Effective TQM Implementation in the Service Industry: A Proposed Framework

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ABSTRACT

Purpose: This paper aims to explore the framework, practices, and implementation of total quality management (TQM) in the service industry.

Methodology/Approach: The present study focuses on the existing literature on several TQM dimensions and developed a framework that would allow the service industry to efficiently apply TQM, resulting in enhanced organizational performance.

Findings: The research findings suggest that the relevance and implementation of TQM practices have a strong linkage to organizational performance. Managers shall work for the accomplishments of TQM to achieve success in local and global competition. By implementing TQM practices effectively in the service industry, managers can see improvements in the organization's function. Therefore, managers shall accept the TQM approach to improve overall service quality and organizational performance.

Research Limitation/implication: The study is limited to secondary data collection and no primary research is carried out to verify the proposed framework.

Originality/Value of paper: The present study contributes to the literature on TQM by developing a framework for the service industry. This adds to the existing knowledge on TQM in the service industry and builds a foundation to carry out future research. The proposed TQM framework will empower the organizations for superior performance by evaluating the factors, defining rooms for improvement, and designing ways to achieve business excellence.

Category: General review

Keywords: total quality management; service quality; profitability; customer satisfaction; business sustainability

1 INTRODUCTION

Service Quality (SQ) implications are increasing in industry irrespective of the product or service industry. It is due to its relevance and is a significant factor in the customer's choice of service. Firms have begun to understand SQ's consumer experience and how well it can be connected to service elements to fulfil the expectations of consumers (Ansari, Farooqui and Gattoufi, 2018). This boosts business in the form of repeat buying, customer loyalty, customer retention and "positive word of mouth" (Ansari, 2020). According to Kumar and Sharma (2017b), in the competitive league, organizations would like to succeed in their improvement process; thus, to concentrate on making their product quality and service levels better than others to attract customers.

The quality management or Total Quality Management (TQM) movement has several leaders, publishing ground-breaking works that have contributed to this field. Leaders or researchers like Juran (2000) indicated that TQM leads to sustainability in long term and having strong economic performance. TQM delights internal and external customers by fulfilling and exceeding their expectations continuously. It involves everyone in the organization for gaining continuous improvement. TQM is management philosophies that empower every member of the organization, persuade, and promote each employee to take part, contribute, and proposes a proposition for the overall improvement of the system to achieve continuous improvement (Lleo et al., 2020; Garcia-Alcaraz et al., 2021). TQM has a definite effect on the success of those organizations enforcing their practices and principles (Hassan et al., 2012). It believes in the principle of cost reduction and prevention. According to Bigliardi and Galati (2014), benefits of implementing TQM listed in most works include improved customer satisfaction, enhanced quality, efficient delivery of products and services, cost minimization, and advanced performance.

In the last couple of years, TQM has been widely discussed in the literature, which is a management philosophy. Most of the studies have been investigated mainly in manufacturing sectors. However, researchers have paid serious attention to service sectors as well in evaluating TQM. According to Antony et al. (2002) and Manville et al. (2012) Implementation of TQM in a service organization differs from the implementation of TQM in a manufacturing company due to the intangibility of the service provided and the quality measurement in the service organization. To help with the effective TQM implementation in the service industry, it is critical to determine the critical success factors of TQM within the service sector, which is the main aim of the current study. Based on the findings, a framework is presented for effective TQM critical practices application in the service Industry. The rest of the paper is organized as follows, where Section 2 covers the extensive literature review on TQM and its different aspects to improve organizational performance. Methodology used in the study is discussed in Section 3, whereas Section 4 presented the framework of TQM in the service industry. Finally, the conclusion

and study implications are presented in section 5 including the limitations and the future scope of the study.

2 LITERATURE REVIEW

2.1 An Overview of TQM

The concept of quality management has been acknowledged since ancient times in Japan, especially since the Second World War, in the late 1930s. After that, several manufacturing firms have concentrated on improving quality and using tools that explicitly strive to quality control in these firms (Talib, Rahman and Qureshi, 2010; Demirbag et al., 2006). Moreover, both the United States and the United Kingdom have recognized the concept of quality management specifically in manufacturing industries. Consequently, in various worldwide standards such as the ISO 9000, quality management was widely acknowledged and the concept of quality management was widely accepted (Sachdeva, Bhardwaj and Sharma, 2007).

In the mid-1980s, Edwards Deming, Kaoru Ishikawa, and Joseph Juran (Hackman and Wageman, 1995) introduced key concepts for Total Quality Management (TQM). Although it is known that TQM is not a clear-cut term (Hackman and Wageman, 1995), TQM is generally understood to enhance the quality of products and services as an integrated organizational tool. As Deming (1986) introduced, "TQM uses a particular set of principles, practices, and techniques to expand business and profits by avoiding reworks, rejections, waste, customer complaints, and high costs." According to Goetsch and Davis (1995), TQM "is a business approach that aims to optimize an organization's competitiveness by continually improving the quality of its goods, services, employees, processes, and environments".

TQM is a philosophy of company-wide management to improve the quality of the products or services and the processes continually by concentrating on consumer expectations and needs to maximize firm's performance and overall customer satisfaction (Sadikoglu and Olcay, 2014). It consists of several tools and methods of quality, as well as different principles and beliefs shared by all employees within the same organization (Lleo et al., 2020; Garcia-Alcaraz et al., 2021; Gharakhani et al., 2013). According to Lakhal, Pasin and Limam (2006), TQM can be described as a strategy for generating and transferring more effective and superior services by achieving cooperation among members of the organization.

TQM has been defined as a management philosophy as well as a mindset that has enabled many businesses to progress towards achieving excellence in businesses (Magd and Karyamsetty, 2020). TQM also enables the firms to develop a participation culture, quality-mindedness, teamwork, trust, zeal for continual development, continual learning, innovation, creativity, and, ultimately, a

working culture that pays to the success and sustainability of a firm (Yusof and Aspinwall, 2000).

TQM also includes all team members of the company in the process of meeting consumer needs by employing problem-solving methods to increase goods and services quality of the organization. The key objective of the TQM concept is to achieve a holistic alignment between organizational personnel and their roles to achieve better development, improvement, and protection of the standard of goods and services to attain consumer satisfaction (Talib, 2013). TQM philosophy concentrates specifically on enhancing the business quality and manager satisfaction by maximizing employee participation in decision-making activities using quality enhancement teams and quality circle approaches (Yusuf, Gunasekaran and Dan, 2007). It is a consumer-driven management discipline that intends to meet and exceed consumer standards by delivering goods or services that are defect-free the first time, on time, all the time. Though the primary aim is to appease external customers, TQM admits that it would be challenging to fulfil the expectations of external customers' without fulfilling the need of the internal customer. It thus aims to reach or surpass the needs of both internal and external clients (Mersha, 1997).

TQM is to integrate all the efforts towards the improvement of overall quality. It strives for overall improvements in the quality of the products and services to meet customers' contentment, which could lead to their loyalty and organizational performance. According to Gharakhani et al. (2013), TQM has been generally identified as a management technique for various services industries, which ultimately aims to improve organizational performance. Since TQM philosophy discusses the overall improvement of work, employees' participation, customer involvement for overall quality improvement. TQM philosophy focuses specifically on maximizing customer satisfaction through employee participation in decision-making activities using quality enhancement teams and quality circle approaches (Yusuf, Gunasekaran and Dan, 2007). All the business sectors are facing challenges from local and global competition due to the TQM implementation globally. At each of the TQM practices, several principles have been identified through the literature review that are outlined in Figure 1, which indicates that all the principles are interconnected with one another and contribute to TQM when integrated.

As shown in Figure 1, the framework of principles represents a polycentric structure that begins with customer attention and then extends with leadership, people involvement, process approach, system management approach, proof-based decision making, and finishes with relationship management. In this coherent network structure, all the above principles are very necessary for management performance (both individually and jointly) and achieve full efficiency and effectiveness when operating together that means acting in a harmonious, coordinated, and synergetic way (Luburic, 2015; Perović and Krivokapić, 2007).

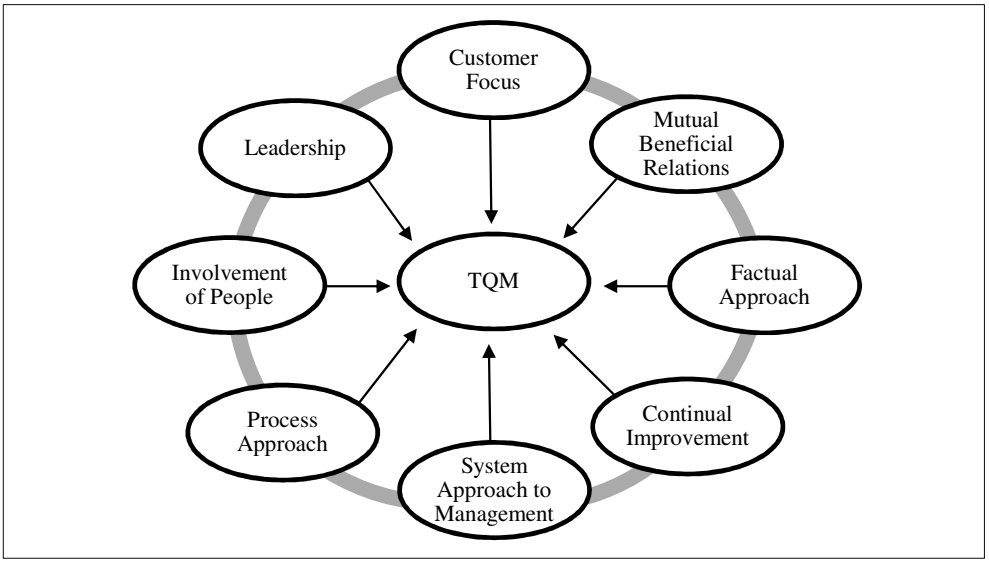

Figure 1 – Overview of the Eight Quality Management Principles

The concept of TQM is one of the modern management principles that has improved boost competitiveness among companies (Karamouz et al., 2020; Snyder, Eriksson and Raharjo, 2020). This has arisen from the degree of consumer knowledge that helps them to choose a high-quality product and service at a fair price. For all those reasons, most organizations' management encourages the adoption of a concept of TQM (Ho, 1994). As Reid and Sanders (2007) indicated: "TQM means collecting and exceeding customer expectations by involving a combined attempt on the part of each person in the firm." Demirbag et al. (2006) concluded that quality management is one of the extremely important aspects of any organization. There is a general agreement that TQM is a way to operate institutions to boost the overall effectiveness of the organizations. Kedar and Borikar (2016) says that "trying to describe TQM is like shooting a moving target". TQM has been described as a corporate culture driven by continuous improvement in improved customer satisfaction, with the active involvement of all personnel in the firm (Kumar and Sharma, 2017a). It highly focuses on business process management and customer satisfaction (Kumar et al., 2018). Doulatabadi and Yousof (2014) concluded that TQM Concepts focus on four elements as illustrated in Table 1.

Table 1 –TQM Concept (Doulatabadi and Yousof, 2015, In: Magd, 2015, p.41)

Concepts	*Total Quality Management*
Philosophy	"To combine people and quality techniques to achieve continuous improvement in the quality of the product and hence in all aspects of the operation."
Principles	"Continual improvement, customer-focused, supplier relationships, people, involvement, leadership, and process approaches."
Process	"Statistical Process Control (SPC), Plan, Do, Study, Act."
Performance	"Organization's continuous improvement, employee development, and customer satisfaction."

Three fundamental aspects are integrated into the TQM approach: involvement, commitment, and continuous improvement. Manufacturing and service appreciate the commitment from top management, continual development, customer service and satisfaction, teamwork, employees' training and development, customer's feedback as part and parcel of TQM success factors. According to Kumar, Garg and Garg (2011), communication within the company is of the least importance for TQM in both the service and manufacturing industries. It addresses the issues of customer loyalty, customer satisfaction, service quality, repurchase, and profitability. Therefore, the support of senior management is necessary. At the same time, employee encouragement and involvement are vital elements of the TQM program, since employees must buy-in the TQM concept (Lleo et al., 2020; Garcia-Alcaraz et al., 2021).

The quest for improvement in TQM is an endless process. Thus, newer, and higher targets are set as the earlier goals are achieved. The core of TQM is to constantly search for gradual improvements. The continuous search for change includes the full engagement and involvement of all the organization's stakeholders, including executives, staff, vendors, and customers. The buy-in by employees is especially important, without whose help the TQM initiative would be fruitless. Partnerships with suppliers must be forged, too. Collaboration among employees and departments is motivated at TQM through team effort, and quality management becomes the responsibility of all. In organizations with a well-established TQM culture, the role of the manager shifts from being an admin and regulator to that of mentor and benefactor (Mersha, 1997).

In any organization, whether its manufacturing or service, private or public, TQM's basic principles apply everywhere. If properly planned and implemented, TQM can benefit private companies to achieve sustainability in national and foreign markets and allow nations to accomplish their goals for economic growth. Given that the adoption of TQM entails a significant shift in organizational culture and structure, the method of its application should be tailored to fit a case and depends on an objective evaluation of the internal and external environment in which a firm function (Mersha, 1997).

2.2 TQM Gurus Approaches

Several quality gurus came with TQM philosophy such as Crosby (1979), Ishikawa (1985), Deming (1986), Feigenbaum (1991), and Juran and Gryna (1993) and they had a distinct perception of TQM. According to Hackman and Wageman (1995), TQM core ideas were pioneered in the mid-1980s by Deming (1986), Ishikawa (1985), and Juran (2000), although known as TQM, but are not a clear-cut term.

Deming approach (1986) to TQM was thru the formation of an organizational system, which could foster cooperation and learning that could lead to continuous improvement in service delivery. TQM is a company-wide management philosophy to continually improve the quality of products/services/processes by focusing on the needs and desires of the customers to increase organizational performance and overall customer satisfaction (Sadikoglu and Olcay, 2014). Deming also pleaded that, because leadership matters, top management should take the lead in reforming processes and systems, and he came up with 14 TQM principles.

On the other hand, Juran and Gryna (1993) approach was in the view of TQM to delight customers, empower employees, and articulated for greater revenues and lesser costs and they understood that the major quality issues are from the management/executive side instead of the workers' side. According to Kumar et al. (2017), emphasis on educating and raising knowledge of business activities and procedures takes workers to the organizations through leadership, development, customer-centered, teamwork, organizational sustainability, and improved decision-making capacity. Juran (2000) emphasizes quality circle and self-managing units, which can encourage the quality enhancement, bridging the communications gap between employees and management, and better harmonization among employees. According to Juran (2000), it is very crucial to recognize customer requirements, and understanding of future expectation to ensure the product meets customers' requirements.

Crosby (1979) identified principles and practices of quality management such as management participation, employee recognition, education, prevention, and failure costs for excellence or zero defects. Crosby stresses (1979) upon the management style, change the thinking, and accept mistakes and defects. He also suggested a 14-stage program that can guide companies in following quality improvement practices. According to Curkovic et al. (2000), there is a strong association among the implementation of quality management practices and the improvement of firm's performance.

Ishikawa (1985) pleaded for quality management should widen its scope beyond the product and service and appealed that the firm's success is completely reliant on considering quality development and continuous improvement as a never-ending process and supported that employee engagement and participation is significant to the fruitful accomplishment of TQM. According to Sadikoglu and Zehir (2010) influences of employees' performance ultimately benefits the

performance of the entire organization. Ishikawa (1985) believed that quality circle is important for achieving TQM and highlighted the significance of education, saying that quality management starts and culminates with it. Tools such as cause and effect diagram, pareto charts, histogram, check sheets, scatter diagram, and stratification chart have been associated with Ishikawa (1985).

Feigenbaum (1991) described TQM as an effective approach for integrating efforts to achieve customer satisfaction in terms of quality development, quality maintenance, and quality improvement. Four key steps were suggested by Feigenbaum (1991), such as setting quality standards; evaluating conformance with these standards; intervening when standards are not met; and aiming to strengthen those standards. There is a strong correlation between the adoption of quality management practices and the improvement of organizational performance, according to Gupta (2000).

The TQM methodologies of five quality management gurus were examined, and it became clear that each had its own individual approach. However, irrespective of their approaches, the principles and practices of all the gurus supported TQM understanding. It is believed that these principles may apply to any sector to improve performance and can be summarized as follows:

- It is management's responsibility to deliver leadership, encouragement, and empowerment;
- The company should have strategy and policy;
- Employee education and training to be given high priority;
- Employees to be rewarded for their efforts;
- Quality improvement process to be given high importance and
- Quality circle should be implemented across the industry.

2.3 TQM: An Organizational Performance and Sustainability

According to Juran Institute, TQM is the collection of management processes creating responsible top management, pleased clients, motivated staff, and superior quality products at low-cost. This directs to sustainability in the long run and strong economic performance (Juran, 2000). Organizations have started understanding in recent years that TQM is the way forward towards ensuring long-term sustainability and overall performance of companies (Mushtaq and Peng, 2020; Karamouz, Ahmadi Kahnali and Ghafournia, 2020). Organizations are required to devise and execute plans within a global context in a dynamic world (Magd and Karyamsetty, 2020; Zakuan et al., 2012). Nowadays, many companies use quality as a strategic tool. Enhanced quality contributes to improved productivity and profitability, which enhances the competitive market position of the company (Mersha, 1997). In the competitive league, organizations would like to succeed in their process of improvement; thus, to attract customers,

they emphasis on manufacturing and offering better quality products and service better than others (Kumar and Sharma, 2017b). Besides, Kumar et al. (2017), emphasized educating and raising knowledge of business activities and procedures, takes workers to the organizations through leadership, development, customer-centered, teamwork, organizational sustainability, and improved decision-making capacity.

TQM is widely adopted and successfully introduced for both small and large businesses, giving them the edge for global and local competition by providing high-quality products to meet customer needs (Karamouz, Ahmadi Kahnali and Ghafournia, 2020; Snyder, Eriksson and Raharjo, 2020). According to Quazi and Padibjo (1998), TQM's efforts in the U.S. and Japan underlined TQM's increasing importance and profitability effects. Lakhal, Pasin and Limam (2006) conclude that companies with current TQM systems significantly met investment return standards in the industry.

Interest in TQM practices has been significantly improved over the last two decades and is deemed a valuable area for many research scholars (Arumugam, Ooi and Fong, 2008; Yusof and Aspinwall, 1999). Gharakhani et al. (2013) indicated that TQM has been generally recognized as a management technique for various services industries, which ultimately aims to improve organizational performance. TQM is seen as a systematic combination of various models, practices, communication processes and people to meet each consumer requirements (Van Ho, 2011). In line with rising demands for high-quality goods and services, companies have recognized the value of implementing TQM practices to manufacturing processes to produce high-quality products and minimize costs. TQM is known as a strategy that considers consumers as the key concern, aimed specifically at providing high-quality products and services by constantly enhancing manufacturing processes (Magd and Karyamsetty, 2020).

Despite these qualities, corporate culture, policy, leadership, and structure often perform an important role in meeting the organization's TQM needs. Zu, Robbins and Fredendall (2010) clarified that it acknowledges an effective organizational culture for the positive adoption of TQM. The culture of a company is one of the crucial factors in the success or failure of a company (Zgodavova, Hudec and Palfy, 2017; Zu, Robbins and Fredendall, 2010). House et al. (2004) stressed the company's culture in its hard and soft elements, which has prompted a revolutionary change in TQM emphasis. The 'hard' factors concentrate on methods, strategies, and systems, while the attitudes and community, etc. seem to be more visible to 'soft' facets of TQM. It is also evident that the TQM implementation concerning relevant cultural aspects is the standard and efficacy for the firms to achieve better results and outputs. Effectiveness will enhance the value of decision-making and strategic planning. In the practice of improving quality and increasing product value to improve the profitability of companies, leaders play a crucial role (Kumar et al., 2018).

The measurement of success at all managerial approaches is considered an integral feature. The two key organizational performance indicators that have a direct impact on TQM activities are cost and quality. Brun (2011) and Sadikoglu and Zehir (2010) both consented that the application of numerous TQM practices like process management, training, customer management etc. influences the performance of employees that ultimately benefits the entire organization's performance. Gharakhani et al. (2013) also suggested that TQM substantially influences the organizational performance, especially its financial performance.

Implementing TQM has been an essential factor in enhancing the performance of an organization. The relationship among TQM and organizational performance has been studied by numerous scholars (Ali and Khatoon, 2016). These researches showed that there is a beneficial association among the successful application of TQM and the performance of an organization in which, if one company implements TQM practices effectively, its organizational performance will be significantly improved (Prajogo, Power and Sohal, 2004), its operating expenses will be reduced, and its productivity will be increased (Lam, 1995). Most past researches indicated that total TQM practices and approaches have been positively resulted to various key success areas such as performance and productivity, innovation performance, customer satisfaction, employees' satisfaction, quality performance, competitive edge, customer base, financial results, and overall performance of the firm (Sadikoglu and Olcay, 2014), as shown in Table 2.

Table 2 – Impact of TQM on Organizational Performance

	Performance Areas	*Source*
TQM practices impact on organizational performance	Operational performance	Sadikoglu and Zehir (2010); Tari and Claver (2008); Saravanan and Rao (2007); Demirbag et al. (2006);
	Inventory management performance	Sadikoglu and Zehir (2010);
	Employee performance	Al-Saffara and Obeidat (2020); Sadikoglu and Zehir (2010); Fuentes, Montes and Fernandez (2006); Mohrman et al. (1995);
	Innovation performance	Siregar et al. (2019); Honarpour, Jusoh and Nor (2018); Sadikoglu and Zehir (2010); Prajogo and Hong (2008); Santos-Vijande and Alvarez-Gonzalez (2007);
	Customer results	Sadikoglu and Zehir (2010); Fuentes, Montes and Fernandez (2006); Das et al. (2000); Choi and Eboch (1998); Mann and Kehoe (1994);
	Market and financial performance	Sadikoglu and Zehir (2010); Fuentes, Montes and Fernandez (2006); Agus and Sagir (2001); Escrig, Bou and Roca (2001); Easton and Jarrell (1998); Mann and Kehoe (1994);
	Aggregate firm performance	Sadikoglu and Zehir (2010); Sharma (2006); Kaynak (2003); Merino-Diaz de Cerio (2003); Brah, Tee and Rao (2002); Douglas and Judge (2001); Choi and Eboch (1998); Hendricks and Singhal (1996).

Sampaio, Saraiva and Guimaraes Rodrigues (2009) observed that most research attempting to connect the impact of quality management principles and practices on organizational performance concluded that a clear link exists between adopting quality management practices and enhancing organizational performance (Magd and Karyamsetty, 2020; Quazi and Jacobs, 2004; Tari and Sabater, 2004; Dick, Gallimore and Brown, 2002; Ozgur, Meek and Toker, 2002; Tari and Molina, 2002; Curkovic et al., 2000; Gupta, 2000; Romano, 2000; Terziovski and Samson, 1999; Adam et al., 1997; Mann and Kehoe, 1994; and Maani, 1989). Accordingly, empirical studies indicate that TQM has a positive effect on the success of those organizations enforcing their principles and practices (e.g., Hassan et al., 2012; Taddese and Osada, 2010; and Prajogo and Hong, 2008). Some of the validated benefits of implementing TQM listed in most works include better customer satisfaction, cost minimization, advanced performance, quality enhancement, and efficient delivery of goods and services (Bigliardi and Galati 2014; Prajogo and Hong 2008; Kumar and Boyle 2001; Kiella and Golhar 1997). Figure 2 demonstrates the consequence of implementing TQM on the organization's performance and business sustainability.

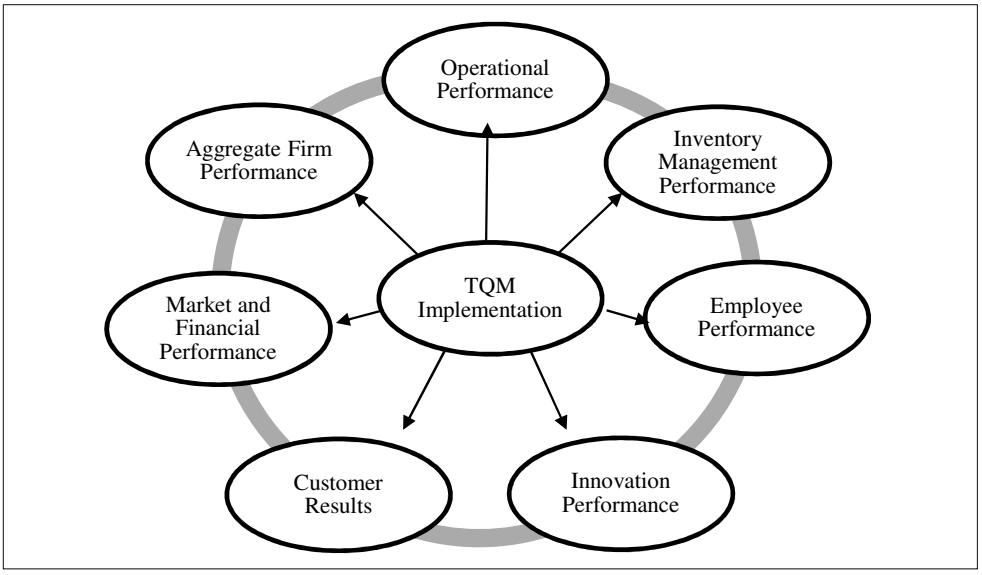

Figure 2 – TQM Implementation Impact on Organization's Performance and Business Sustainability

3 METHODOLOGY

The present study is focused on identifying the critical success factors and developing a framework for effective TQM critical practices implementation in the service industry. An extensive review of the literature was carried out using the available literature on TQM to highlight the importance of TQM and discuss

the factors related to TQM that enables the organizations to enhance the performance and achieve success in this competitive world.

The study is based on analyzing the available literature or the current body of knowledge to develop a framework. The literature review is carried out under different themes to create a theoretical base for the framework. The main papers on TQM were defined for the first phase, containing the keywords of "quality management", "TQM in manufacturing", "TQM in the service sector", "critical success factor for TQM", "TQM and organizational performance", and "TQM and organizational sustainability" in the academic databases including Scopus and Web of Science in particular. The main aim of the review was to compile studies in the field of quality management that addressed TQM success factors for improving organizational performance and sustainability, resulting in overall success. The factors that are highlighted in the framework were identified through the literature review and are very essential to TQM that enables the organization's performance and business sustainability. In this way, a final framework is presented that would act as a comprehensive guide for future researchers and business practices.

Secondary literature was gathered from various research papers, articles, and case studies in peer-reviewed journals; reports; industry white papers, and conference proceedings. The author referred to the journals related to quality management published by well-known publishers including Elsevier, Emerald, Wiley, Springer, Taylor & Francis, Sage, Inderscience, etc.

The authors have referred to various highly reputed international journals for this study. Some of them are The TQM Journal, Total Quality Management and Business Excellence, International Journal of Quality & Reliability Management, Quality Management Journal, Benchmarking: An International Journal, International Journal of Production Research, International Journal of Operations and Production Management, Journal of Operations Management, International Journal of Production Economics, Decision Sciences, Journal of Manufacturing Technology and Management, International Journal of Productivity and Performance Management, Academy of Management Journal, Industrial Management & Data Systems, Organizational Dynamics, and Management Science.

4 DISCUSSION AND FRAMEWORK

This section covers the discussion on TQM implementation in the service industry, the critical success factors of TQM in service industry. Finally, a framework for effective implementation of TQM in service industry is proposed.

4.1 TQM Implementation in the Service Industry

Quality Gurus such as Crosby (1979), Ishikawa (1985), Deming (1986), Feigenbaum (1991), and Juran and Gryna (1993) came with a different

perception of TQM, which could be key success factors for TQM. As per Hackman and Wageman (1995), TQM core ideas were pioneered in the mid-1980s by Juran (2000), Deming (1986), and Ishikawa (1985), which could be the best way to achieve total quality. Match and mix of these models can be done to get a blended solution for the service industry. It would depend on the respective industry, its size, regions, market competition, and so on.

To develop such a model for the service industry would have to identify and measure the critical success factors, such as market analysis, strengths and weaknesses, opportunity and threats, financial and non-financial issues that could be influencing the effective TQM implementation. The service sector shall determine to quantify its current quality level, maturity level, and what it would like to achieve in the short and long term (Brint and Fry, 2019). Accordingly, service sectors work-out based on their vision, mission, goals, and strategic planning. According to Van Ho (2011), TQM is seen as a systematic combination of various models, practices, people, and communication processes to meet all consumer requirements. It also needs to identify and evaluate basic needed quality, barriers for improvement, and how to overcome such a barrier for the achievement of TQM. The application of TQM in the service industry results in a higher level of service and greater customer satisfaction (Pakurar et al., 2019).

Based on various quality models as proposed by Quality gurus, service organization shall select, manage, and adapt to the model that fits best. TQM can be described as a strategy for generating and transmitting more effective and greater services by attaining teamwork among the employees of the firm (Lakhal, Pasin and Limam, 2006). To gain eventual success service organizations should attain to achieve their goals and objective with high priority. The excellence of achieving TQM should be based on the service processes and should be easily implemented. The critical factors for consideration are company size, area of business, location, market competition, and their strengths and weaknesses. For both small and large companies, to have an edge over the competitors on the global and local markets, delivering high-quality services is must to meet consumer needs (James and James, 2020; Brint and Fry, 2019 and Zgodavova, Hudec and Palfy, 2017).

The service sector is one of the world's most significant industries, particularly in developing nations (Schneider et al., 2003). In non-manufacturing organizations, TQM has an important role to play; competing more effectively has become an overwhelming concern in the interdependent global economy for virtually all organizations today (Mohanty and Behera, 1996). In the earlier days of TQM's evolution, the sole attention was to apply all of the research and principles in the manufacturing industry. There was not much definition of the quality factors for the service sector at that time. As the competition increased demand for quality of service, then the need for TQM implementation in the service sector was realized (Juneja, Ahmad and Kumar, 2011). At that time, it was the biggest question: "Will TQM concepts apply to service industries?". Corporations like

American Express eventually started conceptualizing and implementing TQM to the service industry in the late 1980s (Kumar, Garg and Garg, 2011).

The American Marketing Association defines services as activities, advantages or satisfactions that are presented for sale or in relation with the sale of goods. "Services are economic activities offered by one party to another: often time-based, performance leads to desired results on receipts, objects, or other assertions for which the buyer is responsible. Service customers expect value from access to goods, labour, professional skills, facilities, networks, and systems, in return for money, time, and effort; but they typically do not take ownership of any of the physical elements involved" (Lovelock, 2007). Service organizations provide a broad range of facilities, such as public utilities; public information offices; hospitals; educational institutions; police and fire departments; travel and tourism agencies; banks and insurance firms; restaurants; hotels; and transport companies. These corporations often communicate directly with enormous numbers of clients. These customers must identify and resolve the various, varying needs and contrasting priorities. As society becomes educationally advanced and more progressive, the demands of society for service quality are increasing (Ansari, 2020; Mohanty and Behera, 1996).

The competition, as well as the increase in the share of the service sector, led to a need for TQM practice in service industries (Talib and Rahman, 2010). And today we are experiencing a significant amount of service firms using strategic steps to introduce TQM (Mohanty and Behera, 1996). Effectively implementing TQM in service organizations includes an appreciation of the specific features of service operations; customer's and service provider's role; and implementation of suitable quality assurance principles and techniques. It is unsafe to accept that the methodology used within a manufacturing organization to implement TQM can be directly modelled in the service organizations (Mohanty and Behera, 1996). The initiation and TQM implementation into a service sector is a crucial task according to the authors. It needs a detailed analysis of consumer prospects, analysis of the present system, quality standards, procedure and activities, development of measurement and control systems, and integration of this structure into the business.

Several of the main points outlined by Mohanty and Behera (1996) in terms of quality service are as follows:

- Quality of service is not interchangeable with customer service, while customer relationships and customer service are component of the service quality;
- Manufacturing centered models and techniques for managing quality can be more complicated than assistance unless a good knowledge of the specific nature of the service industry is used to re-emphasize the model and choose a suitable collection or series of techniques;

- Organizational product-positioned culture requires to be shifted to a customer-positioned culture;
- Noteworthy changes can arise if the "Quality Message" is used effectively in education and training.

Mefford (1993) suggested a "total service quality" strategy for better quality and enhancement of service sector companies. Key aspects of this approach include a conceptual foundation, organizational engagement, empowerment of workers, process alignment, emphasis on continual improvement, and feedback loops.

Lakhe and Mohanty (1994) outlined a quality management application framework for enhancing the inner quality of service operations as (a) determining the field of quality management focus (b) defining the service process or operation (c) evaluating the existing system/framework (d) developing an "excellence model", (e) identifying the crucial improvement areas (f) developing process control systems (g) integrating process control in management control (h) development of a quality improvement process.

4.1.1 Steps for Implementing TQM in a Service Industry

The following steps are outlined in Juneja, Ahmad and Kumar (2011) and Mohanty and Behera (1996) for the implementation of TQM in a service sector:

- *Step 1. Develop a strategy for service quality:* Accomplishing complete quality of service needs a well-defined goal, flexibility, and discipline. Top management must start with the initiative to create, spread, and execute a quality improvement program. The Chief Executive needs to ensure a quality presence that is strong, highly evident, and widespread. His/her ongoing participation can be conveyed through different means, like encouragement, inspiration, guidance, and direct intervention;
- *Step 2. Analyze the service process and define the quality measures:* The mechanism by which service functions work must be well established and its quality dimensions should be defined for successful enforcement and review. In a service system, the quality dimensions are defined as cost dimension, time dimension, psychological dimension, and error dimension. Organizations must review their current policies, documentation, and monitoring processes and develop new effective measures that require input from customer's feedback while determining quality measures;
- *Step 3. Build process control system:* The establishment of process controls is important for constant management of the service process. To this end, reviewing the current process is important to define core performance areas, gather data, and establish a trial management system. The emphasis must be on recognizing what needs to be assessed and tracked to provide consumer satisfaction;

- *Step 4. Investigate the process to find improvement opportunities:* This phase aims to determine internal process issues that affect customer service and cost and examine the process improvement opportunities;
- *Step 5. Improve process quality:* The participation phase aims to reach a new level of process performance and sustain that level. It includes frequent analysis with all staff regarding the quality enhancement prospects and success in quality management. Lastly, it can be said that the service sector cannot survive without the appropriate quality of service and the quality of service can only be accomplished by applying TQM's principles in the service sector (Fatemi, Wei and Moayeryfard, 2016; Zakuan et al., 2012; Juneja, Ahmad and Kumar, 2011).

4.2 Comparative Analysis of TQM Implementation in the Service and Manufacturing Industry

Firstly, the authors have reviewed the practices/critical success factors of implementation of TQM based on quality awards (see Figure 3) in the reflection of the belief that these critical success factors are applicable across all the sectors and specifically to manufacturing. It is claimed that the critical success factors may differ since the intangibility of the service provided and the quality measurement in the service organization (Manville et al. 2012; Antony et al. 2002). Quality managers in manufacturing organizations can quantify the product's quality or the supplier's quality, but in a service organization, the quality of the services is very hard to measure (Talib, 2013). Juneja, Ahmad and Kumar (2011) stated that TQM practices in service organizations are not the same as manufacturing organizations. They are distinct in operation, process, customer relationship, and product qualities. The manufacturing industry focuses on the processes and quality of the goods, while the service industry pays further emphasis on customer support and acceptance (Sureshchandar, Rajendran and Anantharaman, 2001).

By looking closely at figure 3 in identifying the most common critical factors for effective TQM implementation identified by the quality awards are "Leadership; Strategy and Policy Planning; Information and Analysis; People Management; Process Management; Customer Management Satisfaction; Business Results; Performance and Management of Suppliers/Partners; Impact on Society; Resources Management".

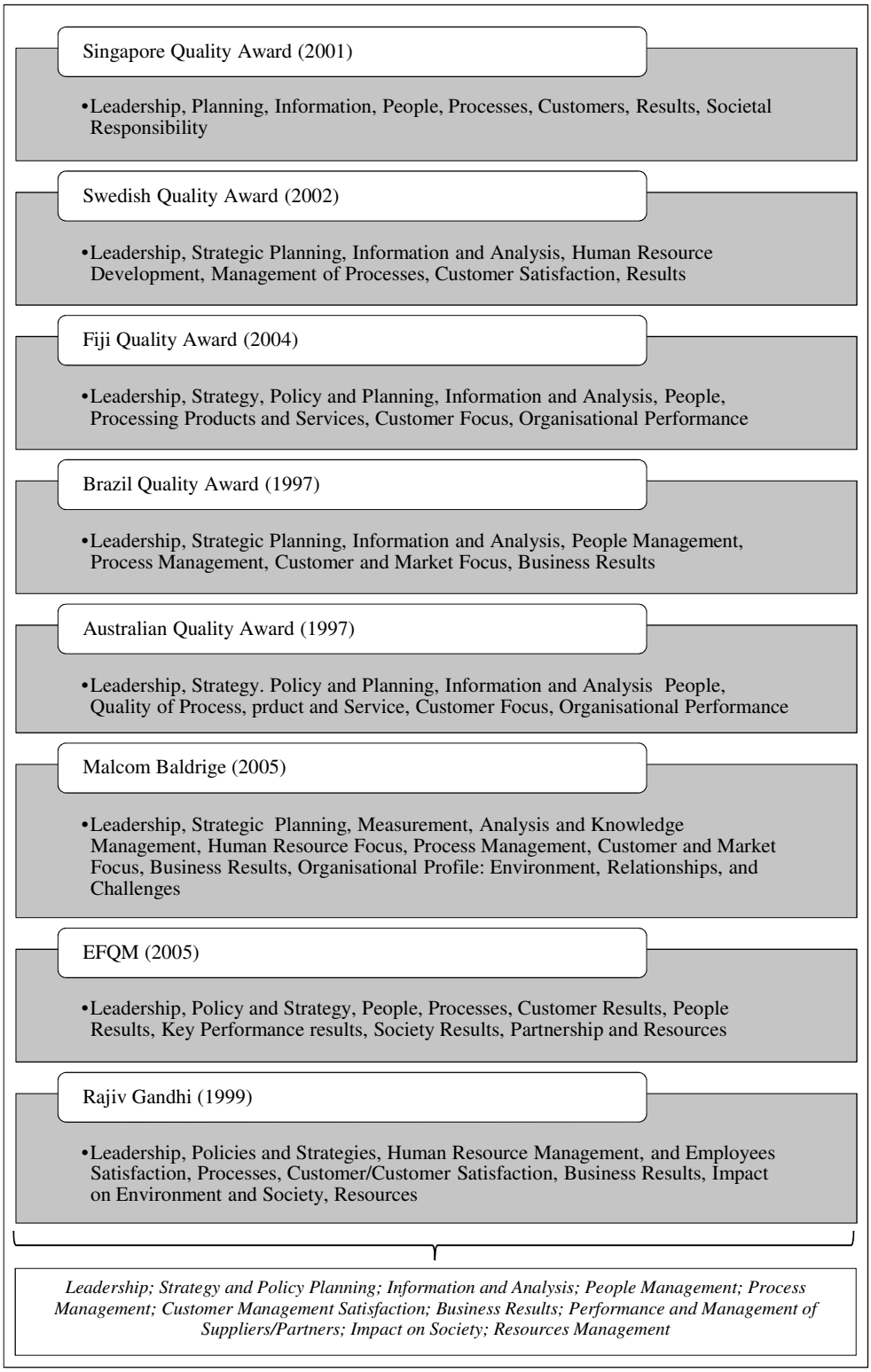

Figure 3 – Critical Success Factors Based on Quality Awards (Magd, 2015)

The Malcolm Baldrige National Quality Award (MBNQA) from the United States, first given in 1989, and the European Foundation for Quality Management (EFQM) Excellence Award, first given in 1992, have been widely acknowledged as the most influential business excellence model (Carvalho et al., 2019; Bandyopadhyay and Leonard, 2016; Zgodavova, Hudec and Palfy, 2017; Talwar, 2011).

The latest version of MBQNA's Baldrige Excellence Framework (2019-2020) includes the world-renowned criteria for performance excellence, core values and concepts, and guidelines for evaluating organizational processes and results for service organization specially business/nonprofit, healthcare, and education industries. The model includes seven critical aspects for performance excellence that are leadership, strategy, customers, knowledge management, workforce, operations, and results (ASQ, 2019).

Similarly, the EFQM model is also periodically updated to respond to the global and business environment dynamics and trends. The latest version of this model is EFQM 2020, which includes total of seven criteria and the RADAR (Result, Approach, Deploy, Assess, and Refine) assessment tool, and encompasses three separate dimensions: direction (why), execution (how), and results (what) (Fonseca, Amaral and Oliveira, 2021; Nenadal, 2020). The seven factors for performance in the updated model are purpose, vision & strategy; organisational culture & leadership; engaging stakeholders; creating sustainable value; driving performance & transformation; stakeholder perceptions; strategic & operational performance. The EFQM 2020 model is based on the Sustainable Development Goals (SDGs) of the United Nations and European business ethical standards (Fonseca, Amaral and Oliveira, 2021).

In addition, TQM common critical success factors based on twenty six empirical research as highlighted in the study of Magd (2015) are "Top management commitment & Leadership; strategic planning; customer focus and satisfaction; quality culture, quality information and performance measurement; benchmarking; human resource management & development; training; employee empowerment and involvement; employee satisfaction; process management; resource management; business results; product and service design; supplier management; continuous improvement; and communication".

Based on the available literature, top management & leadership commitment, customer satisfaction, human resource empowerment and training, teamwork, innovation and continuous improvement, information analysis & management, effective communication, process management, employee involvement & recognition, quality systems, benchmarking, and strategic quality planning are the main success factor for TQM implementation in service industry. Table 3 presents the key success factors in the service industry for TQM implementation. These factors are discovered by the authors from the past studies.

Table 3 – Key Success Factors for TQM Implementation in the Service Industry

Success Factors	*Source*
Leadership & Top Management Commitment	Hussain (2020); Fatemi, Wei and Moayeryfard (2016); Moghadam et al. (2013); Kumar, Garg and Garg (2011); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Sit et al. (2009); Al-Marri et al. (2007); Brah, Tee and Rao (2002); Woon (2000);
Customer Focus & Satisfaction	Fatemi, Wei and Moayeryfard (2016); Moghadam et al. (2013); Talib, Rahman and Qureshi (2012); Brun (2011); Kumar, Garg and Garg (2011); Yee-Loong Chong (2011); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Sit et al. (2009); Al-Marri et al. (2007); Prajogo and McDermott (2005); Brah, Tee and Rao (2002); Woon (2000);
Human Resource Training and Empowerment	Hussain (2020); Fatemi, Wei and Moayeryfar (2016); Moghadam et al. (2013); Talib, Rahman and Qureshi (2012); Brun (2011); Kumar, Garg and Garg (2011); Yee-Loong Chong (2011); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Sit et al. (2009); Ueno (2008); Al-Marri et al. (2007); Prajogo and McDermott (2005); Brah, Tee and Rao (2002); Woon (2000);
Employee Involvement & Recognition	Al-Saffara and Obeidat (2020); Fatemi, Wei and Moayeryfard (2016); Yee-Loong Chong (2011); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Sit et al. (2009); Ueno (2008); Al-Marri et al. (2007); Prajogo and McDermott (2005);
Information Analysis & Management	Moghadam et al. (2013); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Al-Marri et al. (2007); Prajogo and McDermott (2005); Brah, Tee and Rao (2002);
Process Management	Hussain (2020); Moghadam et al. (2013); Brun (2011); Fotopoulos and Psomas (2009); Sit et al. (2009); Al-Marri et al. (2007); Woon (2000);
Quality Systems	Fatemi, Wei and Moayeryfard (2016); Talib, Rahman and Qureshi (2013); Al-Marri et al. (2007); Woon (2000);
Teamwork	Talib, Rahman and Qureshi (2013); Brun (2011); Kumar, Garg and Garg (2011); Ueno (2008);
Benchmarking	Talib, Rahman and Qureshi (2013); Ali Noor, Mahat and Zairi (2010);
Continuous Improvement & Innovation	Hussain (2020); Siregar et al. (2019); Honarpour, Jusoh and Nor (2017); Misra (2014); Talib Rahman and Qureshi (2012); Kumar, Garg and Garg (2011); Ali Noor, Mahat and Zairi (2010); Fotopoulos and Psomas (2009); Al-Marri et al. (2007);
Effective Communication	Brun (2011); Kumar, Garg and Garg (2011); Ueno (2008); Al-Marri et al. (2007); Brah, Tee and Rao (2002);
Strategic Quality Planning	Fatemi, Wei and Moayeryfard (2016); Fotopoulos and Psomas (2009); Al-Marri et al. (2007); Woon (2000).

Kumar, Garg and Garg (2011) observed that both sectors (manufacturing and service) appreciate the commitment from top management, continual development, customer service and satisfaction, teamwork, training of employees, and customer's feedback as to success factors of TQM. But, when it comes to the TQM application in the manufacturing industry, customer satisfaction, continuous improvement, and teamwork are the most important factors for TQM. Whereas in the service organization the most critical factors for TQM are customer satisfaction, teamwork, and continuous improvement. The

study also revealed that communication within the company is of the least importance for TQM in both the service and manufacturing industries. Nevertheless, the analysis of the literature found that communication and information sharing are very necessary for successful and efficient operations within the entire organization. Better communication within and outside the organization may reduce both internal and external customer-related misunderstandings and uncertainty about their requirements. Top management is accountable for communicating and explaining the goals and policies related to quality to their employees. Besides, the involvement of top management and leadership in the quality management process can inspire personnel to perform a dynamic part in quality-related activities Kumar, Garg and Garg (2011).

It can be inferred that the crucial success factors of TQM implementation in service organizations are completely distinct from the success factors in the implementation of TQM among industrial organizations. The most significant success factors for implementation of TQM in a service organization are leadership or top management commitment, employee participation, quality culture, employee training and development, and customer satisfaction.

4.3 Framework for Effective TQM in the Service Industry

This section discusses the framework for TQM in the service industry. TQM becomes key in today's world where all the companies are trying to satisfy the customers and maximizing profits. In this competitive world, every company is highly emphasized on minimizing their cost and providing better services to the customers. Therefore, to improve business performance especially in the service industry, the focus must be on TQM application as it is one of the crucial factors that play a major role in enhancing organizational success. Considering this, a TQM framework is proposed that will enhance the overall business performance of the service industry.

The preliminary conceptual framework of TQM was developed and accomplished based on concepts and key issues recognized through the review of literature and researchers' knowledge and understanding. The framework was developed based on TQM understanding and by forming a baseline for TQM implementation in the service industry. It was observed throughout literature that the key factors for TQM deployment are top management commitment, leadership, policy and strategy, and strategic planning, which would emphasis on process management, customer satisfaction, and continuous improvement.

The framework as shown in Figure 4 illustrates that the factors that are important to implement TQM in the organizations are leadership & top management commitment; continuous improvement; supplier management; business results; product and service design; strategic planning; customer focus and satisfaction; quality information and performance measurement; process management; employee satisfaction; benchmarking; resource management; employee

empowerment and involvement; training; human resource management & development; and communication.

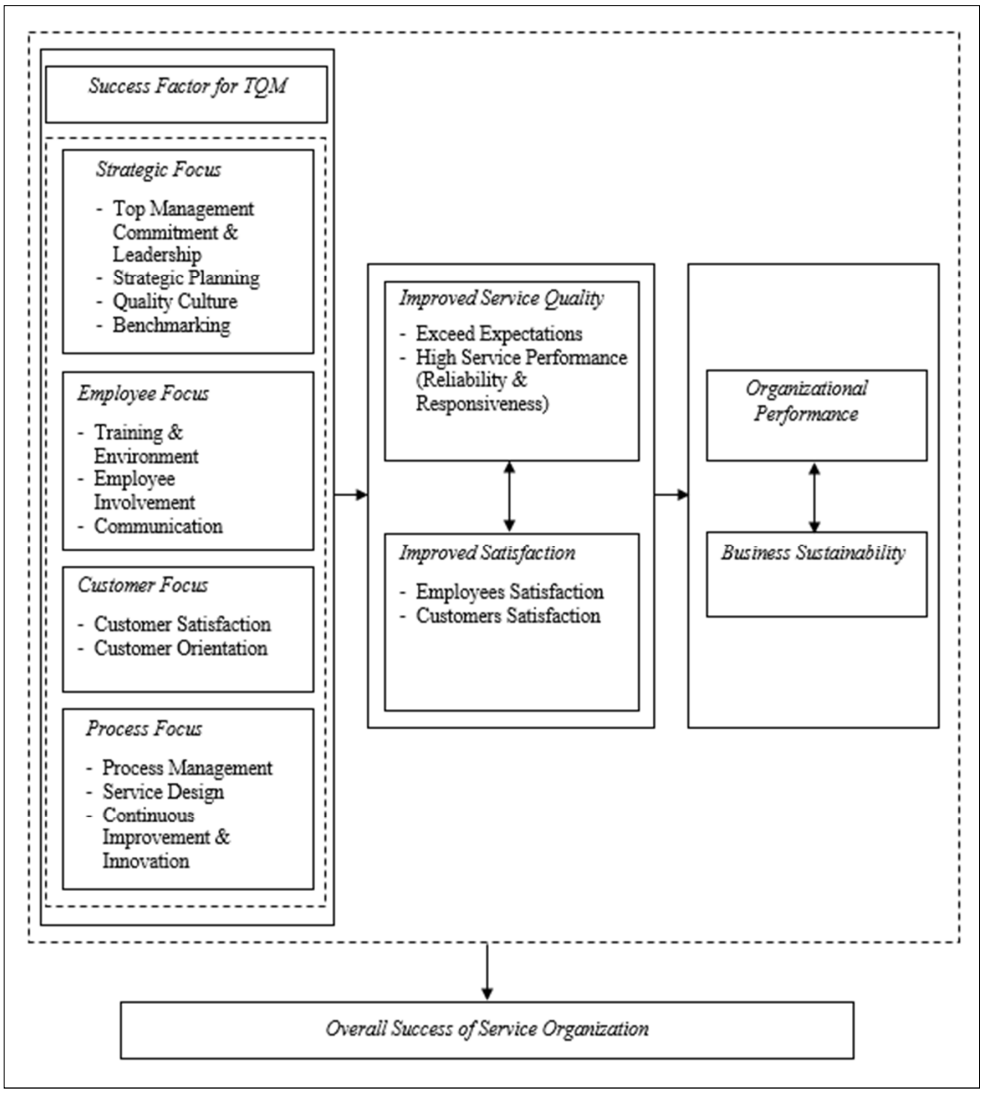

Figure 4 – Framework for Effective TQM in the Service Industry

Considering all these mentioned factors for implementing TQM will successfully lead to improved service quality and enhanced employee and customer satisfaction. Enhanced quality contributes to improved productivity and profitability, which enhances the competitive market position of the company. So, if the service quality will improve and the satisfaction level of employees, as well as customers, increases it will further lead to organizational improved performance and business sustainability. Further, this all will eventually lead to the overall success of the service organizations.

According to Kumar and Boyle (2001), the benefits of implementing TQM include improved customer satisfaction, enhancement in quality, efficient delivery of products and services, cost minimization, and advanced performance. Besides, the potential benefits can only be obtained by its effective implementation of TQM. As service system provides services directly to the customers through multiple contacts and each of these connections offers a prospect to provide excellent service through multiple transactions.

The system must be receptive and dependable enough to satisfy customer demand by making the services available on time, which is often considered as a key component of quality. The factors govern customer satisfaction that includes attributes such as speed, comfort, cleanliness, courtesy, and helpfulness of customer representatives. These factors offer mainly depend on customer expectations of service and each customer can have a different expectation. TQM means fulfilling and surpassing customer expectations by including a combined attempt on the part of each person in the firm (Reid and Sanders, 2007). At the same time, it is expected that employees are likely to avoid TQM implementation for bringing desired change. Therefore, employee involvement from the initial stage is mandatory to bring TQM related change in the organization.

Several studies in the past such as Brun (2011) and Sadikoglu and Zehir (2010) consented that the application of numerous TQM practices such as training, customer management, process management etc. influences the performance of employees, which then ultimately benefits the performance of the entire organization. Kumar et al. (2018) and Santos et al. (2015) also highlighted the crucial role of leaders in the process of quality enhancement and increasing product or service value to improve the organizations' profitability. The past studies also showed that there is a beneficial association between the successful implementation of TQM and organizational performance. Gharakhani et al. (2013) also suggested that TQM substantially influences the performance of an organization, specifically its financial performance.

5 CONCLUSION

In today's dynamic world, it is critical for businesses to focus on quality in their operations in order to meet the minimum requirements of customers on the one hand, while minimizing costs and maximizing profits on the other. By enhancing the quality of the services, customer satisfaction can be achieved that helps an organization to enhance profitability and business sustainability. Quality is not only important in the manufacturing sector but also in the service sector where customers are not attached to any tangible product. To sustain in this competitive and dynamic world, TQM is the only key for organizations to achieve overall success. Considering this growing concern in the service industry, the current study discusses the TQM practices and their critical success factors, followed by a proposed framework to achieve business excellence in the service industry. High commitment and engagement of the top management are one of the critical

requisites for implementing TQM in the service industry. The service industries are becoming more and more involved in adopting and implementing TQM for improving overall service quality, achieving desired results based on customer satisfaction, customer loyalty through the improvement of service delivery system, and finally gaining improved financial performance. It can be achieved by being competitive, effective, and becoming customers' choice of the service provider.

Research finding suggests that several factors are responsible for the success of TQM, such as employee motivation since employees are the major factors in the service delivery system. Employees must be trained and retrained for improved human capital. Qualified and competent employees will proactively contribute toward the implementation of TQM. It was also observed, and researchers suggested closely monitoring customer satisfaction, customer loyalty, which can be gauged through a frequent and continuous feedback system. Therefore, customer relationship management shall be given high priority for the successful implementation and achievement of TQM. Also, the commitment from executives is equally important for success as the implementation of TQM without the top management's support may fail the purpose of applying TQM in the service industry. In the context of the foregoing, it is to summarize that TQM is essential for service sectors and for obtaining precise results.

The present study contributes to the literature on TQM by developing a framework for the service industry. An extensive literature review was carried out to explore the various dimensions of TQM and detailed analysis was performed to showcase how it can be effectively implemented in the service industry. This adds to the existing knowledge on TQM in the service industry and build a foundation to carry out future research. The proposed TQM framework will empower the organizations for superior performance by evaluating the factors, defining rooms for improvement, and designing ways to achieve business excellence. The present study will also be highly useful for academicians and researchers who are working in the field of TQM in the service industry. The proposed framework would help them to understand every dimension for TQM implementation, allowing practitioners to implement various approaches in the service organization. It also provides insights on how managers can plan and adopt different approaches in their service processes to achieve better performance.

The developed framework will also enable the service organizations to implement TQM effectively in their organization to achieve high results and achieve overall success. This framework would also act as a comprehensive guide for future studies and business practices.

5.1 Limitations and Future Scope of the Study

The study is limited to secondary data collection and no primary research is carried out to verify the proposed framework, thus, this study offers several

future avenues for research. Future studies may be conducted empirically to verify the critical success factors for the service sector. A model can be developed for the service industry using this study and framework as a base. Also, the factors can be explored in an industry where goods and services are delivered simultaneously to customers and the final users.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.