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Effects of ISO 9001 on Non-Financial and Financial Performance in the Organizations: A Review

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ABSTRACT: *The main purpose of this paper was to specify the impact of ISO 9001 on financial and non-financial performance. For this aim, a comprehensive literature review was carried out on the scholarly published studies, which investigated empirically the effects of ISO 9001 standard on the organization's performance in different sectors. Subsequently, the ISO 9001 studies identified and selected carefully that were relevant to the objectives and criteria of the study with the aim of achieving the results and making conclusions. The analysis of the results of the empirical studies uncovered that ISO 9001 significantly affected production process (internal business process), while this standard was not correlated with the indicators of innovation and learning perspective at significant level. Furthermore, the systematic review of the existing literature provided enough evidence that the effectiveness of ISO 9001 on customer's results and financial performance were unclear and contradictory.*

Keywords: ISO 9001 Certification; Quality Management System (QMS); Balanced Scored (BSC); Financial Performance; Non-Financial Performance; Organization's Performance.

INTRODUCTION

Nowadays, globalization and competitive pressure have generated an environment where organizations should be flexible, adaptive, responsive, and innovative [19], [21], [22]. ISO 9001 is one of the effective techniques, which can assist the companies to overcome their problems. This quality management certification belonged to QMS standards, and is a “generic standard” for all organizations, regardless of their size and field of activity. Its intention is to satisfy customers' requirements [21], [13]. Today ISO 9001 is widely adopted by different sectors in 188 countries, according to the latest ISO “survey of certifications” [7], the number of total ISO 9001-certified organizations was about 1,138,155 certificates by 2014. ISO 9001 implementation is a strategic decision [25]. Several studies were examined and determined the advantages and effects of ISO 9000 on specific performance in the organizations. Lushi et al. [13] reviewed 50 research papers concerning impact of ISO 9001 on the companies, they found that the organizations were achieved the 13 benefits of this standard, such as: “exports”, “efficiency”, “improvement in competitive position and competitive advantage”, “improvement in systematization”, “improved quality in product and service”, “improved image”, “improvements in employee results”, “improved customer satisfaction”, “improved relationships with suppliers”, “improved relationships with authorities and other stakeholders”, “market share”, “profitability”, and “sales growth”. In addition, the implementation of ISO 9001 can be the “pro-active strategy” to improve performance in different organizations [14].

Although ISO 9000 certification has shown its benefits, but the research community is still “ambiguous” to its usefulness or potential advantages of ISO 9001 in improving the overall performance of the firms [9], [17], [12]. Many studies reported that the level of the effects of ISO 9001 standard on firms' results are still unclear, contradictory and there are many “conflicting opinions” [30]. It seems that the effectiveness of ISO 9001 standard has been “contradictory” in nature indicating “positive and/or negative financial and organizational results depending on the multitude of factors studied in each particular research” [10, p. 33].

Furthermore, the results of some empirical studies in construction and service sectors have been asserted that the implementation of ISO 9001 is just wasting time and money for “consultancy”, “training”, “periodical internal and external audit”, and “certification fee” without any tangible advantage, except promoting competitiveness in the market, not more [23]. Similarly, Farooqui and Ahmed [2] stated that ISO 9001 standard focuses on short-term goals and benefits that makes the organizational processes less efficient.

The real key issue is assessing the impact of ISO 9001 standard on companies performance, which can clarify whether ISO 9001 can have any benefit for the organizations or not [9]. Therefore, this paper carried out a literature review from existing empirical studies that analyzed the influences of ISO 9001 standard with different perspectives (dimensions) of performance within different sectors, through which the authors have been specified the most significant dimensions of the main performance indicators affected by the ISO 9001 standard, in order to achieve the objective of the study, and determine what exactly the impact of ISO 9001 on financial and non-financial performance within the organizations from different industries in various countries through reviewing the empirical studies examining the hypothesized relationship between ISO 9001 and a set of performance measures. In addition, the current study was adopted a systematic and rigorous review to identify appropriate research papers in this study based on three steps, as carried out by Neyestani and Juanzon [19] in their study.

LITERATURE REVIEW

Based on Literature review, nineteen empirical studies identified and determined, which were appropriate to use for the study. These empirical studies were performed between 2002 and 2017. Furthermore, literature review showed that the empirical studies employed a wide range of performance indicators or KPIs for measuring the impact of ISO 9001 on performance of the organizations, such as: product quality; market share; customer's satisfaction; flexibility; ROA; profitability; employee satisfaction; cost of production; time; supplier performance; innovation; competitiveness. Also, some researchers used only financial measures, others adopted many other operational performance indicators, whereas some measure the effectiveness of ISO 9001 standard on a set of the performance measures belonged to all main perspectives of performance (BSC) [17], [1]. Thus, in order to summarize and simplify the data analysis, the current study classified and discussed the effects of ISO 9001 on performance of the organizations in four main dimensions or perspectives of Balanced Scorecard (BSC), as suggested by Neyestani and Juanzon [20]. Then this study was categorized the production process (internal business process), customer's satisfaction, and innovation and growth as non-financial performance, and the discussions and conclusions related to the effects of ISO 9001 on Financial and non-financial were based on the aforementioned classifications.

ISO 9001 and Financial Performance

According to Karim [9], ISO 9001 is an area that has not been accounted in detail by current research studies that evaluated the impact of this standard on financial issues within the organizations, but some published research on the implementation of ISO 9001 standard and financial performance measures highlighted that despite the statistical results indicating the positive relationship. Surely, this quality management standard is able to stimulate some activities that cause increasing profitability within the organization [10]. According to Fatima [3], the ISO 9001-certified firms had substantially greater “returns on assets” (ROA) and likewise ISO certified organizations can enable to increase sale rate and profitability in the companies. But Lushi et al. [13] and Islam et al. [6] claimed the only some ISO 9001-certified firms do better than non-certified firms regarding financial performance. However, the results of the literature review reported that there is no consensus among scholars and authors regarding the impact of ISO 9001 on financial performance in the organizations. For example, some studies found the significant effect of this standard with the organizations' financial measures [23], [1], with ROA only [17], with financial performance of large and medium-scale firms only [3]. Whereas others indicated that there is no or a very weak relationship between ISO 9001 and financial indicators in the firms [5], [6], and in small-scale organizations [3], as demonstrated in Table 1. Accordingly, these studies have been indicated contradictory findings with conflicting outcomes regarding the relationship between ISO 9001 standard and financial perspective. Therefore, although ISO 9001 gives some internal and external benefits, and therefore many of them have a positive impact on individuals, operational issues and customers, but in fact, the relationship between the quality management

standard and financial performance is not so clear [4]. Furthermore, some scholars who attempted to determine whether or not ISO 9001 standard affects the financial performance of organizations, were acknowledged that it is very difficult to measure and judge fairly concerning the significant impact of ISO 9001 with the improvement of financial performance in the organizations because there are many variables in the firms, which are related to financial issues [9].

ISO 9001 and Non-Financial Performance

Many studies reported that ISO 9001 can maintain and improve performance continuously. In construction industry, several case studies were reported that ISO 9001 can cause improving quality performance, avoiding costly errors and delay during construction processes [2]. Thus, ISO 9001 is able to improve internal efficiency by reducing waste and non-value added tasks. Furthermore, the results of many ISO 9001 certified companies have been promoted the “documentation” and “work procedures”, and “a greater clarity of work”, which cause largely improving in “internal business processes” [13]. Similarly, the review of 19 selected studies highlighted that the majority of the empirical studies found the direct and significant impact of ISO 9001 on measures of internal process perspective [14], [6], [21], [24], [18], [12], [29], [11], [27], [1]. While Martínez-Lorente and Martínez-Costa [16], Martínez-Costa et al. [17]; Han et al. [4], Martínez-Costa and Martínez-Lorente [15] claimed that there was no relationship between this standard and internal process of the organizations. Interestingly, although Martínez-Costa et al. [17] concluded ISO 9001 cannot significantly affect internal process but they acknowledged ISO-certified companies performed better than non-certified firms on the internal performance results.

Consequently, it is clear that the most of these empirical studies have found that generally a cause-effect relationship exists between ISO 9001 and internal process indicators or operational performance. According to Kaziliūnas [10] and Han et al. [4], ISO 9001 standard can assist the firm to realize well regarding the needs, requirements, behavior, and attitude of customers, which cause being more competitive. ISO 9001 affects organizational competitiveness, which in turn helps to improve business performance [4]. Likewise, the favorable view emphasizes that ISO 9001 promotes “employees' awareness” in quality issues and encourages continuous improvement through regular and imperative quality audits. Thus, this standard generates a better employee and partner satisfaction results from employees' success in having opportunities for personal learning and practicing new skills [11]. In addition, the adoption of ISO 9001 standard yields visible advantages to the companies concerning increased employee's satisfaction [26]. But the outcomes of reviewing the existing literature regarding the impact of ISO 9001 on innovation and learning unearthed that the majority of the studies found this standard is not correlated with innovation and learning [15], [16], [17], [11], [1], while Sakka [26] and Han et al. [4] reported that the ISO 9001 was affected positively the innovation and learning at significant level. Accordingly, ISO 9001 standard cannot promote innovation and learning in the organizations. Also, this finding is consistent with the opinion of Kaziliūnas [10], who justified ISO 9000 is not a flexible tool for implementing quality management in the organizations, and its emphasis is very low on employees' skills, innovation, and knowledge.

Also, the market share is one of the most reasons why companies adopt ISO 9001 standard [4], [9]. Doubtlessly, the customer's satisfaction is tightly related to increase market share. There is evidence which suggests that firms can achieve internal improvements, or that standard can assist the firms maintain or increase their market share by satisfying the customers [9], [13]. Thus, the main purpose of the ISO 9001 is to promote the effectiveness and efficiency of organizations for obtaining continuous improvement through defect prevention process, in order to achieve their objectives and meet the requirements of their customers [21]. Furthermore, ISO 9001 can properly make trust by a suitable relationship with customers with the aim of enhancing long-term customer support and improving customer satisfaction and loyalty [10]. Interestingly, other advantages of ISO 9001 standard in the organizations are “an improved image and an increased sale rate, because the fact that they have a certificate promotes their image in the eyes of their customers [13]. However, the review of these 19 research papers indicated that the results of the empirical studies in this area were conflicted and mixed results, as presented in Table 1. Some studies reported that ISO 9001 has a significant impact on customer's issues [21], [24], [26], [1], while others found there is no significant relationship between this quality management standard and customer perspective in the organizations [17], [11], [4], [31].

This result is also consistent with view of Han et al. [4], who noted that it is not surprising to find from

the studies that ISO 9001 standard efforts do not affect customer issues directly, because an organization which has ISO 9001, is often expected to promote customer's satisfaction and consistently provide product or service that meets customer and regulatory requirements [14], but in fact, it does not guarantee that ISO 9001 always improves quality performance of the organizations for satisfying customers [24]. Similarly, Neyestani & Juanzon [21] stated that the reasons of the majority of the construction companies for being an ISO 9001-certified firm are to become eligible in tendering of government and international projects, and also achieving its competitive advantages as a marketing tool. Thus, they often neglect to use ISO 9001 properly with the aim of obtaining performance excellence and its multiple advantages. Accordingly, ISO 9001 standard can not enable to assist them to meet the expectations of their customers in long-term.

CONCLUSIONS

Based on the results of the previous empirical studies, the research found that the effects of ISO 9001 on financial and non-financial performance. In general, the impact of ISO 9001 standard on organization's performance is inconsistent and unclear. Similarly, Martinez-Costa et al. [17] and Lushi [13] noted the relationship between ISO 9001 and firm's performance is more mixed compared with the relationship between TQM and organization's performance. However, this paper was highlighted that ISO 9001 has an important role in improving production process (internal business performance) in ISO 9001-certified organizations. This outcome from literature review is also consistent with the studies of Kuo et al. [11]; Sun and Cheng [29], who realized that ISO 9001-certified companies can often accomplish their internal business performance (production processes) better than non-certified, the reason is to practice more on “quality activities” and “process management”, in order to ensure the companies meet the customer's requirements. While the results of this study indicated that ISO 9001 standard cannot be correlated with performance measures of innovation and learning, because ISO 9001 focuses more on production process issues than promoting the innovation and learning in the organizations [10]. Finally, the results of the previous empirical studies were unearthed that the effects of ISO 9001 standard on customer's results and financial performance were inconclusive and unclear, because the ISO 9001-certified organizations with different quality management context have significantly different performance outcomes on the financial performance and customer results in different industries [10].

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