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Implementation of TQM in Public Universities of Bangladesh: Challenges and Resolutions: A Review

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Abstract: Education intends to promote such values and improve people's capacity that sustains environment and development issues of any countries. Education helps to create awareness, welfare attitudes, skills and behaviour as well as a sense of ethical responsibilities among the people. Education has different levels such as primary, secondary, higher secondary and university education. Among these, university or higher education is one of the fastest growing parts of the education system. In these contexts, higher education should be standard, welfare and sustainable development oriented. One of the key aims of higher education is to anticipate the needs of the economy and prepare highly skilled workers to make it competitive. This is especially important for a developing country like Bangladesh. Because, it is badly needed to build up our human capital, and higher education can play vital role in this regard that promotes to the growth of economy, achieve and sustain a high-quality workforce. But higher education is now globalized and in many ways commercialized affair. As a result, quality of higher education is ignored, and business attitude prioritized, especially in the context of third world countries. As a developing country, in Bangladesh, this scenario is more vulnerable.

Keywords: Public University, Total Quality Management, Higher Education, Bangladesh.

INTRODUCTION

Higher Education in Bangladesh

The development of a modern society depends to a large extent on the nature and standard of higher education. Thus, the role of higher education is to prepare competent, knowledgeable and far-sighted people for assuming various higher responsibilities. The growing importance of knowledge in the modern world can hardly be overemphasized, especially in the era of globalization and in a global environment which is fiercely competitive. Particularly, higher education has enormous potential to promote prosperity in the developing nations [1]. In Bangladesh there was a time when higher education used to be considered a luxury in a society of mass illiteracy. However, towards the turn of the last century the need for highly skilled manpower started to be acutely felt every sphere of the society for self-sustained development and poverty alleviation. Highly trained manpower not only contributes towards human resource development of a society through supplying teachers, instructors, researchers and scholars in the feeder institutions like schools, colleges, technical institutes and universities. They are also instrumental in bringing about technological revolution in the field of agriculture, industry, business and commerce, medicine, engineering, transport and communication etc [2]. Institutions which are grouped together to comprise the higher education sector vary from country to country. In the case of Bangladesh, higher education, also called the tertiary level education is generally used to comprehend the entire range and dynamics of post higher secondary education. This article is an attempt to address the problems and issues haunting the universities of Bangladesh and to explore the areas for father enhancement of these universities.

Higher education in the private sector is a legacy of the British colonial education system. According to university grant commission of Bangladesh 2018, at present there are 147 universities in Bangladesh of which 103 are privates, 41 are public universities and another 3 international universities. Of the private Universities ten are general universities, five are engineering, three agricultural, five sciences and technological and one is university of arts and culture, one affiliating and one offering education only on distance mode. The number of students in the private universities is around 200,000 excluding those in the affiliating National University and Open University offering distance mode education. The number of

students in the latter two were 800,000 and 437,500 respectively in the year 2017-18. Thus at the moment above 1.3 million of population receive higher education in Bangladesh of which 74 percent were male and 26 were female students in the year 2004. The percentage of female students enrolling at the universities is on the rise [3]. Higher education facilities of the private universities are spread over the entire country, so that students of different regions can receive higher education without going very far from their familiar environment at home. Thus there is at least one private university in all the administrative divisions of the country.

In the context of Bangladesh various Education Commissions that were set up so far theoretically emphasized on unlocking potential at all levels of society and creating a pool of highly trained individuals to contribute to the national development. For example, National Education Commission-2000 under the title Higher Education inter alia states that the goal of higher education will be acceleration and inventing new knowledge and creating skilled persons [4]. But these objectives cannot be achieved if quality of education cannot be ensured. Quality assurance in this context denotes "All the policies, systems and processes directed to ensuring the maintenance and enhancement of the quality of educational provision within an institution. A quality assurance system is the means by which an institution confirms to itself and to others that conditions are in place for students to achieve the standards that the institution has set" [5]. It is important to note that quality is not static; with changing environment and advancement of technology it needs to be dynamic and always endeavour for excellence. As to the private universities, quality assurance deserves more attention because these universities are established by the government and financed through state exchequer. Compared to private universities, the cost of education in these institutions is less as it is highly subsidized. In such a context and wider scope of entrance, vast majority of students enrol themselves in these institutions. Overall, in Bangladesh the quality of graduates of private universities seems to have deteriorated as seen from the reports of the Public Service Commission and the analysis of opinions of employers both in the public and private sector jobs. This, however, does not mean absence of a small percentage of very high quality of students. Quality assurance must be understood with clear idea about what to be assured. The relevant aspects in this regard assumed to be admission access policies, equal opportunities, credit accumulation, programme design course review, resource allocation for courses, research student's supervision, assessment and degree, academic staff appointment and development, academic staff appraisal, teaching and innovation, securing of student's view on academic matters [6]. Though unfortunate it is largely true that quality education in the private universities has declined and that quality assurance faces internal and external problems.

Definition of Quality & Total Quality Management (TQM)

There are various well-known definitions of quality. Crosby [7] defined as "conformance to requirements", While Juran & Gryna [8] defined quality as "fitness for use". Deming [9] defined quality as "a predictable degree of uniformity & dependability at low cost & suited to the market", which inclines towards quality in operation. He also added that quality is a "never ending cycle of continuous improvement" [9].

Total Quality Management (TQM), in turn, is "a comprehensive term that includes all levels of management. It implies the improvement of all individuals in the organization & covers all activities" [10]. This research further provides few more definitions of TQM. Roosevelt [11] defined TQM as "a strategic architecture requiring evaluation & refinement of continuous improvement practices in all areas of business" [12].

Gave a definition with an emphasis on customer satisfaction. "TQM is a management philosophy that builds a customer-driven, learning organization dedicated to total customer satisfaction through continuous improvement in the effectiveness & efficiency of the organization & its processes".

Brief History of Total Quality Management

"The roots of Total Quality Management (TQM) can be traced back to 1920's when statistical theory was first applied to product quality control" [13]. His concept resulted primarily from the effort of American quality experts & their theories. Then, some of the American gurus such as W. Edwards Dening. Joseph Juran & Armand Feigenbum were invited by the Japanese to teach & Implement their quality theories in Japan in the 1950's & subsequently, TQM was developed from then on. After that, some of the American quality experts, such as Philip Crosby & Tom Peters, had extended the Quality Management concepts after the Japanese success in the 1970 & 1980's [14].

TQM began as a simple quest by customers for quality in products [15]. Customers would examine products to see if they meet their expectations prior in purchasing them. These simple reactive procedures conducted by customers, eventually led to the internalization of proactive quality assurance measures in manufacturing & service industries. Quality measures, therefore, had progressed from a reactive stance (customer determined quality) to a proactive view (industry determined quality) of ensuring quality in products & services [16]. To take this progression a step further, there is a development of another approach to quality assurance – interactive management or TQM. Therefore, TQM generally is a systems concept that

deals with the interaction of technical, cultural, & political issues that affect the delivery of quality product or services [10].

Theory Linked to the Present Study

There are some theories that are related to the present study, such as Deming's theory, Juran's theory, Crosby's theory etc. One of the well-known theories & most suitable to the present study is the Deming's theory, which is used in this research as a base to discuss & to compare with the results from the present study.

Deming's theory

The Deming's TQM theory is very popular as a set of 14 points [13]. Adding to these 14 points in the Deming's theory are the "Seven Deadly Diseases" that hinder organizations to perform well. Moreover, there are a number of "Obstacles" that prevent organizations to obtain high quality [9]. The 14 Points are described as crucial phrase or institutions & are designed to be concepts of organizational behavior. Once these are implemented by organizations, the 14 Points will serve as a treatment for "Seven Deadly Diseases" & help organizations overcome the "Obstacles" to produce & deliver high quality products & services [17].

"Deming's 14 Points are:

- Create constancy of purpose
- Adopt the new philosophy.
- Cease dependency on mass inspection.
- End the practice of awarding business based on price tag alone.
- Aim for continuous production & service improvement.
- Institute training on the job.
- Institute Leadership.
- Drive out fear.
- Break down barriers between departments.
- Eliminate management by numbers, numeric goal.
- Eliminate work standards (quotas).
- Support pride of craftsmanship.
- Institute a vigorous program of education & self-improvement.
- Make sure the top management supports the previous thirteen points" [9].

The main goal of many organizations is to maintain improvement in the quality of their products or services. To date, many theories & techniques have been offered to accomplish & attain this goal. Deming's theory has been extensively used & is considered as a foundation of Total Quality Management [18]. A number of intensified orders that Deming recommended can be found in his 14 points of Quality. These points emphasize the importance of systems thinking, team work, continuous improvement, top management support & commitment & learning, Moreover, the Deming's theory covers most of the concepts of other TQM theories [19]. Therefore, it has been chosen as the foundations of this study.

TQM in Higher Education

In 1980s [20], the efforts to establish Total Quality Management (TQM) in higher education was started with the encouragement from the successful implementation of TQM in business and the need for a change in education [21, 20]. Quality has originally been implemented in the administrative work of higher education institutions and has rendered good results and outcomes in many areas [22].

Owlia and Aspinwall [20] and Anninos [23] reported that governmental and economic factors were exposing higher education into a new environment, in which, implementation of TQM is necessary. The four main driving factors behind the motivation of higher education institutions in adopting quality are: costs, competition, service orientation and accountability [23]. Implementation of TQM can garner many positive results in higher education institutions, such as increasing productivity, decreasing costs and improving quality of services and academic aspects.

However, a clear definition is only beginning to emerge. The institutions of higher education of the past half a century are starting to give way to a far more society-sensitive college and university. The college and university of the twenty-first century must prepare students for the real world; that is, for the ever-changing career and economic realities that they will face. Institutions of higher education must abandon the production model of higher education in which success is based on head counts, grades, credit generation and degrees and move toward a learning environment that emphasizes an involvement that will empower students with high-quality skills to meet new challenges. It is, however, easier to describe and define quality than it is to develop, reinforce and sustain it [24, 25].

Total Quality Managements aims to provide customer satisfaction at a lower cost. It is a systematic process and element of the strategic management, which involves everyone and everything [26]. According to [22], "the main principles of TQM that characterize a quality-oriented university include:

- Orientation to the needs of university stakeholders
- Leadership commitment
- Staff (academic and administrative) full participation and team working
- Focus on processes
- Measurements and management by facts
- Continuous improvement and learning"

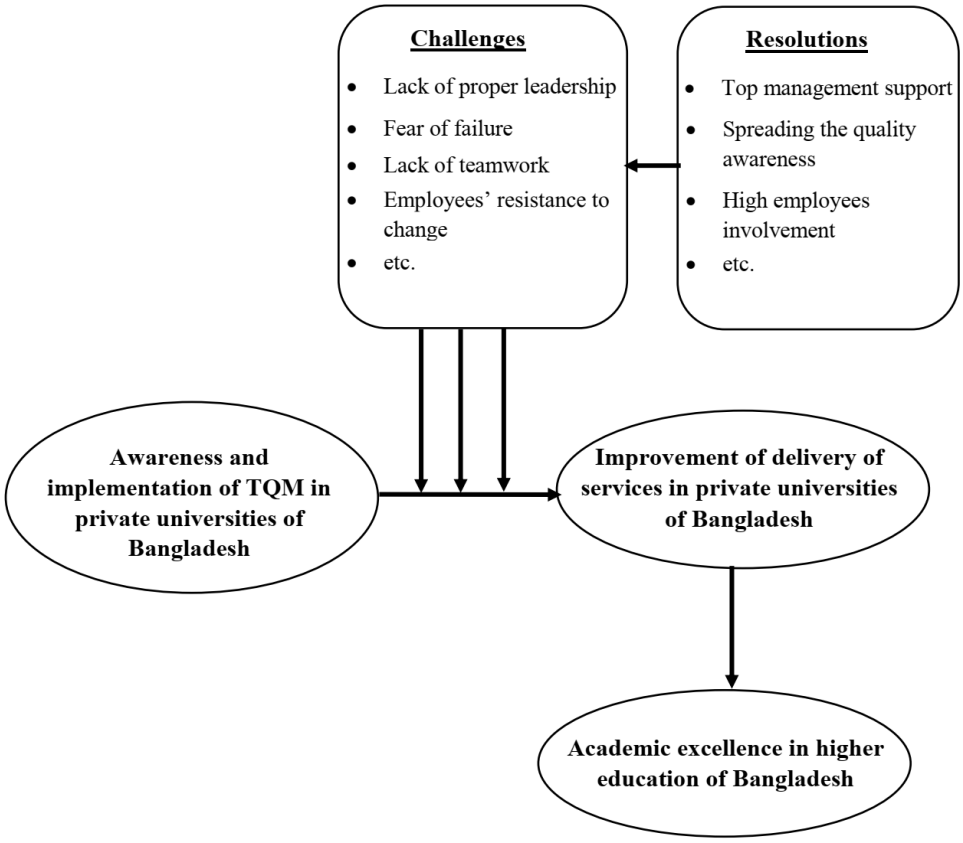

Fig-1: Conceptual Research Framework

It is noticeable that there are remarkable similarities between the above principles and the theories of TQM, as explained earlier. The quality must be internalized in every member of a university or institution in order to be manifested as a culture of a university or institution. If one applies quality as a personal value, then absolutely he or she will definitely perform more effectively.

Continuous improvement is one of the principles of quality management, which is oriented on a people-focused system that aims at continual increase of performance by stressing learning and adaptation as keys to the success of an organization [27]. Moreover, continuous improvement in academic institutions means exploring the needs and expectations of the institutions' customer base, who may be the faculty, the students, the staff, the accreditation agencies, and the members of the community. On the other hand, implementing and maintaining a continuous improvement initiative in academic environments is a challenging [28]. The need for continuous improvement and the challenges present in its implementation in academic institutions can be attributed to the uniqueness in education and its environment [27].

Increased competition has required that individuals entering the workforce have a high level of technical and interpersonal skills [29]. Academic institutions are required to respond to the challenge of preparing graduates ready to enter the workforce. Thus, maintaining an updated curriculum that motivates employers to hire the institution's graduates becomes a priority.

Changes in the student composition make the teaching and management of the classroom environment very challenging for professors. This implies that professors not only need to be concerned with the understanding of the course material, but also with the variety of styles necessary to cater to such a diverse audience of students. This challenging issue in itself involves a never-ending incremental learning an improvement cycle [28]. These changes and demands n institutions of higher education make a compelling case for careful analysis of the requirements to implement and maintain continuous improvement in academia [30].

Many institutions of higher education have been sluggish in pursuing continuous improvement initiatives. Some colleges and universities have pursued quality programs without significant return. Nevertheless, some other higher education institutions have been successful in their quality efforts [31, 32, 30]. Quality and continuous improvement initiatives have been mainly applied to academic institutions' administrative systems and maintenance processes, and-

to a lesser scale – to academic programs and systems [33].

The results from the quality initiatives in these institutions are significant in the administrative processes and in some areas of curriculum development. The improvement of curricular programs seems to be direct reflection of acknowledging customer needs and commitment to improvements. The quality initiatives from the academic institutions mentioned have evolved toward continuous improvement efforts in academic and administrative processes [32].

Venkatraman [34] recommended a model for total quality leadership in education. The major components of the model were quality philosophy was described as determining the customers' needs and designing the educational services according to those needs. Quality leadership concerns itself with students and faculty members and calls for the cultivation of open, critical and caring behaviours towards the needs of students and staff in order to practice good leadership. According to [26], the major role of a leader is to assist people in carrying out their duties efficiently. In academic institutions, the teacher plays the role of a leader, rather than only as an instructor.

There are three generic approaches to the technique of total quality management as it is currently practiced in higher education in the UK. The first has a customer focus, where the idea of service to the students is fostered through staff training and development. This results in an institutional culture which regards the needs of students as paramount and which promotes student choice and autonomy [35].

The second approach has more of a staff focus, and is concerned to value and enhance the contribution of all members of staff to the effectiveness of an institution's operation, to the setting of policies and priorities, ad to the continuous improvements in institutional effectiveness. It entails a more horizontal management structure and the acceptance of responsibility for action by defined working groups [35].

The third approach takes a service agreements stance, and seeks to ensure conformity to specification at certain key measurable points of the educational process. Thus, for example, it would be possible to determine that lecturers should mark and return all student coursework within a certain number of days from the date due for submission, and to monitor the practice and prescription as agreed [35].

Quality in the Educational Processes of A University

A good university can be acknowledged by its better performance than most, not only in management operations but also in teaching, researching, and social activities. Quality has to characterize every single scheme, method or means in the instructive pillars of universities or colleges. Teaching quality, for instance, is usually a multidimensional design and as an all-inclusive evaluation should really be dependent on students', staffs, and even administrators' evaluation of several aspects, such as teaching skills, understanding and experience of teacher, teaching methods and student understanding and knowledge [35].

Although it is highly challenging to attain some sort of comprehensive agreement about the meaning of quality in teaching-mainly because it is simply not a visible course of action-a large number of experts concentrate on teaching assessment and they have designed appropriate models, methods and standards by which teaching can be evaluated easily. For instance, curriculum design, material, student development and accomplishment, and learning sources [36].

According to Tijssen, Visser, and van Leeuwen [37], the assessment of research is actually less complicated than the one of teaching, since there are particular quantitative and qualitative indicators by which research is evaluated. Nevertheless [38], insisted that the assessment of research is also a complex procedure. The Research Assessment Exercise that takes place in the United Kingdom with the objective of evaluating research quality in universities uses research outcomes, research atmosphere and respect indicators as a foundation to assess research quality [39].

Additionally, while universities indulge deeply in public contribution and financial enhancement by spring education, quality in that aspect is essential too. Quality can be recognized by universities' operation and results, implementation of research in public and private sectors, and lastly entrepreneurial action through the support of creative ideas and research outcomes [23].

Based on the theories of TQM, we can understand that it focuses on teamwork, continuous improvement, employees' involvement learning and improving culture, which is similar to the values of many current universities.

Antithesis of Total Quality Management in Higher Education

While there are many reasons to tout the key elements and positives attributes associated with TQM, there are some people who remain elusive to the benefits of TQM. They think TQM is another too good to be true management fad that wastes time and money [21]. A few of the familiar arguments of implementing TQM concepts in higher education contain resistance to considering students as clients, resistance to the technical language of TQM, and the lack of perceiving the importance of TQM for higher education [10].

In addition to these objections, TQM initiatives are prone to failure throughout the implementation process. Brown and Koenig [32] and Meirovich and Romar [21] identified four reasons for this failure during the initial implementation of TQM. These are lack of leadership commitment, resistance to change, lack of learning and training and anticipating quick results.

Top administrators at colleges and universities might be attracts to TQM for the wrong reasons. It is important to firstly, consider the reasons behind the implementation of TQM. The common reason is usually one of a few responses that tend to be the disillusionment in implementing TQM. For example, many colleges and universities implement TQM because their constituents- such as students, parents, and state government-might demand it or any similar accountability that requires a cost-cutting approach. Others might implement TQM because another institution has had favourable results using TQM methods. Unfortunately, these are all poor reasons for implementing TQM [32]. The only reason for implementing TQM should be to improve performance in performance in all areas including financial results, customer satisfaction and employee satisfaction. In order for TQM to be successful, there must be a genuine reason for the implementation of TQM and the matter should be communicated to others in the academic environment [32].

Just as with the private business sector, colleges and universities tend to wait until there is an acute financial crisis before they begin TQM efforts. This often ensues with a desperate need to fix the problems that have festered for many years. One problem with this reactive approach to implementing TQM is that a crisis, such as financial stresses, limits the resources that can be applied to ensure the successful and long-term implementation of TQM [40]. Whenever TQM methods are implemented as a quick fix to an immediate problem (as is often the case), participants expect to see quick results. When these results do not become immediately noticeable, TQM is dropped. In its haste, quality results are not direct consequences of TQM. TQM teaches an institution to focus its attention on the quality processes as opposed to results. Once a process is improved, the bottom line results should also be forthcoming [41].

Challenges & Barriers of Implementing TQM in Higher Education

The effort to introduce quality concept in higher education can start but it may be obstructed by many challenges, Such as the dynamics of higher education organizations & its reliability with the quality programs, the personal independence of the teachers, the customer conception & the lack of training & self-learning [42]. however, there are many universities have successfully implemented the quality philosophy, Such as the Oregon State University & the University of Chicago in U.S.A The University of Tokyo & the Tohoku University in Japan, the University Sains Malaysia & the University of Malaya in Malaysia .

Meirovich and Romar [21] reported that when an organization attempts to implement new philosophy such as TQM, one needs to distinguish between education & business. They are often concerned the usage of TQM Concept by researchers when comparing education with business. They stressed that in Universities, considering good grades as a measure of implementing TQM successfully in the most misconception of TQM. Therefore, “the first major barrier for the application of TQM in education is the misinterpretation of TQM philosophy & the lack of understanding of the processes that are different in education ass compared to industry” [21]. This could be caused by the lack of awareness about TQM.

“A common challenge & barrier to both industry & education in implementing TQM is lack of proper leadership” [34]. Leaders must be able to define workable organization vision & mission & be prepared to instigate change & get all the necessary resources to the team to achieve that vision. TQM Need to be accepted as a strategy by the leadership & they must be committed to it [43].

According to Koch [44], “barriers to applying TQM in higher education are related to the highly generic & idealistic mission of the institutions, the lack of agreement on the meaning or implications of quality, & the academic freedom “, that have leaded to a management having somewhat minimal over employees. The difficulty caused by the freedom, as Mehralizadeh and Safaeemoghaddam [10] stated, that “most academic staff do not view their work as contributing directly either to their institution’s output or to the satisfaction of the institution’s customers”.

There might be an additional challenge. Which is “the fear whether TQM really works & is worth the effort” [45], and “The fear of losing power or position could be another barrier as well” [43]. Due to this perception, some managers may hinder their staff from carrying out their responsibilities or giving them authority. Within higher education institutions, there is a requirement to re-define colloquialism in manners of involving & empowering academic employees in order to apply quality successfully.

Another challenge could be employee’s resistance to change. Regarding higher education, many of the faculty members are primarily professionals who often expect independence & academic autonomy. Faculty members might not prefer being requested to reconsider their teaching methods. Faculty members might be more dedicated to teaching instead of deliberating over TQM. Furthermore, it is a general

perception that TQM brings about unnecessary paperwork which is not desired among academes [46].

Another challenge for TQM in higher education can be lack of adequate funds and resources [45]. TQM implementation requires enough budget and resources in order to cover operational cost, such as external consultation, training employees, improving processes & technical support [44]. In view of the fact that higher education institutions mainly get funds from the government. Implementation of TQM could cause excess in expenses. Along with this kind of huge fund & resources, TQM would not provide & show the projected benefits within a certain period of time.

According to Ehigic & Akpan, the challenges that higher education institutions face in implementing TQM are high level of competition, the rise of consumer education & globalization. To overcome these challenges higher education institutions must find solutions to rise above those challenges & improve the quality of higher education.

Despite all the criticism of TQM, the application of this management philosophy has been increasing progressively. The Saudi Arabian government has given TQM its due attention, since it established The National Commission for Academic Accreditation & Assessment to assure quality in Saudi Universities. Moreover, one of the major goals of higher education in Saudi is to produce graduates with high efficiency & good capabilities to improve the productivity & the economy of the country. However, there is no adequate literature on Saudi experience with TQM implementation especially in public sectors.

The first application of TQM was in the North West Force Hospitals (NWAFH) with a slight move from quality assurance to TQM. Al-Ahmadi & Ronald stated that some challenges obstruct successful implementation of TQM in health care sectors. These include managerial factors, organizational behaviour factors, implementation factors, that are related to evidence-based medicine (EBM) & cultural factors.

The main objective of the present study is to discover the challenges & resolutions of implementing TQM in public universities of Saudi Arabia. As stated in previous studies, one of the most effective tools to deal with customer requirements & to assure quality in new or improved services is Quality Function Development (QFD) [47]. Hence it was used in the data analysis of this study. Therefore, a brief description of QFD has been provided below:

Quality Function Development (QFD)

Quality Function Development (QFD) was initiated by the Japanese in the 1960s, but it was unknown until the western institutions started to value it as a method in the 1980s & started using it as a technique of decision making. QFD has been employed effectively in many organizations in Japan & other countries else in order to enhance processes & improve products. Now a day, companies are utilizing QFD as an effective tool that are used in strategic & functional decisions in organizations [48].

"QFD is a method commonly used for structed product planning & development that enables a development team to specify clearly the customer's want's & needs, & then to evaluate each proposed product or service capability systematically in terms of its impact on meeting those needs" [49].

The QFD has several tools. These tools merge inputs from variety of teams in organizations & utilize them in order to improve products & services & overall customer satisfaction. QFD offer ways of translating customer requirements.

Researchers, such as Zairi and Youssef [50] and Chan and Wu [49] and [51], have explained the advantages of QFD. These advantages can be summarized as follows:

- QFD can create positive connection between customer's needs & the company's products.
- It can improve teamwork among employees in the organizations.
- It can maximize customer satisfaction.
- It encourages staff to do documentation process, because they realize the significance of information. &
- It leads to efficient communication between the organization's departments.

QFD & Decision Making

In an attempt to respond to the needs of customers & stay competitive in the marketplace, a decision-making tool was developed in order to integrate technology, organizational politics & customers' requirements all into a product that is manageable, attractive, usable, & profitable. This decision-making methodology is nothing but quality function deployment [52]. Customers' requirements can be collected by many ways, such as surveys, focus groups, interviews, data in journals, & customers complaints [53].

A great capable tool of quality function development is House of Quality Diagram. According to [54].

"House of quality is a diagram resembling a house used for defining the relationship between customers desires & the firms or product capabilities. It utilizes a planning matrix to relate what the customers wants to how a firm, that produces products, is going to meet those wants".

There are two groups of requirements that need to be considered in the house of quality the first requirement set is to acknowledge actual needs of customers. The first requirement set is called "Customer's Requirements" (CRs) which influence (CRs). The design requirements need to be determined in order to meet or maximize customer satisfaction. Then the relationship between (CRs) & (DRs) need to be found & analyzed in order to come up with the practical results that can be used in decision making or problem solving [52].

The initial application of QFD in industries was in the areas of automobiles & electronics. It then spread to other industries rapidly, namely, food, transportation, media & education. Currently, all most all types of industries over the world are using QFD Nowadays, it has become a well-known tool & one of the most helpful & valuable method of Total Quality Management [54, 50].

QFD in Higher Education:

Chan and Wu [49] illustrated the application of QFD to enhance teaching in the school of engineering at West Virginia University. Dealing with the students as customers, employing nominal group techniques, & interviews of teachers & administrations were helping them to apply QFD properly. The QFD process was utilized to assess & study the area of teaching in the school of engineering.

Sanford [55] described how QFD can be used to evaluate customer satisfaction in universities. He used QFD in assessing the MBA program at Grand Valley State University. The data for the QFD were gathered by conducting a number of brainstorming sessions of MBA students, faculty members, & administrations. The outcomes of the pilot study showed that QFD is a very helpful & practical tool in identifying customer needs, prioritizing them & directing organizational resources toward customer satisfaction.

Quality Assurance Mechanism

Absence of quality assurance mechanism is a critical issue in Bangladesh. Each public university relies on its own mechanism to ensure quality. This mechanism includes curriculum reviews by the Curriculum committee, assessment of achievement and designing future action plans by the Academic Council etc. There is no provision for external review of quality for the universities. The NU is responsible for maintaining the quality at the tertiary level colleges. Nevertheless, the NU is busy mostly with arranging exams and publishing results and there is no activity to ensure quality of the affiliated colleges. The UGC carries out monitoring of private universities in a limited extent. The private universities need UGC's permission to open and operate departments. However, most of the private universities have failed to meet the minimum requirements of physical infrastructures, fulltime qualified faculty, libraries, teaching aids and other facilities to provide proper education. (Bangladesh: Country Summary of Higher Education).

SUMMARY

Quality education is a great concern in many societies across the world. In a highly competitive education sector, the success of academic institutions depends on the quality of education. Educationalists, policy makers, scholars, and researchers are showing their sincere interest towards the total quality management (TQM) as it is recognized as an effective management philosophy for continuous improvement, customer satisfaction, and organizational excellence. Since this concept was initially developed in the manufacturing sector, therefore, there is a great deal of suspicion whether this philosophy is applicable in education. In this connection, the main objective of this study is to investigate the compatibility of TQM with higher education. At the same time, this study would try to identify key challenges in implementing TQM in higher education of public universities of Bangladesh. It is assumed that this study would be able to draw a meaningful conclusion regarding the applicability of TQM in higher education of public universities of Bangladesh as well as to create an awareness regarding those challenges which may create obstacles in implementing TQM in higher education.

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CONFLICTS OF INTEREST

All authors declared no conflict of interest.

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