IJSTR-1113-7725Combining TQM, SQM and TOE to attain Educational Excellence

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Abstract: Many institutions of higher education have recently been subjected to a lot of competition for students and government funding to the extent that to survive and successfully thwart the competition, sound strategic decisions have to be made from an informed position. The heat of the competition could be withstood through strategically aligning organisational core processes with current and dynamic management paradigms like Total Quality Management (TQM), Strategic Quality management and Total organisational excellence approach. Several excellence models world-wide could be the source of internal and external requirements analysis. Some of these renowned models are the Japanese Deming application Prize, the US Malcolm Baldrige National Quality Award (MBNQA), the ISO 9000 standards and the European Quality Award (EQA). The right portfolio mix of these together with the TQM initiatives will enable any tertiary institution to achieve its dreamt vision and mission and become a world-class education provider. However, this calls for everyone to share a collective sense of purpose that is in sync with the strategic objectives of the institution. Top management must show this commitment first and then cascade this value down to all the operational staff. TQM principles are founded from manufacturing industry and hence there is need to adapt them to the service sector like tertiary education. We therefore propose an integration of several TQM frameworks to help institutions to self-assess themselves in order to perform better and survive the tormenting turbulent times in the education landscape.

Key terms: TQM, Strategic Quality Management, Total Organisational Excellence

1.0 Introduction

Total Quality Management (TQM) is a well-researched management methodology which has been around for a long time now. However, this field of study has always been evolving encapsulating many other best practice principles in the business world. This remarkable expansion of the TQM discipline has attracted so many organisations to deploy in many cases, some part of the TQM frameworks. For some organisation, this venture has taken then to glory but for others the same principles have led to total disaster. In this research, we are going to talk about the theoretical underpinnings of the field of TQM, strategic quality management and the total organisational excellence models. It is our intention to survey critically the scholarly schools of thought behind these theories and techniques and at the same time to highlight an approach that justifiably can work for tertiary educational institutions. Furthermore this research must demonstrate how TQM combined with the excellence models can be adapted to the education service sector. This work is concluded by survey literature related to the current direction of TQM as a discipline and highlight areas of potential researches. This part is followed by the recommendations and the conclusion in which we give our view.

2.0 Theoretical underpinnings of Total Quality Management (TQM)

Total Quality Management is today regarded as a way of life by several organisations whether they are small, big, non-profit-making or profit-making. Even when this is the case, a lot has been said and written about this subject area. Some of the questions relating to TQM result in confusing debates [1]. Several authors are interested in defining the term 'quality' first before writing about TQM. Oakland [2], [3] and [4] agree that quality is about meeting and satisfying customer requirements in a never ending continuous manner. If products and services are of high quality and are fit to use [4], costs for mitigating failures and wastage are removed. The need for quality, less customer complaints and high productivity has resulted in

the evolution of the TQM discipline. TQM is a way of managing to improve the effectiveness, flexibility and competitiveness of a business as a whole. A vital way of planning, organising and understanding each activity and depends on each other individual at each level of the organisation ([2], [5], [1]). They further concur that TQM is a corporate-wide process which has to involve all levels of employees. Zairi [1] further expanded the scope of TQM to cover a number of techniques, management principles, technologies and methodologies which are put together to work for the benefit of the end customer. Many organisations have been stimulated to adopt the TQM process as an act of proactive preparedness to deal with both internal and external pressures that the organisation faces. This is another tool among a coterie of others which an organisation can use for a strategic competitive advantage over its contenders. The TQM evolution can be attributed to the works of several 'gurus' who made significant contribution during the early 1950s, the late 1950s and the 1970s to 1980s. As recorded by the Department of Trade and Industry [6], the first phase was championed by the Americans who went to Japan; W. Edwards Deming who believed management is largely to blame for most quality problem and thus his ideas are concerned management responsibility. Joseph M. Juran is renowned for his quality trilogy of quality control, quality planning and quality improvement. Armand V. Feigenbaum came up with the 'total quality control' concept. These gurus' ideas influenced the works the Japanese who developed new ideas. Kaoru Ishikawa contributed to quality: company-wide quality, the Ishikawa diagram, the assembly and use of seven basic tools of quality. Genichi Taguchi was concerned with routine optimization of product and process to achieve quality before manufacture rather than through inspection. The Just-in-Time manufacturing, the single minute exchange of die (SMED) and the Poka-Yoke (mistake proofing) are Shigeo Shingo's contributions. The last phase of gurus comprised those Americans responding to the Japanese industrial success. Philip B Crosby came up with "Quality is free" and "Zero defects" concepts and Tom Peters identified leadership as being central to the quality

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improvement process and advocated for "Management by walking about" [6]. To become more competitive tertiary institution could adopt but not limited to TQM, strategic quality management, self-assessment (Gap analysis) through Business excellence models, balanced scorecard, Business Process Re-engineering, benchmarking, and many tools and techniques that can be used in process improvement.

3.0 Critical Evaluation

The emergence of so many business techniques and tools as identified above means businesses are always preoccupied with the zest to become world-class organisation. The tertiary education landscape nowadays is highly competitive and educational institutions are more or less run as businesses. For this reason exploration is being made to model and simulate with many different business frameworks, some of which share a lot of similarities and differences. This research has established that many organisations are using a variety of tools and techniques in pursuit of total organisational excellence ([1], [7], [8]).

3.1 Total Quality Management (TQM)

Although there are several vague definitions of TQM as noted by [9],[10], [11], [2], and [12], it can be concluded that TQM is an essential management approach that views all the business facets of the organisation. Every organisation is in a position to fulfil its mandate by providing quality service/product to the end-user. TQM as a practice makes use of other business models for better outcomes to be realised. For instance, TQM and the Business Process Re-engineering (BPR) are similar in that both view business in terms of processes. In contrast TQM according to [13] follows the Kaizen continuous incremental improvement while BPR is innovative and radical in nature ([14], [15], [16], [17]). Therefore, in many organisations TQM and BPR can be used together to articulate business processes. Tertiary institutions could use these management models to identify their critical success factors. However, Zairi and Sinclair [7] contend that organisations that are familiar with TQM will successfully implement BPR. This means that TQM is seen by other authors as the foundation on which other business models must be buttressed for them to be of benefit to the organisation. Unlike TQM, BPR advocates for a more dramatic and fundamental shift in process redesign in a bid to cater for or effect organisational change [8]. TQM has been characterised by the Japanese industrial revolution pioneered so many gurus with diverse philosophical viewpoints. The different backgrounds of the gurus testify why their main focus was varied. For example, [9] and [18] maintain that Feigenbaum considered "cost effectiveness" as the role of TQM while Deming's and Juran's was "survival through profitability". Even with these nuances, TQM contributes to the overall success of the organisation.

3.2 Strategic Quality Management (SQM)

On the other hand, SQM has recently come to be regarded as a new management paradigm that is going beyond the TQM. Ideally this new approach blends a number of contributions from [20], [19] and [21]. The

contributions suggest quality to be of strategic value to the organisation. SQM's role therefore must ensure the mission, vision, goals, aims, actions plans of an organisation must be espoused in a top-down fashion. Where TQM failed, lack of management commitment was the chief cause. This is what SQM has come to address through creating values and establishing objectives and systems to satisfy customer's expectation and improve organizational performance ([22], [23]). The tertiary education institutions must formulate organisation-wide strategies that are responsive to the current turbulent dynamics in the education industry. Many stakeholders needs have to be looked at from a holistic perspective. This phenomenal change is the new order that SQM as an emerging paradigm has to contend with. Bounds et al [24] identified customer value strategy, organisational systems and continuous improvement as the three themes that can propel the subject of quality beyond just TQM. With SQM approach, educational institutions will have a framework to help define their business, assess internal and external environment, decipher the key problems and then from such information they could draw action plans which could be monitored. The ultimate outcome is quick response to changes in the tertiary education landscape

3.3 Total Organisational Excellence (TOE)

Another way of improving the services of an organisation with the aim of surpassing the rivals in the industry has been through the use of excellence models. In this regards the organisation aims to be a winning world class company through adopting a systematic approach to harness and focus the entire workforce and every organisational activity to achieve excellence. Oakland [2] propounds that self-assessment is the methodology to be linked to models such as the Japanese Deming Prize, the US Malcolm Baldrige National Quality Award (MBNQA) and the European Quality Award (EQA) developed by the European Foundation for Quality Management (EFQM). There are several other similar national and international models developed by many countries, including the South African Excellence Foundation (SAEF) which was developed by the SADC block. A lot has been written about these models by [2], [4], and [25]. For example a tertiary institution can benchmark its performance against the best practices which are presented as checklists in most of these models. Although not all categories explained can befit seamlessly an educational institution, by customising the fundamental values agreed upon, the institution can introspect itself and see what it can excel at and do better than the completion to survive in the current volatile times.

4.0   Model Application to educational institutions

Looking at the models discussed above, educational institutions have innumerable range of choices. Nonetheless, we propose combining TQM, SQM and the Shewhart Deming cycle, although it is important to note that not all models are best choices for an educational institution. The Japanese Deming Prize is one widely used excellence model in business and industry but for educational purposes, it appears too prescriptive for a

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dynamic industry like education. What's more is the fact that it ignores the impact of the external environment (PESTEL) which affects how institutions of higher education are funded. An alternative to using the Deming Prize alone is to combine it with The Baldrige Award as suggested by (Kendrick, [26], [27], [28]) and the European Quality Award [29] are recognized as the highest dividends for focusing on total quality in business, industrial, and (recently) educational settings. The downside of this combination is setting up objectives that are in concert with educational curriculum but there is a seamless integration with educational curriculum if TQM, SQM and Excellence models like Deming Application, ISO 9000, MBNQA and EFQM are brought to the fore. The main cause of failure to implement TQM has been largely due to lack of strategy, lack of commitment by top management, not carrying out quality audits, failing to sustain enthusiasm for TQM [30] and lack of participative management, just to mention a few. Izadi M., et al [31] advocates for quality criteria for improving University programs such as vocational and technical education. They further assert that TQM allows internal and external customers to communicate with faculty to continuously improve educational processes. If parents, alumni, and students (internal customers) are satisfied, they will recommend degree programs to others. Likewise, if employers, taxpayers (in state supported institutions), and graduate schools (external customers) are satisfied with the graduates of programs such as technology education, they may continue relationships and support. We agree with this assertion as it promulgates the very ideals that many institutions have been striving to achieve. The continuous improvement focus of TQM is a fundamental way of fulfilling the educational reform accountability requirement. Improvement teams of lecturers will be constantly monitoring their teaching and learning methods to ensure imparting quality education to students. Policies and procedures for selection of learners are outlined and learners are given guidance and support. The eight guidelines of implementing TQM proposed by [32] and the proposed use the customised Shewhart/Deming cycle (step 6) could be a significant consideration for attainment of a world-class status. From this framework, it can be noted that TQM must be modified to fully recognise some unique aspects of education namely that education is a service industry with no visible and tangible product. Fact-based decision making can be aided through statistical controls with feedback and employee access to the necessary data. Empowerment must include recognition of lecturers or any staff member that has demonstrated an extra mile in the discharging of their service. The barriers that are likely to impact on successful adoption this methodology lie with leaders who do not understand TQM. Rushing to adopt this philosophy without first needs analysis assessment could lead to a fiasco. Where there are afflictions bedevilling the organisation TQM approaches are better delayed. However, some critics of TQM [33] argue that it is for manufacturing and thus may be difficult to adapt to suit academic systems. In the same article, three universities have successfully implemented some particular aspect of the TQM. For example, the University of Chicago's LEAD programme used the teamwork concept, the School of Hotel and Restaurant Management at North Arizon University focussed on customer focus, planning process and improvement cycle, whilst Northwest Missouri State University developed and implemented a TQM plan called the Culture of Quality [33].

5.0 Recommendation

Despite the misunderstandings regarding the definition of TQM, as a management philosophy it does add value to how organisations could pursue their agendas. What is of cardinal significance is the fact all stakeholders of TQM must find a common ground on how to fully integrate it into the affairs of the business. The future success of TQM in many ways lies on knowledge of processes, measurement and the relationships between them [30]. A recent study by Almeida [34] revealed that only four African countries have an appreciation of Quality Awards and Excellence Models. This demonstrates a major void in the uptake of TQM concepts in Africa. More researches are needed to help developing countries with practical advice on how these awards can provide their companies with management tools for in-house skill development. There is a general consensus among many writers concerning application of TQM to higher education [35], [36],[37] and [38]. However, there is need for a paradigm shift in terms of governance and service delivery as well as looking into more innovative experiments that improve the performance of this sector. This state of affairs begs a lot of scholarly contribution before TQM becomes the common denominator in education sector. There is therefore need to develop systems that deal with cultural changes as well coming up with hybrid tools and techniques that consider holistic view of the entire business [39]. For tertiary institutions to derive maximum benefit from the deployment of TQM, a total quality manager is required to incubate the process and to ensure that all staff members fully understand the concept. A quality manger should be a change agent who sees TQM as a way of life as with the Japanese Kaizen approach. This change needs to be managed with the support of top management. We also recommend that educational institutions could become strategically competitive by involving everyone in this wind of change. This participative management will instil a sense of change ownership among the employees and this will ultimately result in the successful implementation of the TQM initiatives and imperatives.

6.0 Conclusion

TQM is of great importance to the service sector such as the education industry we concur with [38], [40] and [41] that implementation is not as simple as treating each service as a manufacturing process. In this research we have managed to show that no single TQM guru has the right answer and ideas must be taken from each. No two organisation can implement TQM in a similar manner, thus it must be customised to suit the corporate strategy. We have explored the various definitions attributed to TQM and noted that the debate about exactly is TQM is still an on-going discussion. The TQM, SQM and total organisation excellence models were discussed. For us no one winning model was suggested for educational institutions. Whilst TQM is a manufacturing-oriented

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approach, we have argued that combining the various TQM methods and techniques gives a higher chance for higher education institutions to be more competitive in attracting its customers. Since the field of TQM is continually evolving, we have highlight that current researches and those that are likely to unfold in future shall particularly be concerned with diversifying knowledge and theory about quality.

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