

IMPROVING PRODUCT AND SERVICE QUALITY THROUGH EFFECTIVE QUALITY MANAGEMENT SYSTEMS



Economics

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Eshija Shehabi

Faculty of Economics, University of Tetovo, Tetovo, North Macedonia

Abstract

The caliber of products and services is a crucial determinant for the sustained success of enterprises in an increasingly competitive marketplace. The establishment of the Quality Management System (QMS) is a crucial method for maintaining, regulating, and perpetually enhancing quality within businesses. This study seeks to examine the function of Quality Management Systems (QMS) in enhancing operational efficiency and satisfying consumer needs, while also addressing both internal and external issues that directly affect the quality of products and services. Factors such as organizational culture, human resource capabilities, technology, process management, and the influence of legislation and market demands are recognized through theoretical study and the evaluation of practical instances. The findings indicate that success in quality management relies on the incorporation of these factors into an effective and sustainable management system. The study concludes with suggestions for enhancing quality management methods and formulating strategies aimed at continual improvement.

1. INTRODUCTION

Quality is a vital component that determines an organization's competitiveness and sustainability in the modern market. A research published by Harvard Business Review indicates that American business leaders prioritize customer service, product quality, and technical advancement as the three principal factors for the long-term survival of their company. This underscores the strategic significance of quality in organizational effectiveness. W. Edwards Deming, a prominent authority in quality management, asserts that 85% of quality failures are attributable to administrative decisions, whereas merely 15% result from individual worker errors. This indicates that quality enhancement must initiate at the strategic management tier and encompass the entire organizational framework (Shuklev, 2013).

Irrespective of the organization's size or sector, it runs within an internal system that necessitates maintenance and ongoing enhancement. The Quality Management System (QMS) is crucial in directing enterprises towards sustainable quality goals. ISO 9001, the most globally acknowledged standard for quality management, delineates the criteria for an efficient system designed to consistently fulfill customer needs and enhance the organization's internal processes (ISO, 2015).

In small enterprises, system installation is typically conducted by the owner or primary manager, whereas in large organizations or the public sector, it is overseen by specialized entities equipped with superior technology resources and skilled personnel. Nonetheless, the objective persists: to guarantee the quality of the product or service and to enhance the company's market trustworthiness.

ISO 9001 embodies a systematic methodology grounded in the PDCA (Plan–Do–Check–Act) cycle, fostering ongoing enhancement and evaluation of all elements within the quality management system. This methodology encompasses many preventive measures and systematic

methods designed to guarantee the safety and quality of products, particularly within the food and manufacturing industries (Angelov et al., 2012). The measures encompass:

1. Composing safety manuals and operational procedures;
2. Enforcing external regulations and pertinent documentation;
3. Designating accountable individuals for overseeing product quality and safety;
4. Integrating technological controls throughout all phases of production, storage, and distribution;
5. Performing routine inspections in workplaces and transportation means;
6. Educating employees on personal hygiene and quality standards;
7. Endorsement of continuous training for production people.

The formulation of quality standards transcends a technical concern, representing a process that significantly influences operational efficiency, production capacity, and brand reputation. Gramatikov (2004) underscores that these requirements directly influence economic success and warrant thorough examination prior to their approval. In recent decades, the worldwide quality movement has resulted in the implementation of principles like Total Quality Management (TQM), which seeks continual enhancement at every stage of the organizational process. Modern organizations regard quality not as an expense, but as a strategic investment. They establish sustainable systems and consistently strive to uphold high-quality standards, recognizing that only through the ongoing satisfaction of consumer demands can they secure success in the global marketplace (Ristevska-Jovanovska, 2010). Consumer feedback serves as the most immediate and dependable measure of product or service quality, and it should be utilized as a fundamental instrument for the advancement of quality management systems.

Table 1

Content of Total Quality Management

1.	Concentrated emphasis on the consumer. The term consumer encompasses both external consumers who acquire products or services from the company and internal clients, such as employees in transportation or accountancy, who engage with or assist others within the organization.
2.	Commitment to ongoing enhancement. Total quality management embodies an unwavering dedication to perpetual dissatisfaction. 'Very good' is insufficient. Quality is perpetually subject to enhancement.
3.	Concentrate on the procedure. Total quality management emphasizes the work process as the foundation for the ongoing enhancement of product and service quality.
4.	Enhancing the quality of all company operations. Total quality management employs an expansive notion of quality. It depends not only on the finished product but also on the company's distribution methods, the promptness of its complaint responses, the courtesy of its telephone interactions, and similar factors.
5.	Precise measurement. Total quality management use statistical and technical metrics to assess every essential variable in a company's operations. Current performance is evaluated against established standards or criteria to detect issues, ascertain the causes of discrepancies, and rectify these causes.
6.	Enabling employees. Total quality management encompasses individuals who will facilitate the continuous enhancement of the process. Teams are frequently employed in overall quality management initiatives as a catalyst for discovering and resolving issues.

Source: *Robbins and Coulter, 2002, Management, 7th edition, Prentice-Hall, p. 46.*

The release of several publications and theoretical works in management has signified the emergence of a new paradigm known as "the quality revolution." This revolution signifies a major transformation in management philosophy, transitioning the emphasis from reactive quality control to proactive defect prevention throughout all stages of the production process. The architects of this revolution, W. Edwards Deming and Joseph Juran, assert that halting the manufacture of substandard items is significantly more efficacious than rectifying errors in subsequent phases of production. They perceive quality as a collective obligation rather than a mere consequence of individual acts (Shuklev, 2013).

In this environment, strategic management is essential for the creation and execution of long-term strategies that guarantee the organization's survival and sustainable development. This process integrates data and components from all organizational units to establish a coherent strategic direction aligned with the enterprise's goal and vision.

Simultaneously, strategic marketing functions at the market level, concentrating on certain products and services. It employs comprehensive data to strategically position the product and to formulate sustainable marketing initiatives that enhance consumer value (Durankev, 2009).

The management of relationships with target markets comprises four fundamental phases: **analysis, planning, execution, and control**. The primary aim of this cycle is to establish, sustain, and enhance sustainable connections with consumers and partners in the market, with the intention of fulfilling the organization's objectives. The efficient administration of this process is intricately linked to the implementation of quality standards, which guarantee adherence to legal and technical requirements while enhancing brand credibility in the eyes of consumers.

2. DETERMINANTS INFLUENCING THE QUALITY OF PRODUCTS AND SERVICES

The quality of products and services arises from a complex interplay of various elements that affect every phase of the product life cycle, including creation, manufacture, distribution, usage, and after-sales support. These elements can function both directly and indirectly, with their effects potentially being more significant in certain stages of the process than in others. Gramatikov (2004) identifies the primary elements affecting product and service quality as development, procurement, production, marketing, services, and quality control. The following delineates the primary responsibilities and tasks associated with these functions in relation to ensuring and enhancing quality.

2.1 Product/Service Development

Development represents the initial and fundamental phase in building quality. The main tasks include:

- Incorporating the functional and quality characteristics of the product in accordance with market requirements;
- Collaborating with partners and competent enterprises to implement quality standards;
- Designing technical processes and internal procedures according to quality requirements;

- Developing and monitoring testing, validation, and certification procedures for the product/service.

2.2 Acquisition and Service Expenditures

The expenses associated with service and supplier management substantially influence overall quality. This encompasses:

- The selection and assessment of the most appropriate suppliers based on quality standards;
- The identification of quality attributes for raw and auxiliary materials;
- The maintenance of quality documentation and facilitation of supplier audits.

2.3 Manufacturing

The production process is essential for guaranteeing quality, since it actualizes the technical specifications and the client's demands. The responsibilities encompass:

- Documenting and delineating quality standards in design and technological processes;
- Ensuring the integrity of packaging and auxiliary materials;
- Establishing control parameters at each production stage;
- Managing and permanently rectifying defects during production;
- Engaging in the resolution of customer complaints pertaining to quality.

2.4 Quality Assurance

Quality control simultaneously serves both preventive and corrective functions. Specific tasks encompass:

- Executing a preventive strategy throughout all production phases;
- Assessing the quality of raw materials and incoming components;
- Performing regular testing according to series or production cycles;
- Developing and sustaining information systems for traceability and quality reporting;
- Enhancing control methodologies and educating personnel on contemporary testing and evaluation techniques.

2.5 The Role of Employees

Quality is not solely the obligation of a particular sector; rather, it is the outcome of the collective dedication of all personnel. Each member of the organization, based on their function and duties, plays a part in upholding and enhancing quality standards. Consequently, a corporate culture that fosters accountability, ongoing training, and inclusivity is vital for attaining quality objectives.

3. CONCLUSIONS AND RECOMMENDATIONS

The Quality Management System serves as a crucial foundation for enhancing the long-term performance and sustainability of companies in a progressively competitive landscape. The analysis indicates that quality is not a fixed idea, but rather a dynamic process necessitating continuous commitment across all organizational levels. Numerous factors influence the quality of products and services, interacting throughout the development, procurement, production, control, and customer service phases. The adoption of standards like ISO 9001 and the Total Quality Management (TQM) approach serves as a pragmatic and strategic framework for establishing a culture of continuous improvement. The functions of human resources, technology, internal control, and supplier partnership are essential for attaining the requisite quality. Ultimately, consumer experiences and their comments serve as critical indications for the accurate evaluation of the quality delivered. The extensive adoption of international standards like ISO 9001 should be integral to the fundamental strategy of any firm seeking to enhance quality. Investing in staff training and empowerment is crucial for developing internal capabilities in quality management. The development of integrated information systems for quality monitoring and reporting would enhance decision-making grounded in actual data. Enhancing collaboration with suppliers and stakeholders to guarantee a sustainable value chain. Concentrating on the analysis of consumer input as a primary means of finding areas need enhancement.

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