ISO 9001 CERTIFICATION AND SERVICE QUALITY DELIVERY IN MALAYSIAN HIGHER EDUCATION INSTITUTIONS: A CONCEPTUAL MODEL

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ABSTRACT

In line with the strategies for accelerating the achievement of quality education, ISO 9001 Quality Management System (ISO 9001) was introduced as a mean to enhancing performance and effectiveness of the Malaysian HEIs' delivery systems. The key objective for which the HEIs adapting ISO 9001 to practice rests on the premise that the certification able to establish continuity in management procedures which then contributing to betterment performance. Adoption the certification in the education sector is, however, relatively new and has yet to be understood clearly. Indeed, the limited literature surrounding ISO 9001 in education indicates the effectiveness of the certification is vague and inconclusive. Given the literature gap, this paper presents a conceptual model on the link between ISO 9001 and performance outcomes. Since the primary focus of ISO 9001 is to meet customer requirements, the performance outcomes are measured by service quality delivered by the HEIs. The model depicts that successful implementation of ISO 9001 depends upon its seven quality management principles including customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management. Meanwhile, the outcomes of the certification are expected to enhance customer satisfaction, depend upon the perceived service quality delivery, measured by SERVPERF scale consisting of five dimensions including academic aspects, non-academic aspects, reputation, access, and program issues. It should be noted that the presented model is a tentative one and will undoubtedly need to be verified and validated in the next stage of research. Therefore, the model is conceptual in nature and will be validated in further research.

Keywords: ISO 9001, Service Quality, Higher Education Institution, Malaysia

INTRODUCTION

In today's knowledge economy, the progress of a nation depends essentially on the ability of its peoples in term of knowledge, skills, and competencies. In this regard, higher education institutions (HEIs) have been linked with the development and economic growth of every nation (Chapman and Sarvi, 2017). The nations with higher education levels are said to have experienced greater economic growth (UNESCO, 2014). It was achieved by transforming economic structure through the provision of educated workforce, highly skilled labour that are technologically competent and capable to compete not only locally but also globally (Banya, 2015). For this reason, an investment in education as one form of development of human capital has become a crucial agenda and national priority for most nations. Consequently, the emphasis on human capital as a driver of economic development has led to undue scrutiny on quality

education systems.

In Malaysia, the Government has put a huge effort in promoting education for its citizens. Obviously, education sector earned the greater portion of social service expenditures. In 2018 education sector has allocated an estimated of RM5.26 billion compare to just RM44 million in 1970 (Ministry of Education Malaysia, 2020). Despite the vast expenditure in education sector, the Malaysian education system has been subjected to the increasing of public concerned and discussion in recent years. The expectations of parents increased and employers has voiced their concern about the ability of the system to adequately prepare young Malaysians for the challenges of the 21st century (Ministry of Education Malaysia, 2013). Acknowledged the issues, the Government has given particular attention to the problem of quality in higher education. It was aimed at enhancing the higher education institutions (HEIs) delivery system by establishing more consistency in performance standards (Ministry of Education Malaysia, 2015). This move has driven HEIs to be more accountable in their service delivery and responsive to customer needs, and subsequently forced to find ways for more efficient, effective, and customer-focused (Khalid et al., 2019).

In line with the strategies for accelerating the achievement of quality education, ISO 9001 Quality Management System (ISO 9001) was introduced as a mean to enhancing performance and effectiveness of the HEIs' delivery systems. The key objective for which the HEIs adapting ISO 9001 to practice rests on the premise that the certification able to establish continuity in management procedures which then contributing to betterment performance. The primary focus of ISO 9001 QMS is to meets customer requirements which further lead to customer satisfaction (ISO, 2015). It is consistent with marketing theory whereby customers are justifications for organization's continuous existence and by extension responsible for achieving profitable performance (Ndubisi and Nwankwo, 2019). Cronin and Taylor (1992) viewed customer satisfaction as the customer experience of a specific service encounter; therefore, service quality is a precedent of customer satisfaction. Customer satisfaction can thus be seen as the perception of the customers about the quality of service they received. Since HEIs are more of service organisations (Hasbullah and Yusoff, 2018), adopting ISO 9001 in practice aim to commit to a quality management strategy that able to improve performance by enhancing service quality delivery leading to customer satisfaction (Oo, 2019). It should be noted that to obtain and maintain the certification involved highly risk. It is expensive, takes valuable time and needs continuous effort (Kartikasari et al., 2018). But then, does adopting ISO 9001 in the HEIs really boost the service quality delivery? This is the issue this paper attempts to address.

While ISO 9001 has been introduced over the last three decades and has been adopted worldwide by various sectors, adoption in the education sector is, however, relatively new and has yet to be understood clearly. This fact could be derived from the latest ISO survey. It was reported that out of 739,206 ISO 9001 certificates issued worldwide in 2018, 13,474 or 1.8% were issued in the education sector, and only 242 were issued in the context of education sector in Malaysia (ISO, 2019). Thus, it is not surprising that to date limited ISO 9001 studies have been conducted within the education sector, and much less has been published in Malaysia context. The relatively few empirical ISO 9001 studies in the education sector have resulted in very little information about its impact on the sector's performance. It has led to the argument that ISO 9001 implementation in the education sector is still in its infancy as compared with other industries.

Nevertheless, there have been some ISO 9001 studies within the Malaysian education sector. Mohamed et al. (2016) looked at the factors affecting ISO 9001 QMS implementation in a public HEI. Basir et al. (2017) examined the effect of elements of academic culture on the maintenance of ISO 9001 QMS at selected HEIs. Othman et al. (2017) used literature review

to develop a new framework to analyse the quality management system, employee satisfaction and performance of academic staffs at the private HEIs. The implementation steps of ISO 9001 QMS at HEIs were outlined in recent study by Basir et al. (2019). Meanwhile, Wahid (2019) investigated how a large public HEI has maintained its ISO 9001 QMS over the last 20 years. In the context of the link between ISO 9001 and performance outcomes within the Malaysian HEIs, a literature search found considerable limited studies have been conducted to date. The studies have evaluated performance outcomes from different perspectives. However, the studies have demonstrated vague findings. Basir et al. (2017) used the dimensions of academic culture as a proxy for performance. They found that academic freedom, individualism and collegiality have negative effects on ISO 9001, while professionalism had influenced ISO 9001 both positively and negatively. Meanwhile, Mohamed et al. (2019) explored the relationship between management's commitment and employee satisfaction of an ISO-certified HEI. The study revealed that management's commitment of the ISO-certified HEI has apparently influenced job satisfaction among employees.

With respect to the service quality studies, few were conducted within the Malaysian HEIs and none of the studies defined the relation to ISO 9001. Most have evaluated service quality independently by either using existing models or developing the new one. The studies also reported inconclusive results, however. For example, Ali et al. (2016) found a significant positive relationship between five dimensions of HEdPERF scale and satisfaction of students which in turn enhanced institutional image, and loyalty of students at three public HEIs. On the other hand, Chui et al. (2016) reported negative gaps between perceived service quality and expected service quality for some dimensions of SERQUAL scale at a private HEI.

Despite this, researchers have not yet established the link between ISO 9001 and service quality, to the best of the authors' knowledge. Of course, all of the previous studies are of great importance, but the establishment of a link between ISO 9001 and service quality could be equally important since service quality excellence is the expected results from the certification efforts. Therefore, the literature contains a greater void, thereby providing evidence for this exploratory contribution. The contrasting findings highlighted the significant need for an initiative to provide customer feedback to the Malaysian HEIs, emphasizing on continued implementation of ISO 9001 to enhance customer satisfaction. Indeed, customer feedback is the priority of a quality management system (Rosa et al., 2012).

Given that a gap in literature exists, coupled with the critical issues on education quality in countries like Malaysia, there is a timely need for research in this area. Such research should focus not only on investigating if a link exists but also on a more finely grained examination of how any links are constructed. This paper after all is not about ISO 9001 itself, it is about the claimed that the certification able to enhance customer satisfaction which focus of service quality delivered by the certified HEIs. As a part of ongoing doctoral research, this paper presents a conceptual model on the link between ISO 9001 and service quality. The remainder of this paper is structured as follows: firstly, the background of the research is introduced; this is followed by developing a conceptual framework model that would guide the research; and lastly, conclusion and future direction are presented.

1.0 BACKGROUND

The primary focus of ISO 9001 was established is to meet customer requirements and to strive to exceed customer expectations (ISO, 2015). Heizer and Render (2011) noted that an effective way to maximize customer satisfaction is the organization's ability to develop and implement a process that will ensure a constant, consistent and timely delivery of quality products of services. Ideally, ISO 9001 was designed to establish continuity in management procedures that maximizing customer satisfaction, in turn, leading to performance improvement. This

could be achieved by adapting seven Quality Management Principles (QMPs), namely Customer focus, Leadership, Engagement of people, Process approach, Improvement, Evidence-based decision making, and Relationship management as a basis to guide the intended objective.

Accordingly, customer satisfaction is linked to service quality, which related to the measurement of an organisation's base on to their needs, which further provides a measurement of service quality (Pakurár et al., 2019). In this context, customer satisfaction contributes to repeat purchases or services, brand loyalty, positive word of mouth, and therefore, satisfied customers form the basis of a successful organisation (Angelova and Zekiri, 2011). Cronin and Taylor (1992) considered that customer satisfaction is based on customer experience in a specific service encounter; thus, customer satisfaction is based on service quality. For that reason. the concepts of customer satisfaction have been structured around the way that expectations serve as a benchmark of reference for measuring satisfaction (Forsythe, 2015). In both academia and industry, the terms service quality and customer satisfaction are often used interchangeably since the two use one evaluative construct in particular (Iacobucci et al., 1995).

The conceptualization and assessment of service quality are the most frequently discussed topic in marketing literature. Researchers have reached a general consensus that service quality is an elusive and abstract term that is hard to define and quantify (Zeithaml, 1981; Grönroos, 1984; Parasuraman et al., 1985; Cronin and Taylor, 1992). In order to measure service quality, different measurement models have been developed such as SERVQUAL (Parasuraman et al., 1985), SERVPERF (Cronin and Taylor, 1992), and HEdPERF (Firdaus, 2006). However, the SERVQUAL and SERVPERF models were the most widely used theoretical frameworks to measure service quality. The HEdPERF model, on the other hand, was the newest model designed in higher education settings to assess service quality from student perception. In this study, the SERVPERF scale is adapted.

Given that ISO 9001 is used to assure the quality of the management processes, with these processes relating to the customer satisfaction, it is expected that certified with ISO 9001 will result in enhanced service quality. Testing this proposition is the main focus of this study, hence, the primary research question to be answered is:

Does ISO 9001 QMS implementation have an effect on service quality of the Malaysian higher education institutions? If yes, how does the pattern of the relationships?

2.0   CONCEPTUAL FRAMEWORK

The above discussion has showed that ISO 9001 and service quality theories were the grounded theories underpinned this study. These two theoretical positions established the importance of understanding the effect brought by ISO 9001 certification in HEIs to service quality delivery. It is hypothesized that the ISO 9001 affects customers satisfaction in term of the service quality delivery of the certified organization. Thus, the nature of this study can be classified as an "explanatory study", which emphasizes on studying a situation or problem in order to explain the relationships between variables (Saunders et al., 2014). In developing the measurement constructs, Artino et al. (2014) notified that to either use the already developed measurement or design a new measurement based on a literature search. Keeping all these positions in minds, the conceptual model, shown in Figure 1, is proposed. ISO 9001 is measured by the extant for which it's seven QMPs being applied and treated as the independent variables. The perceived service quality is measured by SERVPERF scale consisted of five dimensions of service quality and considered as the dependent variables. These measurement constructs have been used in many previous studies in education settings and therefore, may possess some validity in their role as crucial factors to organisational performance.
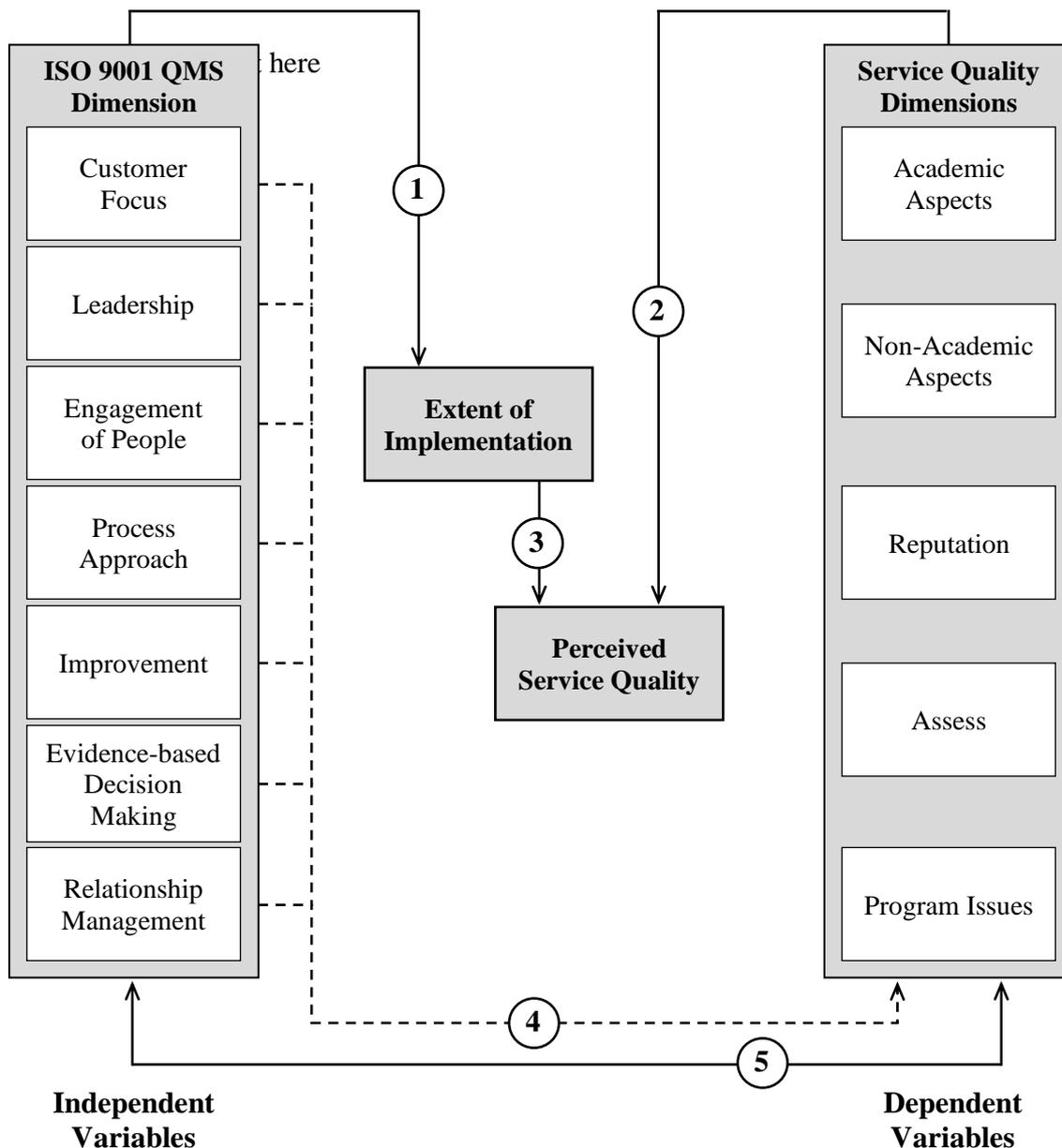
Figure 1   Conceptual model on the link between ISO 9001 and service quality

In referring to Figure 1, the study firstly attempts to investigate the extent to which ISO 9001 was implemented in an HEI. It will be assessed by seven dimensions include customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management. This measurement is demonstrated by the arrow leading from the "ISO 9001 Dimensions" to "Extent of Implementation" (1). Secondly, the study aims to assess the overall perceived service quality by measuring respondents perceived on the five dimensions of SERVPERF scale include tangibles, reliability, responsiveness, assurance, and empathy. This measurement is shown by the arrow leading from "Service Quality Dimensions" to "Perceived Service Quality" (2). Thirdly, the causal relationship between of ISO 9001 and perceived service quality will be established. It is presented by arrow leading from "Extant of Implementation" to "Perceived Service Quality"

(3). Fourthly, the study will also intend to identify which of the dimensions of ISO 9001 highly correlates with perceived service quality. It is presented by the dotted line leading from each of the seven dimensions of "ISO 9001 QMS Dimensions" to "Service Quality Dimensions" (4). Finally, the study attempt to measure the pattern of relationship between ISO 9001 and perceived service quality. This measurement is demonstrated by the two-headed arrow leading from "ISO 9001 QMS Dimensions" to "Service Quality Dimensions" (5).

This conceptual model presenting an integrated way of looking at a problem under study which explains how the research problem would be explored (Liehr and Smith, 1999). It could be considered as the "blueprint" of the research that provides the structure and support for the rationale for the study, the problem statement, the purpose, the significance, and the research questions (Grant and Osanloo, 2014). Most importantly, it provides a grounding base for the research strategies, research designs, and analysis procedures (Lederman and Lederman, 2015).

3.0   CONCLUSION AND FUTURE DIRECTION

The adoption of ISO 9001 in education sector is relatively new and has yet to be clearly understood. Apparently, ISO 9001 was originally designed and believed to be the most useful quality management system for manufacturing sector, where it was known to contain many standardised processes and products. Unlike the steady-state and standardised nature of its end product on which ISO 9001 was based, education is more of service sector. Although there were end products (students), but the success of the products is dependent solely on the human capability involved in every education process, rather than machinery used in the processes. However, literature has shown that the effectiveness of the certification is vague and still surrounding with controversies. Therefore, the motivation of this effort is to deal with the question on the effectiveness of ISO 9001 certification in enhancing performance in term of service quality delivery within the certified HEIs from Malaysian perspective. Since ISO 9001 was implemented in the HEIs at the management level to enhance management processes and procedures, the link between the certification and service quality will be measured by the perception of academic staff. As an internal customer, academic staffs were the most significant customers as they are closest to management and thus, influenced by any management practices. Indeed, management theory stated that an organisation's superiority is directly connected to its administrative practices and employee performance (Öcal and Koçak, 2015). Therefore, this study concerns with the outcomes from of ISO 9001 implementation on customer satisfaction as measured by the service quality delivery in the context of the ISO-certified HEIs. It focuses on the experience and assessment of academic staffs of one of the HEIs in Malaysia.

To guide the efforts, a conceptual framework that link between the ISO 9001 and service quality is developed (see Figure 1). The framework depicts that success implementation of ISO 9001 depends upon its seven quality management principles including customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, and relationship management. Meanwhile, the outcomes of the certification are expected to enhance customer satisfaction, depend upon the perceived service quality delivery, measured by SERVPERF scale consisting of five dimensions including academic aspects, non-academic aspects, reputation, access, and program issues. However, the presented framework is a tentative one and will undoubtedly need to be verified and validated in the next stage of research. Nonetheless, the current model should provide a framework for understanding past studies in education context and should serve as a guide for conducting future researches. In future research, the study will use a quantitative research approach to test the model. Apart from attempting to fill research gap, this study would also provide insight of the outcomes from

implementing ISO 9001 to the performance of Malaysian HEIs. Finally, the authors noted that the limitation of this effort, that is, exploratory in nature and is based on work done by earlier scholars and researchers. Therefore, the model is conceptual in nature and has to be validated by further research.

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