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A Systematic Review for the Challenges of Total Quality Management **Implementation in Service Quality of Private Universities**

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Abstract

Total Quality Management (TQM) has become a major concern in most institutions of higher learning as their success depends on quality of education provided as well as other services. This is because stakeholders such as scholars, students, researchers, educationists and policy makers among others are continuously expressing interest in this management philosophy. However, its implementation seems to face certain obstacles that can stand in the way of the production of quality graduates and provision of quality services. This paper seeks to explore the challenges of TQM implementation in Private Universities which if not addressed may affect the quality of education provided by these Universities. It reviews literature on theories of total quality management and then goes ahead to explore the various challenges facing TQM implementation in universities across the globe. The challenges identified included; lack of management support and commitment, resistance to change as well as poor leadership among others. It is therefore important that universities establish how best to address these challenges which may ultimately affect service quality if not given due attention. Short of that, universities are at risk of poor service quality which may ultimately affect student enrollment and retention at these institutions.

Keywords

Quality, Total quality, Management, Total quality management, Private universities, Universities

INTRODUCTION

Nowadays, universities operate in a competitive market, where the best, are those with the best students, teachers and employees, and also the ones that manage to obtain the biggest grants (Vale, et al., 2022). According to Heinz-Dieter & Powell (2018), the main products of universities are competitive graduates. Thus, universities need to show stakeholders evidence of the accomplishment of their objectives, mission and strategies (Yakhou, and Ulshafer, 2012). All areas of universities' operations require quality assurance right from the beginning to avoid faults and waste (Padhi, 2016).

According to Choudhary et al, (2013), Total Quality Management (TQM) aims at inculcating quality in all activities of universities to ensure customer satisfaction. To integrate the quality discipline into the culture and activities of universities, TQM employs strategy, data and effective communication (Choudhary et al, 2013).

The prime elements of TQM include the following according to Choudhary and Rathore (2013): customerfocused, total employee involvement, process-centered, integrated system, strategic and systematic approach to achieving an organization's vision, mission, and goals; continual improvement that drives an organization to be both analytical and creative in finding ways to become more competitive and more effective at meeting stakeholder expectations; fact-based decision making as well as communications. These elements are vital to TQM that many organizations consider them, as the core values and principles upon which they base their operations. According to Padhi (2010), successful TQM implementation must concentrate on ethics, integrity, trust, training, teamwork, leadership, recognition and

communication. Communication links all the other elements to make TQM a success, for it helps to notify people of all expectations (Padhi, 2010 and Linders, 2011).

Universities and accreditation agencies are of recent paying much attention to quality and quality assurance (Rosen, 2015). This results from the current globalization and knowledge-based economy, where quality graduates augment the nation's economy and contribute to its advancement. According to Rosen (2015), to ensure quality, Universities' management need to harmonize the whole system. This enables faculties, faculty administration, departments, divisions, teaching staff and all other stakeholders to strive for the achievement of organizational missions and goals. This is done in conformity with education quality assurance in a harmonized, and relaxed working atmosphere (Heinz-Dieter & Powell, 2018).

According to Cekanov and Pavlíková (2014), there are several areas of quality assurance in higher-education institutions. That is, study programs, criteria and rules for student evaluation, the quality of teachers and the education process, quality of material, technical and information resources and collection, as well as analysis and use of information. Application of the principles of TQM in universities enables the achievement of service quality (Juneja et al., 2011). Bilen (2010), posits that though TQM has been successfully implemented in other service sectors, in universities, its implementation has been mostly limited to non-academic administrative processes.

Despite the vitality of TQM in business operations, the concept seems to be underrated by most private universities (Choudhary et al, 2013) especially in developing countries (Kanwal, 2021). Private universities focus on some elements while giving little or no attention to others. This seems to be affecting the quality of most business processes and services offered by these institutions and if not given due attention, it might affect the quality of the products of the universities as well as the reputation of the institutions. It is upon this background that the researcher deemed it timely to establish the challenges that may be hindering effective implementation of TQM in private Universities. This is aimed at enabling the identification of these challenges so that possible solutions can be devised before their impact can prove to be detrimental to the service quality and reputation of the universities as a result of poor-quality graduates.

THEORETICAL PERSPECTIVE OF TOTAL QUALITY MANAGEMENT

In this section, theories that guide total quality management practices are highlighted so as to identify those that apply to TQM in Universities. These include; Deming's Theory, Crosby's Theory, Joseph Juran's Theory, The EFQM Framework, and Ishikawa's Theory among others.

The Deming's Theory

According to this theory, quality is equal to the result of work efforts over the total costs. If a company's concentration is on costs, costs rise while quality deteriorates. Demming posits that, quality involves modification of processes using knowledge. The theory bases on fourteen management themes, the profound knowledge system and the Shewart cycle or Plan-Do-Check-Act. The fourteen points of TQM include: purpose constancy creation, new philosophy adoption, stopping mass inspections dependencies, not awarding business basing on price, aiming for continuous production and service improvement, bringing in cutting-edge on-the-job training, implementing cutting-edge leadership methods, eliminating fear from people, reviewing departmental barriers, getting rid of quantity based work goals, getting rid of quotas and standards, supporting craftmanship pride to ensure everyone is trained and educated, as well as ensuring that the top management structure supports the mentioned thirteen points.

Deming's profound knowledge system consists of; system appreciation which involves understanding the way processes and systems work in organizations, variation knowledge which involves understanding the variations and their causes; knowledge theory which involves understanding what can be known; as well as psychology knowledge which involves an understanding of human nature.

Plan-Do-Check-Act is a cycle created to enable continuous improvement. In the Planning Phase, objectives and actions are outlined. In the 'Do Phase', actions are done and process improvements implemented. In the 'Check Phase', checks are made to ensure quality as compared to the original. Lastly, in the 'Act Phase', changes needed for continued improvement are determined before returning to the planning phase.

This theory can be used to guide TQM in universities since it involves among others, the establishment of obstacles to effective TQM implementation to make necessary changes before embarking on the process again.

Crosby's Theory

This was developed by Philip Crosby. According to the theory, money spent on quality is money well spent. Crosby based the theory on four absolutes of quality management. That is, quality is defined as adherence to requirements, prevention is the best way to ensure quality, the performance standard for quality is zero defects and quality is measured by the price of non-conformity. He also based his theory on his fourteen points for quality improvement.

Crosby's fourteen steps to continuous quality improvement include; attain total commitment from management, form a quality improvement team, create metrics for each quality improvement activity, determine cost of quality and show how improvement will contribute to gains, train supervisors appropriately, encourage employees to fix defects and keep issues logs

Create a zero-defects committee, ensure that employees and supervisors understand the steps to quality, demonstrate your company's commitment by holding a zero defects day, goals are set on 30-, 60-, or 90-day schedule,

determine root causes of errors, remove them from processes, create incentives programs for employees, create a quality council and hold regular meetings and lastly repeat from step one.

This theory can also be used to guide TQM processes in universities since it involves the determination of root causes of errors as well as removing them from the processes. The theory further advocates for the prevention of errors to ensure quality, which errors could result in barriers to effective TQM implementation.

Joseph Juran's Quality Trilogy Theory

Joseph Juran is the founder of the 'Quality Trilogy' which is made up of quality planning, improvement and control. According to Joseph, success in a quality improvement process requires careful planning and control of all improvement actions. To Joseph, there are ten steps to quality improvement. These include; creation of an awareness of the opportunities and needs for improvement, determination of improvement goals, provision of training needs, initiation of projects, monitoring progress, recognizing performance, reporting on results, tracking achievement of improvement and then repeating all the other steps.

This theory can as well be used by universities to guide TQM practices. This is because the theory advocates for quality, planning, improvement and control which can all help in overcoming barriers to TQM implementation.

Ishikawa's Theory

This theory was developed by Dr. Kaoru Ishikawa by looking at quality from a human standpoint. The theory focuses on how companies should handle their quality improvement projects. According to Ishikawa, there are seven basic tools for quality improvement. These are: pareto analysis, cause and effect diagrams, stratification, check sheets, histograms, scatter charts and process control charts.

Pareto analysis aids in the identification of big problems in the quality improvement process; cause and effect diagrams enable the identification of the root cause of problems; stratification analyzes how collected information connects together; check sheets focuses on the frequency of occurrence of a problem; histograms monitor variation; scatter charts demonstrate relationships between different factors; and process control charts help in the determination of the disparities to focus on.

This theory is also applicable in the implementation of TQM in Universities since it involves the identification of barriers in the quality improvement process, checking the frequency of problem occurrence, monitoring variation in occurrence as well as the determination of variations to focus on.

The EFQM Framework

EFQM represents 'European Foundation for Quality Management'. The EFQM Model is rooted on nine quality management criteria, five of which are enablers and four are results. Enablers focus on what a company does whereas the results focus on what a company achieves. The two categories result in a model that recognizes diversity in quality management methodologies instead of favoring any one methodology.

According to the Model, the nine criteria include the following: focus on results, focus on customers, purpose constancy and consistent visionary leadership, management focus on process, systems and facts for easy monitoring, training and involving employees, continuous learning for everyone, developing partnership that add value to a company's improvement process, as well as a company's social responsibility.

The model is also applicable to TQM in Universities though to a lesser extent as compared to the other theories.

METHODOLOGY

The study used a qualitative methodology to guide the location of relevant literature for this study. This was done with the use of search terms such as quality, challenges, total quality management implementation, and Universities among others while perusing through reference lists and databases. These key terms were searched for to enable the selection of published content for review typically in the theoretical explanations, the study findings, as well as the conclusions and discussion. The findings and conclusions presented in this study result from a systematic review of twenty-one journal articles. One (1) article was published in 2023, one (1), in 2022, two (2) in 2020, four (4) in 2019, one (1) in 2018, two (2) in 2017, two (1) in 2016, one (1) in 2014, two (2) in 2012, and two (2) in 2007. Only those articles related to the implementation of TQM in higher education and those published in English Language were considered. Therefore, studies that discussed concepts other than TQM were excluded from the study.

CHALLENGES OF TOTAL QUALITY MANAGEMENT IMPLEMENTATION IN SERVICE QUALITY OF PRIVATE UNIVERSITIES

Even though TQM has the ability to serve the academia and improve service quality at universities; its implementation in a university setting may face obstacles (Sohel-Uz-Zaman, and Anjalin, 2016). According to Rosa et al. (2012), universities are different from business organizations with unique characteristics that may harden TQM implementation. The diverse implications of quality in universities greatly affect the development of quality measuring methods and instruments, which consequently results in the creation of various stakeholders for the universities (Sarrico et al., 2010). Houston (2008) notes that in business and industry environments, the definition of quality depends on customers' needs and expectations; yet this is not utterly apposite for the education industry; leading to the creation of complexity in

defining the term in universities. Bilen (2010) points out that the customer-based quality definition has been problematic in universities limiting its spread and success.

Sohel-Uz-Zaman, and Anjalin, (2016), posit that TQM implementation in universities lacks commitment from implementers such as faculty members and the top management. According to Massy (2003), faculty resist improvements in the quality process due to their unwillingness to adopt to the change in the status quo but want to continue doing things the usual way. According to Koch (2003) TQM implementation involves a plethora of meetings, too much paperwork, delayed critical decision making or escape from it among others. This makes TQM more administrative and democratic.

Ali and Shastri (2010) posit that vagueness in customer identification in universities also creates obstacles in TQM implementation. According to Houston (2008), the definition of a customer is more appropriate in industry and business environment which are based on the idea of satisfying customers' needs and expectations and may not be applicable in education which has many interested parties. For nursery, primary and secondary level, it is quite easy to define; parents are the customers and students are the consumers. However, in higher education, Youssef et al (1998) observe that customers are much more diverse and not so easily defined. A student can be the consumer and customer at the same time if he or she pays his or her tuition fees. In the job market, employer organizations are also the customers. For scholarship students, sponsors are the customers; the state is also a customer. According to Srivanci (2004), without a precise definition of customer and customer focus, quality efforts may be easily diffused in universities.

Seymour (1991) as cited in Sohel-Uz-Zaman, and Anjalin, (2016), identifies a number of reasons for unsuccessful application of TQM in higher education. These include, resistance to change; lack 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; as well as the anxieties Universities have with their own results not being sufficient enough. According to Kosgei (2014), lack commitment from management and some staff members to implement TQM, the university culture does not support TQM implementation, TQM activities are poorly documented, there is poor communication among staff as well as inadequate staff training on TQM activities.

Koch (2003) highlights a multitude of reasons for TQM failure. These include, TQM focusing more on nonacademic activities such as bill collection, check writing, admissions applications, and physical plant inventory; and less on core academic activities such as curriculum development; teaching and learning style, tuition fees, student welfare etc.; resistance from the faculty members as it impedes their authority and freedom, violation of confidentiality related to assessment, promotion, and salary among others as well as the practice of teamwork in education process as these do not rhyme with the traditional teaching process. Koch (2003) adds that defining customers and measuring outcomes are two major difficulties in implementing TQM in Universities since customers such as students, parents, researchers, alumni, business firms among others are involved in higher education, which makes it hard to know the real customer in education. This also makes it hard to measure the outcomes of quality initiatives.

Mathur, Antony, Olivia, Fabiane, Shreeranga, Raja, and Ayon (2023) carried out a study that aimed at investigating the validity of Ishikawa's statement in Universities that 95% of problems in processes can be accomplished using the original seven (7) quality control (QC) tools. The scholars employed an online survey instrument, and contacted participants via social LinkedIn network. The study targeted University educators or professionals as well as administrative professionals such as librarians, IT personnel and human resource managers, who were knowledgeable about Dr Ishikawa's seven quality control tools as. Lecturers who taught the seven basic tools of QC were also included in the study. The survey link was sent to over two hundred (200) educators and professionals and seventy-six (76) complete responses were obtained. Findings established that the seven QC tools were not widespread in universities: The study established the following challenges to effective TQM implementation in the selected universities: lack of knowledge about QC tools, their application or use and benefits of TQM as well as how and when to apply the seven tools. The study recommended management support, widespread training and having a continuous improvement program in place, as critical success factors for TQM.

Using systematic review, Jasti, Venkateswaran and Kota (2022) carried out a study to examine the evolution of TQM *i*n terms of barriers, customers and accreditation in higher education (HE) over the last three decades (1991–2020). They reviewed one hundred thirty-seven (137) articles across fifty-five (55) journals. They established that the importance of TQM in higher education is enormous considering the rapid growth in HE and the issues relating to reduction of education quality especially in developing countries. The findings include identification of the barriers to successful TQM implementation, the need for alignment of TQM objectives of universities and identified target customer(s) with the selected model/framework and the impact of accreditation/certification in the attainment of TQM.

Al-Kayed and Al-Tahrawi (2020) investigated barriers to effective implementation of TQM principles at Princess Alia University College, Albaqa Applied University. The study established barriers in the education process, in the university leadership, scientific research, the university administration as well as the local community. Sabra et al. (2020) conducted a study to identify obstacles to implementing TQM in higher education institutions from an academic staff perspective. The study established that the main barrier to TQM implementation in service quality was financial constraints.

Alnajjar and Jawad (2019) investigated barriers to effective TQM implementation in Iraqi private universities from the perspective of Faculty members. The results revealed that TQM obstacles related teaching, scientific research and senior management and a lack of subsidies for TQM implementation. A study carried out by Armor et al. (2019) on the obstacles to the application of TQM at Prince Sattam bin Abdul Aziz University established that the major obstacle

was poor motivation and lack of recognition for members who championed the application of total quality at the University. Abu Saa, Wahbi and Kloob (2019) investigated the obstacles to effective TQM application in Palestine Technical University-Khadoorie. The study established the following obstacles; too much bureaucracy in administrative work, human relations weakness, and the lack of awareness of the quality culture and its importance.

Kigozi (2019) investigated the challenges to the successful implementation of TQM in selected higher education institutions in Uganda. The study established the following challenges; lack of leadership commitment, poor and ineffective leadership, lack of funding and resources, lack of an integrated TQM model, poor teacher status and morale, lack of cooperation among the staff, resistance against change by the staff, lack of proper TQM training for staff, the indistinctness of TQM implementation, as well as misconception among staff about TQM implementation.

A study conducted by Ghosh (2018) on TQM in Universities revealed the following as obstacles to its effective implementation; lack of or inadequate co-ordination between employees, poor management, lack of or insufficient vision and planning, inadequate or lack of qualified professionals, employee lack of interest in training for changes brought about by TQM, lack of or poor commitment and dedication to TQM, irresponsibility, insufficient knowledge about TQM, rigid organizational structure as well as outdated organizational policies.

Papanthymou, and Darra (2017) identified the following as barriers to effective TQM implementation; lack of management commitment, poor vision and plan statement, government influence, lack of qualified professionals, lack of knowledge about the self-assessment mechanisms, resistance to change, poor coordination between employees and departments, lack of interest in training, expectation of immediate results, instability of leaders and departments, rigid organizational structures, lack of clarity about roles and responsibilities as well as lack of employee commitment. Gomes and Panchoo (2017) identified inattentiveness to performance and measurement standards, poorly motivated employees, poor service delivery, poor input as well as neglect of student unique capabilities as obstacles to the effective implementation of TQM in universities.

Al-Daibat and Al-Daibat (2016) investigated the impediments of total quality management in Jordanian private universities. They identified the following obstacles: financial resources, society obstacles, organizational culture obstacles, top management obstacles, educational technology obstacles, and human resources obstacles respectively.

Hassan (2016) investigated TQM application barriers at the Faculty of Social Sciences at Imam Muhammad bin Saud Islamic University in Riyadh. Barriers identified included; absence of unique quality requirements for academic programs, an unjustified change in university leadership, inadequate dedication to address TQM implementation barriers by university leadership, anticipation of fast TQM outcomes and the lack of financial motivation.

A study conducted by Kosgei (2014) revealed the following challenges; lack of commitment by the management and employees, school's organizational culture, poor documentation, inadequate training of staff, and ineffective communication.

A study carried out by Ahmed and Ali (2012) on the implementation of TQM practices in Pakistani Universities revealed the following as barriers to its effective implementation: limited financial and other resources for TQM training of employees, lack of skills amongst administrative and academic staff for TQM implementation, limited coordination and collaboration among staff to enhance employee participation in TQM practices, ignorance about TQM training needs of employees, failure to involve academic staff, industry and other stakeholders while designing and reviewing course curricula, ignorance about employee job satisfaction as well as non-alignment of academic and administrative processes with the vision of the universities.

Rosa, Sarrico and Amaral (2012) also established ineffective communication media, difficulty in assessing TQM results, bureaucracy, poor leadership, and failure to involve all stakeholders among others as obstacles to successful TQM implementation in universities. Pratasavitskaya and Stensaker (2010) also identified the following impediments to effective implementation of TQM in universities: resistance to change, poor administrative commitment, inadequate experience of team leaders and staff, difficulty in the utilization of TQM tools as well as spending a lot of time on personal training.

Dale, et al. (2007) identified the following obstacles to effective TQM implementation: inneffective leadership; resistance to change; contradictory policies; inappropriate organizational structure; and poor management of the change process.

CONCLUSION AND RECOMMENDATIONS

To achieve good service quality as well as customer satisfaction, private universities need to continuous enhance their physical and non-physical aspects through effective and barrier-free implementation of TQM (Ejionueme and Oyoyo (2015). Basing on the findings, it can be concluded that the major obstacles to effective implementation of TQM in private universities are lack of management commitment and support, poor leadership, and staff resistance among others. Universities must pay great attention to TQM as it is one of the processes that can enhance the development of quality in education. All stakeholders within universities be it faculty, administrators, and students among others must constantly focus on educational improvement and how to achieve TQM. The management of private Universities must support TQM processes, TQM should be introduced gradually to condense resistance and University councils must be very careful while selecting top leadership so that individuals who have interest and can support quality management endeavors are recruited. TQM is a common factor that has the capability of shaping the strategies of private Universities in their bid to content their different stakeholders such as students, parents, community and society at large. The various barriers to

effective TQM implementation can be overcome mainly by management commitment to supporting the whole TQM process across all departments, divisions and operations of private institutions in Uganda. TQM aims at developing a culture of total commitment to quality processes and services to prevent wastage (Felestin & Triyono, 2015).

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The authors declare no conflict of interest whatsoever.

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