



THE RELATIONSHIP BETWEEN TOTAL QUALITY MANAGEMENT AND SERVICE QUALITY IN DEPARTMENT OF MUNICIPAL AFFAIRS AND TRANSPORT OF UAE

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Abstract:

Since 1980, Total Quality Management (TQM) has emerged as a management strategy for providing customers with services that match their needs. In the UAE, the department of municipal affairs and transport will introduce quality measuring tools. TQM establishes quality as the guiding force behind leadership, planning, and design, necessitating the assistance of the eight essential aspects. Thus, TQM would include leaders and managers who have earned quality excellence awards, shown superior performance, delivered superior service, and earned public confidence. In public administration, quality improvement and assessment have resulted in the development and implementation of strategic models. Total quality management originated in the manufacturing industry. TQM and excellence awards are critical in the UAE economy due to the demand for high-quality public services. This is unsurprising, given that service organisations continue to face harsh realities equal to those faced by industrial organisations. This is the fundamental rationale for using service quality models. The phases of service quality management may help improve the efficiency and satisfaction of service delivery while also building a strategic framework for technology integration and innovation. The Department of Municipal Affairs and Transportation is obligated to provide value-added services to its customers and must demonstrate a strong commitment to quality service in order to achieve economic success.

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Keywords: Total Quality Management (TQM), Service Quality, Department of Municipal Affairs and Transport Quality

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1. Introduction

TQM efforts typically draw heavily attention from the mid of last century because of its developed principles and techniques of quality control. This concept has taken wide attention during the late 1980s and early 1990s before being overshadowed by ISO 9000 (Deming, 1986). TQM has proved to be efficient and effective management in all areas of an organization, in respect to its processes, products, employees, and for the satisfaction of relevant customers and shareholders (Fawzia, 2010). Quality management has been brought to Department of Municipal Affairs and Transport as an effort to enhance the quality of life in communities by improving the quality and performance (Evans and Lendsay, 2005).

Customer's expectation of a particular service quality is determined by factors such as recommendations, personal needs and past experiences (Reyaz, 2012; Noura et al., 2014). The expected service and the perceived service sometimes may not be equal, thus leaving a gap. The relationship between service quality and customer satisfaction has received considerable attention in academic literature. The results of most research studies have indicated that the service quality and customer satisfaction are indeed independent but are closely related that and a rise in one is likely to result in an increase in another construct (Shanka, 2012; Uysal, and Mehmet, 2013; Azam and Moha Asri, 2015; Khadijah, 2016; Tham et al., 2017; Udriyah et al., 2019).

2. Service Quality

A business with high service quality will meet or exceed customer expectations whilst remaining economically competitive (Peter and Kundenbindung, 2008). Evidence from empirical studies suggests that improved service quality increases profitability and long-term economic competitiveness. Improvements to service quality may achieved by improving operational processes; identifying problems quickly and systematically; establishing valid and reliable service performance measures and measuring customer satisfaction and other performance outcomes (Parasuraman, 2005; Haque et al., 2014; Rachmawati et al., 2019; Tarofder et al., 2019).

There are many theories of service quality, but the most familiar one in literature is GAP model which was developed in 1985, highlights the main requirements for delivering high service quality. It identifies five 'gaps' that cause unsuccessful delivery (Azam et al., 2014; Haur et al., 2017; Tarofder et al., 2017; Katukurunda et al., 2019). Customers generally have a tendency to compare the service they 'experience' with the service they 'expect'. If the experience does not match the expectation, there arises a gap. Ten determinants that may influence the appearance of a gap were described by Parasuraman, Zeithaml and Berry (1988) in the SERVQUAL model: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer and tangibles.

Measuring service quality may involve both subjective and objective processes. In both cases, it is often some aspect of customer satisfaction which is being assessed. However, customer satisfaction is an indirect measure of service quality (Parasuraman, 2005).

The ISO 9000 series are based on seven quality management principles in service sector (ISO, International Organization for Standardization, 2017):

Principle 1 – Customer focus

Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.

Principle 2 – Leadership

Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.

Principle 3 – Engagement of people

People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.

Principle 4 – Process approach

A desired result is achieved more efficiently when activities and related resources are managed as a process.

Principle 5 – Improvement

Improvement of the organization's overall performance should be a permanent objective of the organization.

Principle 6 – Evidence-based decision making

Effective decisions are based on the analysis of data and information.

Principle 7 – Relationship management

An organization and its external providers (suppliers, contractors, service providers) are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

It is evident that an improvement in service design and delivery helps achieve higher levels of service quality. For example, in service design, changes can be brought about in the design of service products and facilities. On the other hand, in service delivery, changes can be brought about in the service delivery processes, the environment in which the service delivery takes place and improvements in the interaction processes between customers and service providers.

2.1 The Key Concepts of TQM

There is no widespread agreement as to what TQM is and what actions it requires of organizations, A review of the original United States Navy effort gives a rough understanding of what is involved in TQM. The key concepts in the TQM effort undertaken by the Navy in the 1980s include:

- Quality is defined by customers' requirements;

- Top management has direct responsibility for quality improvement;
- Increased quality comes from systematic analysis and improvement of work processes;
- Quality improvement is a continuous effort and conducted throughout the organization;

TQM is a management philosophy, a paradigm, a continuous improvement approach to doing business through a new management model. The TQM philosophy evolved from the continuous improvement philosophy with a focus on *quality* as the main dimension of business. Under TQM, emphasizing the quality of the product or service predominates. TQM expands beyond statistical process control to embrace a wider scope of management activities of how we manage people and organizations by focusing on the entire process, not just simple measurements.

TQM is a comprehensive management system which:

1. Focuses on meeting owners'/customers' needs by providing quality services at a cost that provides value to the owners/customers
2. Is driven by the quest for continuous improvement in all operations
3. Recognizes that everyone in the organization has owners/customers who are either internal or external
4. Views an organization as an internal system with a common aim rather than as individual departments acting to maximize their own performances

The improvement system must not only be applied continuously, but consistently, throughout the organization. This requires a disciplined continuous improvement system based on trust, with everyone in the organization striving to improve the system (Crosby, 1979).

Lau & Idris (2001) investigated the critical soft factors needed to ensure the success of Consequently, the philosophy and key elements form the reference points for most discussions on TQM today (Massey, 1992; Jayasuriya and Azam, 2017; Dewi et al., 2019; Nguyen et al., 2019). However, when one talks about quality today, ISO 9000 will always be part of the conversation. It is a set of standards established for the management of quality assurance. Unlike product standards, these standards are for a quality management system. Each country, which has adopted the standard, has its own set of standards technically equivalent to the ISO series.

2.2 The Quality of Department of Municipal Affairs and Transport

Department of Municipal Affairs and Transport has a leadership and effective role in Department of Municipal Affairs and Transport. Department of Municipal Affairs and Transport plays a key and active role in developing the society (Fawzia, 2010; Khadijah et al., 2016). For many centuries, industries had played critical role in educating the political leaders, potential professionals, religious and social scholars and businessmen who provide services to the society in order to enrich its values and enhance its resources (Evans and Lindsay, 2005; Al-Atiqi, 2009).

2.3 Pearson Correlation Analysis

In correlation analysis, the study estimates a sample correlation coefficient (r), more specifically the Pearson Product Moment correlation coefficient. Correlation matrix is important because it is used to test the degree of association between the variables predefined in the theoretical framework.

This study used a quantitative method based on Pearson correlation coefficient to measure the association between decision making process, customer focus, leadership, Department of Municipal Affairs and Transport process approach, continuous improvement, relationships management, and engagement of people and service of quality of Department of Municipal Affairs and Transport. Data was collected using questionnaires and analyzed using SPSS software. The number of valid questionnaires equal 392.

The correlation is not a direction relationship or causal relationship like regression. It is a statistical measure (expressed as a number) that describes the size and type (positive/negative) of a relationship between two or more variables. A correlation between variables, however, does not automatically mean that the change in one variable is the cause of the change in the values of the other variable. Therefore, correlation analysis will not be used to predict the changes in the Department of Municipal Affairs and Transport Quality.

The highest level of correlation is found between relationship management and service quality of Department of Municipal Affairs and Transport. A correlation of $r = 0.580$ ($q < .0005$, $q = 0.000$) suggests a strong positive correlation between these two variables and show the importance of this factors on Department of Municipal Affairs and Transport quality.

As shown in Table 1, the lowest level of correlation is found between leadership and service quality of Department of Municipal Affairs and Transport = 0.379. But the magnitude of this correlation is still acceptable and shows a satisfactory degree of association.

Table 1: Correlation Table

	Correlation coefficient
Decision Making and	$r = 0.570$, statistically significant, positive and moderate Pearson correlation between
Customer Focus and	$r = 0.409$, statistically significant, positive and moderate
Leadership and	$r = 0.379$, statistically significant, positive and moderate
Department of Municipal Affairs and Transport Process and	$r = 0.427$, statistically significant, positive and moderate
Continuous Improvement and	$r = 0.472$, statistically significant, positive and moderate
Relationships Management and	$r = 0.580$, statistically significant, positive and moderate
Engagement People and	$r = 0.519$, statistically significant, positive and moderate

As shown in the Table 1, there is a moderate correlation between ISO factors and service quality of Department of Municipal Affairs and Transport. These correlations are non-directional. In other words, the directional and causal relationship is not possible to identify using Pearson correlation coefficient. Thus, conducting linear regression analysis is important to identify the casual relationships between these variables.

3. Conclusion

Organizational performance is contingent upon a defined set of activities aimed at enhancing employee skills, organisational citizenship, corporate entrepreneurship, and employee engagement in decision-making. These are very effective human resource management approaches. The qualities of an organization's performance that demonstrate the total influence of quality management systems. The department of municipal affairs and transport's current quality management and recognition methods contribute to organisational excellence.

Quality control mechanisms involve operational tactics aimed at ensuring compliance with quality standards. This organisational level is responsible for finding, analysing, and fixing problems. This quality management feature often happens with the identification of a problem. Certain outputs will be monitored and standards will be established at this stage (Maghfuriyah et al., 2019; Pushpakumara et al., 2019).

The measures are used to monitor the organization's quality and operational processes in order to assess if intended results, such as reaching the organization's quality objectives and targets, are accomplished (Maghfuriyah et al., 2019). This is significant in ensuring that corrective actions are performed to ensure quality objectives are reached. Audits of nonconformities and corrective actions should be conducted. An Audit Report is used to document audit non-conformities and corrective actions. If the process monitoring and evaluation indicates that the planned results are not being achieved, the Quality Report form is used to document the ideas for change. Using the data, preventive and corrective actions may be done to ensure that the goals and objectives are accomplished, and that sustained conformity is attained.

Total quality management is built on the foundation of quality planning (De Silva et al., 2017). The organization's ability to supply internet communications goods effectively and sustainably will be utilised to evaluate product quality and achievement of strategic objectives. Now is the time to define methods and tests for defining, managing, predicting, and validating plan success (Kuruwitaarachchi et al., 2019; Pambreni et al., 2019).

TQM implementation results in an increase in quality performance.

The study is academically sound. Academic research on the role of total quality management in enhancing organisational performance is limited. TQM is founded on the concept of quality planning (De Silva et al., 2017; Kuruwitaarachchi et al., 2019; Pambreni et al., 2019). Prior research has been conducted on the development and implementation of quality incentive systems. It has been shown that conventional paper-based

performance management is ineffective. This is a time-consuming process. A high-quality, sound organisational product encompasses a variety of aspects. Numerous studies on total quality management have explored various aspects of system design, development, implementation, and maintenance. While research has been unable to examine all critical aspects of system development, design, implementation, assessment, and maintenance, authentic institutional experiences have been discovered.

The organization's ability to supply internet communications goods effectively and sustainably will be utilised to evaluate product quality and achievement of strategic objectives. By analysing risks to plan success, setting standards, documenting, and defining methods and tests for achieving, maintaining, predicting, and verifying plan success, the study fills a gap in the literature review. TQM is founded on the concept of quality planning. The organization's ability to manufacture high-quality goods efficiently and sustainably will be utilised to evaluate product quality and achievement of strategic objectives. By analysing risks to plan success, setting standards, documenting, and defining methods and tests for achieving, maintaining, predicting, and verifying plan success, the study fills a gap in the literature review.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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Marwa Naji Ali Alkhater Albuainain is a PhD candidate at Management and Science University in Malaysia. She was supervised by Professor Dr. Ali Khatibi Dr. S. M. Ferdous Azam and Dr. Jacqueline Tham, distinguished academics and researchers at the same university. They have substantial industry experience gained from working for multinational corporations. Furthermore, they are outstanding academics with many publications, including books, textbooks, book chapters, journals, conferences, etc. Their successful supervision, research examination, and academic awards have also made them well-known around the world.

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