noticed [19]. In two different studies, it has been found that TQM is a managerial instrument to resolve the issues associated with services as well as tactics in the academic industry and it can conform to the standard the education industry [22, 14]. However, continuous quality improvement; quality consistency; participation of academics, students and non-academic staff;

satisfaction of the clients; and the existence of management procedures that reinforce quality are a number of quality management programs that nobody would consider irrelevant in the context of higher education [11]. Arcaro opines that quality can create an ambiance where educationalists, parents, government officials, community representatives, and business leaders work jointly to deliver students with the resources they need to meet current and future academic, business, and societal needs [10]. A number of TQM elements have a critical role in process improvement including, “leadership”, “vision”, “measurement and evaluation”, “process control and improvement”, “program design”, “quality system improvement”, “employee involvement”, “recognition and reward”, “evaluation and training”, “student focus”, and “other stakeholder focus” in higher education [16]. A good number of scholars find that some TQM tools and techniques are convincingly suitable in education. It has the capacity to provide practical solutions, positive results in academic and administrative functions. From the abovementioned discussion, it is clear that TQM is credibly compatible with the education [19, 23].

Barriers of TQM implementation in Education System

In some educators believe that philosophy which is developed for business may not be appropriate for service organization like educational institutions. The schools or other type of academic institutions are very much different with a different ethos and characteristics that made difficult, or even impossible to implement a philosophy which has been derived from industry [17,26,13,20]. The biggest obstacle could be the commitment from the parties involved with education system, especially the top management and teachers. Brown et al. notice that lack of top management commitment affects TQM efforts negatively, which is one of the main reasons of failure of TQM efforts [17]. The resistance to quality process improvement comes from professors who consider it is just another business-oriented craze; a typical mindset may undermine the effectiveness of TQM in education [22]. The role of individual, particularly the teachers are often informal and less bureaucratic in traditional education system. On the other hand, Koch and Fisher observe that TQM approach seems to be more administrative and bureaucratic; there is a tendency to produce relentless meetings, generate enormous amounts of paper, and delay or escape critical decision making [6]. There is a long debate about the definition of quality in education. Quality can have multiple meaning in higher education and this variety has considerable influences on the development of methods and instruments of measuring quality; and this variety also can create different stakeholders for the higher education institutions [3]. Overall, this term (quality) may create a complex situation for the academic institutions. The term customer may be very easy to define in manufacturing or business organizations.

However, defining and identifying customer is a challenge in education [5]. The definition (customer) prevails in industry or business environment which based on the idea of satisfying customers’ needs and expectations, is a problematic one in education [54]. Education has multitude interested parties. In the case of elementary and high school level, it is relatively easy to define; parents are the customers and students are the consumers. The customers of higher education are much more diverse and not so easily defined [8]. This situation is complicated in the case of tertiary level of education. A student can be both the consumer and customers if he or she pays his or her tuition fees. In the job market, employer organizations are also the customers. In the case of scholarship students, sponsors are the customers. As a whole, the state is also a customer. Without a precise definition of customer and a customer focus, quality efforts may be easily diffused [25]. A number of reasons for unsuccessful application of TQM in higher education, such as resistance to change; lacking of administration commitment; high time investment due to personal training; difficulty in applying TQM tools to higher education institutions; insufficient experience of team leaders and staff in teamwork; the anxieties of higher education institutions have with their own results not being sufficient enough [4,29].

TQM wants to put more emphasizes on non-academic activities (e.g. bill collection, check writing, admissions applications, and physical plant inventory) rather than core academic activities (e.g. curriculum development; teaching and learning style, tuition fees, student welfare etc.); resistance from the faculty members as it (TQM) impedes their authority and freedom, violate the confidentiality related to assessment, promotion, salary and so forth and practice of teamwork in education process as these are not consistent with the traditional teaching process; and defining customers and measuring outcomes are two major difficulties in implementing TQM in education since a wide range of customers (like students, parents, researchers, alumni, business firms and so on) are involved in higher education so it very difficult who are the real customers in education, it is equally difficult to measure the outcomes of quality initiatives [28]. A number of barriers in implementing TQM in education: the absence of effective communication channels; the problem in measuring higher education institutions results; the co-existence of multiple purposes and objectives for higher education institutions; the emphases in the individualism and significant degree of internal competition; the bureaucratic decision-making process; and the lack of a strong leadership, highly committed to the ideas and principles it wants to apply and capable of involving all the institution's members [16].

Conclusion

In general, it can be said that in order to make TQM successful, it is essential to create a quality culture, i.e. a shift is needed from traditional management culture to a total quality culture. According to Deming, TQM is a management philosophy that requires a radical cultural change from traditional management to continuous improvement management style in an organization [5]. A similar thought is also mentioned that it (TQM) requires a change of culture; it requires a change of attitudes and working methods, as well as a change in institutional management [61]. A quality culture is a system of shared values, beliefs, and norms that focuses on delighting customers and continuously improving the quality of products and services. Quality culture can foster the TQM principles like continuous improvement, open communication, fact-based problem solving and decision making, etc. In addition, academic institutions should adopt a more customer oriented approach in dealing with their student. Conventional teacher-student relationship is no more value adding to anyone. It is necessary to spread professional management practices in the educational institutions. There is a wide range of tools and techniques available in TQM. Random selection of TQM tools, techniques and concepts shall not provide any meaningful benefit. Instead, it is wise to choose those tools and techniques which are consistent with an academic institution. The procedure toward complete quality is a gradual procedure; it needs time, this change can be accomplished with persistence, participation, and help.

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