



THE IMPLICATIONS OF TOTAL QUALITY MANAGEMENT FOR THE DEPARTMENT OF MUNICIPAL AFFAIRS AND TRANSPORT QUALITY IN THE UAE

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Abstract:

To provide customers with services that meet their demands, Total Quality Management (TQM) has arisen as a management technique since 1980. Quality measurement instruments are to be implemented in the department of municipal affairs and transport in the UAE. TQM makes quality the driving force behind leadership, planning, and design, thus it requires the eight core aspects' help. Thus, TQM would include leaders and managers based on quality excellence awards, performance, service delivery, and public trust. Quality improvement and measurement in public administration has led to the development and deployment of strategic models. Total quality management has its roots in manufacturing. The UAE economy's demand for quality public services has made TQM and excellence awards important. Given that service organisations continue to confront harsh realities comparable to those encountered by industrial organisations, this is not surprising. This is the basic rationale for using service quality models. The stages in service quality management may improve service delivery efficiency and customer satisfaction, establishing the strategic framework for technology integration and innovation. The Department of Municipal Affairs and Transport has been compelled to offer value added service for customers and must exhibit a strong commitment to quality service in order to promote its commercial success.

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

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1. Introduction

Total Quality Management (TQM) is a management concept that focuses on the current management operations that enable an organisation to maintain a high standard of service and product quality. TQM is based on a number of modern concepts and philosophies that combine essential administrative processes, specialised technical talents, and imaginative efforts to continually improve the level of quality in a wide variety of organisational sectors (Khadijah et al., 2016).

Due to the critical nature of quality improvement and assessment in public administration, strategic models were developed and implemented. Total quality control may be monitored in industrial settings. TQM and excellence awards have become crucial in the UAE, given the increased demand for quality services in the public sector. This is because the basic issue with TQM is that service organisations have continued to face terrible realities on a par with industrial organisations. This is the primary rationale for using service quality models. The phases of service quality management may help increase the efficiency and satisfaction of service delivery while laying the strategic basis for technological integration and innovation. As a time of the impact of a lack of service quality, the emergence of complaints about poor service, service delivery delays, and a lack of performance measurement, the department of municipal affairs and transport has been forced to provide value added services to customers and demonstrate a strong commitment to quality service in order to support its business success.

The study establishes the vital importance of service quality in determining customer satisfaction and perceptions. In the UAE's public administration, the majority of departments within Dubai municipal have emphasised the importance of perception as it relates to the provision of high-quality services from both a customer service and service delivery dimension. This conclusion underlines the dimension that the overall service quality assessment is connected to the restaurant's or hotel's potential to give excellent services. Establishing and maintaining service quality has strategic financial ramifications, which the department of municipal affairs and transport may use as a competitive advantage strategy.

The relationship between service quality and customer satisfaction is contingent upon the department of municipal affairs and transportation developing a harmonious relationship with its customers, integrating technology to leverage the basis for service delivery, and leveraging service benefit to address the strategic importance of quality (Kumar, 2009; Prabha, 2011; Azam and Moha Asri, 2015). In essence, continuous quality improvement is an investment approach that government agencies may utilise to boost earnings and sales volume (Tham et al., 2017; Udriyah et al., 2019).

2. Literature Review

Five factors contribute to service quality: responsiveness, tangibility, assurance, dependability, and empathy. All of the aforementioned aspects contributed to the

municipality's ability to include the customer into the provision of high-quality services in the UAE. According to Brown and Marchal (2008), customer satisfaction is influenced by customers' perceptions of the service they get, especially its quality. This perception of quality is measured against customer expectations for services in comparison to other public sector organisations. Since such, anticipating and meeting customer expectations is crucial to creating service quality, as it leads in improved revenues in comparison to towns that fall short in this area.

Total quality management helps the municipal affairs and transport department to ensure that the organization's focus and attention are directed on the customers' expectations and perceptions of the services provided (Brown and Marchal, 2008). This creates a benchmark for quality service that assists communities in understanding market expectations. The Asian Productivity Organization (2021) asserts that comprehensive quality management principles examine the premise that customer satisfaction is critical to service standards. This is achieved through balancing customers' expectations and perceptions of the service's quality. The department of municipal affairs and transportation will enhance critical talents and so meet market expectations by using AAA Diamond Rating Standards and Reliability service standards. This service standard for dependability ensures that the municipality delivers high-quality services on time, a vital component of service quality. This is because it is strategic for services to be provided in a manner that ensures priority, allowing for the provision of services on demand while also ensuring that the time gap between demand and when the service is rendered is timely (Haque et al., 2014; Rachmawati et al., 2019). By lowering time spent in line and waiting to be served, the municipal reduces the time necessary to capture the customer's attention.

The criteria for evaluating a potential alternative strategic plan are dependent on the imperative of implementing strategic solutions. The criteria include removing impediments and defeating resistance, directing resources to capabilities, and advancing the organization's mission. These criteria include understanding the strategy's efficacy in order to estimate the possibility that the solution will accomplish the intended results, as well as determining the strategic plan's feasibility in terms of time, cost, and resource capabilities. This will be easily performed by creating a balanced scorecard and decision matrix for each of the strategy choices. Understanding internal and external influences creates the framework for defining organisational success criteria.

Quality planning is the foundation of total quality management. The quality of the product and achievement of the strategic objective will be judged by the organization's ability to provide effective and sustained public service. At this stage, the risk of plan success must be evaluated, standards specified, documentation generated, and processes and tests devised for achieving, controlling, predicting, and verifying plan success.

Municipal quality assurance examinations will use a metric-based approach to determine if the quality strategy is developing as planned. It is vital to test both the department of municipal affairs and transport's quality assurance processes and the project's quality assurance procedures; both qualitative and quantitative metrics are

crucial in assessing the product's quality and customer satisfaction. The tests will assist in predicting and certifying achievement attainment, as well as identifying areas that need remediation. The term "quality control mechanics" refers to the operational procedures that are employed to ensure that quality standards are fulfilled. This stage will focus on the identification, analysis, and correction of problems in the municipality; this component of quality management is often reactive and comes in reaction to the identification of a problem. Certain outputs will be monitored and compliance with relevant standards assessed at this stage (Tarofder et al., 2019). The measures are used to monitor the organization's quality and operational processes in order to determine if intended results, such as compliance with the organization's quality objectives and targets, are being met (Brown and Marchal, 2008). This is significant for ensuring that corrective actions are implemented to move the quality objectives in the appropriate direction.

Quality is a phrase that is significant to both the manufacturer and the customer. Today's global economy has taught many organisations that their existence in business is contingent on creating high-quality products and services. Quality is defined pragmatically in business, engineering, and manufacturing as something's non-inferiority or superiority; it is also characterised as fitting for purpose. Quality is a perceptual, conditional, and partially subjective trait that is subjective in nature and may be interpreted differently by various individuals (Azam et al., 2014; Elias, 2015; Haur et al., 2017; Tarofder et al., 2017; Katukurunda et al., 2019).

Total quality management (TQM) is a term that refers to efforts made at the organisational level to establish and sustain an organisation in which an organisation continually improves its ability to offer high-quality goods and services to customers (De Silva et al., 2017; Kuruwitaarachchi et al., 2019; Pambreni et al., 2019). The TQM philosophy establishes the overarching notion that motivates organisations to strive for continual improvement. Internal and external quality improvements may be used to achieve continuous improvement (Dahlgaard et al., 1998; Jayasuriya and Azam, 2017; Dewi et al., 2019; Nguyen et al., 2019).

Additionally, TQM is a management philosophy, a paradigm, and a process of continuous improvement for doing business through a new management model. The TQM philosophy emerged from the notion of continuous improvement, with a primary emphasis on quality as a business dimension. Under TQM, the emphasis is mostly on the product's or service's quality. TQM goes beyond statistical process control to include a broader range of management activities related to how we manage people and organisations by concentrating on the complete process, rather than simply on basic metrics (Rad, 2006).

ISO is a phrase derived from the Greek word ISOS, which signifies parity or equality (ISO, 2004:2). It is used as a prefix in several nouns that refer to the notion of parity and equality (International Standardization Organization, 2004). The ISO (9000) family of quality management system standards is intended to ensure organisations in ensuring that they meet the quality requirements of their systems while also complying

with applicable statutory and regulatory requirements for a product or programme (Maghfuriyah et al., 2019; Pushpakumara et al., 2019). ISO (9000) addresses the basics of quality management systems (Poksinska, 2002), including the seven quality management principles that underpin the family of standards. It also addresses the requirements that organisations seeking to comply with the standard must satisfy (International Organization for Standardization, 2015).

3. Research Methodology

This study used a quantitative method based on Structural Equation Modeling (SEM) to measure the multiple regression effect of TQM factors in Department of Municipal Affairs and Transport quality. The population defined in this study consists of individuals represents in two selected institutions as mentioned above. Data was collected using questionnaires and analyzed using SPSS software. The number of valid questionnaires equal 392.

3.1 Analysis and Discussions

In this section, the study specifies how the factors of TQM. After modeling the measurement models and measuring the data in the measurement model of each of the independent variables and the dependent variable. The steps of constructing the measurement models of three variables into a structural model include several steps to increase the model fit.

The results of SEM analysis to this model showed a strong association between the factors of TQM (decision making process, customer focus, leadership, Department of Municipal Affairs and Transport process approach, continuous improvement, relationships management, and engagement of people) and the and Department of Municipal Affairs and Transport quality). All correlations are greater than (0.30), a standard threshold for considering a significant effect between these variables, where all correlations are statistically significant ($p \leq 0.000$) as shown in the final structural model.

The summary of correlations is shown in Table 1. This table indicates that all regressions between TQM factors and Department of Municipal Affairs and Transport quality is significant (Sig. ≤ 0.05) and statistically reveals a considerable multiple regression effects. The highest effect is found between decision making and Department of Municipal Affairs and Transport quality.

Table 1: Non-standard regression weights

Dependent variable		Independent Variable	Estimate	S.E.	C.R.	Sig.
Department of Municipal Affairs and Transport Quality	<---	Customer Focus	.150	.031	4.820	***
Department of Municipal Affairs and Transport Quality	<---	Leadership	.050	.022	2.308	.021
Department of Municipal Affairs and Transport Quality	<---	Engagement	.182	.037	4.983	***
Department of Municipal Affairs and Transport Quality	<---	Quality Process	.058	.026	2.237	.025
Department of Municipal Affairs and Transport Quality	<---	Continuous Improvement	.110	.035	3.105	.002
Department of Municipal Affairs and Transport Quality	<---	Decision Making	.287	.055	5.266	***
Department of Municipal Affairs and Transport Quality	<---	Relationships Management	.126	.034	3.767	***

Table 2 shows the strength of standard regression weights between TQM factors and Department of Municipal Affairs and Transport quality. It is found that all regressions are statistically significant and moderate.

Table 2: Standard regression weights

Dependent variable		Independent variable	Regression (β)
Department of Municipal Affairs and Transport Quality	<---	Customer Focus	.431
Department of Municipal Affairs and Transport Quality	<---	Leadership	.167
Department of Municipal Affairs and Transport Quality	<---	Engagement	.495
Department of Municipal Affairs and Transport Quality	<---	Department of Municipal Affairs and Transport Process	.164
Department of Municipal Affairs and Transport Quality	<---	Continuous Improvement	.255
Department of Municipal Affairs and Transport Quality	<---	Decision Making	.611
Department of Municipal Affairs and Transport Quality	<---	Relationships Management	.270

Furthermore, RMSEA of about .08 or less would indicate a close fit of the model in relation to the degrees of freedom. Reading the data from the model fit summary, RMSEA = $0.065 \leq 0.08$. Therefore, the structural model of the study indicates a very close fit of the model in relation to the degrees of freedom.

4. Conclusions

Efforts to improve the quality of products and services differ by organisation. An organisation may leverage quality integration into design process, personnel training, and computer and software upgrades. To improve the quality of the organization's services and commodities, all workers should participate. This may be done by conducting customer interviews, market research, and focus groups. Employees must be empowered, their anxieties driven, and permitted to work in a productive atmosphere. TQM promotes employee empowerment. Allowing workers to work together as a team is one type of empowerment.

Total quality management is responsible for the operation, growth, and development of modern public organisations. Total quality management, when incorporated into management and operations, allows an organisation to change operations, meet customer expectations, among other organisations. Consumer satisfaction is the most effective impact of total quality management. Total quality management has enabled public organisations to adapt to and accept new technologies. It has also paved the door for company mergers, expanding market share and obtaining competitive advantage.

In recent years, the requirement for effective organisational development has grown. To improve the organization's performance has become necessary due to development and increased competition. This has led to the development of high workforce development initiatives. In actuality, the creation of this incentive took into consideration the fact that performance development leads to overall staff improvement. Thus, workforce development initiatives include the organization's ability to develop current employees. Human resource managers are responsible for ensuring proper employee factors.

Human resource management creates the process of applying quality checks to the stages advance with stakeholders and workers. In all stages of strategy implementation, stakeholders and quality management team collaborate. This will speed up the implementation process and ensure that the project meets the quality standards. The strategy will also highlight a well known conceptual paradigm for reviewing services and evaluating care quality. Structure, procedure, and results provide information regarding service quality. According to evidence-based practise, caring workplaces comprehend people without regard to their management and accept them for their quality, not their current predicament.

Recruiting the proper motivated and informed organisations who are aware of the work needs may help sustain and improve an organization's performance. Many studies have been done on the value of excellent human resource management practises, but few illustrate how these practises may directly benefit overall business performance. Employees' ability, dedication, and readiness to share information helps an organisation create extraordinary outcomes and gain a competitive advantage over rivals. So, firms

must instil moral values in their workers to make corporate entrepreneurship a reality. Such actions concern human resource procedures.

Companies that employ performance management processes get several advantages. They may set individual performance expectations that fit with department and corporate goals. They also improve performance and acknowledge greater performance while poor performance is corrected. They also have more discovered and explored chances for growth and development. Employees are responsible for their own performance, while managers are responsible for their department or group's management. Employee engagement, satisfaction, and retention improve. Thus, effective and successful performance management systems help organizations maximize their workforce and organisational.

The mechanics of quality control encompass operational strategies aimed at guaranteeing quality standards. This level in the organisation focuses on identifying, analysing, and correcting errors. This quality management aspect usually occurs in identification to an issue being identified. During this stage, certain outputs will be monitored and standards will be determined.

The measurements are used to monitor quality and operational processes to determine if desired outcomes are achieved, such as meeting the organization's quality goals and targets. This is significant in ensuring corrective steps are taken to ensure the quality goals are met. Non-conformities and remedial measures should be audited. An Audit Report form is used to report audit non-conformities and remedial measures. If the process monitoring and evaluation identifies that the anticipated outcomes are not being attained, the suggestions for improvement are recorded on the Quality Report form. Using the data, appropriate preventative or corrective measures may be taken to ensure that the goals and objectives are met, and that sustained conformance is achieved.

Total quality management is based on quality planning. The ability of the organisation to provide internet communications products effectively and sustainably will be used to assess product quality and strategic objective achievement. Defining methods and tests for accomplishing, managing, predicting, and confirming plan success is required now.

Quality management approaches have improved business performance. Customer satisfaction, outcomes, and quality assurance are some examples of business performance in an organisation. An organization's stakeholders include workers, suppliers, customers, and shareholders. This means employees from strategic cultures work together to achieve company objectives. To achieve the established goals, management must educate its workers about the vision, purpose, core values, and objectives. The study's implementation is to provide an integrated strategy to addressing personnel concerns that result from a new performance assessment system.

Conflict of Interest Statement

The authors declare no conflicts of interests.

About the Author

Marwa Najji 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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