



# Development Of Total Quality Management In Economic Institutions 2024

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## ABSTRACT

The world is undergoing numerous changes at all levels, particularly regarding management methods and the role of institutions in accompanying, benefiting from, and adapting to this evolution to achieve higher productivity levels. In light of this, this study aims to assess the impact of applying total quality management (TQM) in a group of institutions to enhance their competitiveness in local and international markets. The study revealed a strong correlation between the adoption of TQM principles by the studied institutions and their competitive advantages in the targeted markets. It is crucial for top management to formulate an effective strategy for total quality management.

**Keywords:** competitive advantage, total quality management, quality

## Introduction:

Adopting and following the quality management approach has become essential for most institutions, as total quality management (TQM) is one of the most influential and effective themes for improving institutional performance. As a result, many economic institutions are implementing comprehensive quality programs and entering the competitive market after obtaining quality certification.

It has been observed that numerous institutions, when adopting the TQM concept, face significant difficulties due to the inability of management leaders to change existing organizational practices, which are considered pillars of institutional continuity. Quality management is an important administrative method for guiding change within institutions, characterized by its approach to encouraging employee participation in decision-making, thereby improving organizational performance.

This study aims to explore the impact of adopting the TQM concept in the studied companies. Based on this, the main research question is:

- To what extent does adopting the TQM approach in the studied institutions lead to performance improvement in the market?

From this main question, several sub-questions arise:

- To what extent do the studied institutions prioritize total quality management?

- What is the nature of the relationship between TQM and competitive advantage in the studied institutions?

- What are the means of implementing total quality in the institutions?

## Study Objectives:

This study, both in its theoretical and practical aspects, aims to investigate two variables: total quality management and competitive advantage, as well as the relationship between them. The objectives are as follows:

1. Highlight contemporary concepts of total quality management.
2. Examine the importance and characteristics of TQM in the studied institutions.
3. Provide practical relevance in the business sector by attracting industrial leaders' attention to the importance of TQM and the need to adopt it within organizations to enhance competitiveness.
4. Determine the extent to which administrative leaders apply TQM principles in the studied institutions.

### Terminology:

1. **Total Quality:** According to Zarrouki and Lahouel Abdelkader (2010., p. 5), total quality management can also be described as an administrative philosophy and overall structure that aims to increase institutional profitability by implementing processes of continuous improvement across all functional areas.

### Previous Studies:

- Study by Yahia Brouikat Abdelkrim. Belmokadem Mostafa.: TQM as a strategy to enhance competitiveness in industrial companies. This study discusses how many global institutions, including those in America, Asia, Saudi Arabia, and the UAE, have adopted TQM to achieve comprehensive quality through various tools and methods. The study aimed to examine the importance of TQM implementation in Algerian industrial institutions.
- Study by Maddah Mourad and Al-Aidani Elias: The role of TQM in achieving competitive advantage. The changing global economic system and the emergence of economic blocs and multinational institutions have led to significant technological advancements, prompting institutions to reconsider their management approaches. This study highlighted the importance of TQM in securing competitive advantages in local and international markets.
- Study by Mourad Nacer (2007): The importance of applying TQM to enhance organizational competitiveness. TQM is a pioneering concept that plays a significant role in improving institutional performance. This study emphasized the role of TQM in tackling technological challenges and using it as a tool to achieve competitive advantage by effectively utilizing material, financial, and human resources.
- Study by Khatib Khaled (2011): Introduction to TQM for improving competitiveness in the insurance sector. This study focused on applying TQM in the insurance sector in Algeria, emphasizing the role of administrative leadership in promoting TQM among employees.

### Theoretical Framework:

#### Theoretical Concept of Total Quality:

The concept of total quality has garnered much attention from researchers and institutions in various fields, particularly in economics, which is crucial for attracting consumers (Al-Taie, Al Ali, & Al-Mousawi, 2014, p. 15).

According to Al-Samarrai (2007), the American Federal Institute defines quality as "doing the work right from the beginning," utilising beneficiary evaluation to evaluate performance improvement through quantitative methods for continuous organisational development (p. 15).

According to the International Organization for Standardization (ISO), quality is a set of characteristics that benefit certain institutions' products, meeting consumer desires and providing a competitive advantage in targeted markets (kada, 2014, p. 2).

Additionally, Juran defines quality as the ability of products to meet consumers' final desires while delivering optimal performance (Kada, 2014., p. 2).

| Total Quality Management  | Traditional Quality Management  |
|---|---|
| Self-censorship<br>- Teamwork and team spirit<br>- Focus on products and processes<br>- Integration of employees<br>- Continuous improvement<br>- Flexibility of policies and procedures<br>- Analyze data and make inter-comparisons<br>- Focus on customer satisfaction<br>- Participation of suppliers<br>- External and internal clients<br>- Extensive experience in working teams | Monitoring and identification of errors<br>- Individual working style<br>- Focus on the product<br>- Rigidity of policies and procedures<br>- Data backup<br>- Focus on profits<br>- Suppliers are seen as exploiters<br>- External client<br>- Experience is narrow and dependent on each individual |

**Source:** Bouzian Kalthoum, The Role of ISO 9000 Systems in Establishing a Global Quality Culture in Economic Institutions, unpublished master's thesis, University of Blida, 2008, p. 45.

**Total Quality:** Yin-Jung Yeh defines Total Quality Management (TQM) as a framework that represents the process of employing and developing the resources available to an organization to create products that satisfy and improve customer satisfaction. This framework focuses on the organization's human resources and their skill development, as they are the foundation for effective use of resources in executing the organization's technical and administrative operations, supervising them, and controlling their quality (Yeh, 2003, pp. 257–258).

**Principles of Total Quality Management:** The philosophy of Total Quality Management (TQM) is founded on a series of principles that management can implement to get optimal performance, as noted by (Youssef, 2006, p. 93), including:

**Customer Focus:** The importance of customers goes beyond external clients and dedicates all time and effort to motivating them to purchase its products.

**1. Focus on Processes and Results:** Defective results indicate a lack of quality in the processes themselves, necessitating continuous solutions to problems that affect the quality of products or services.

**2. Error Prevention:** This principle requires the use of acceptable standards to measure the quality of products and services during the production process, rather than waiting for errors to occur.

**3. Empowering the Workforce:** Traditional administrative concepts assume that the workforce consists of individuals solely concerned with earning a salary. However, TQM seeks to empower them.

**Obstacles to Implementing TQM:** The major obstacles to Total Quality Management include (Harrouche, 2013, p. 135):

- The novelty of the TQM concept, especially in developing countries.
- Lack of qualified human resources in this field.
- Insufficient funds allocated to TQM implementation.
- Some employees mistakenly believe that they do not need training.

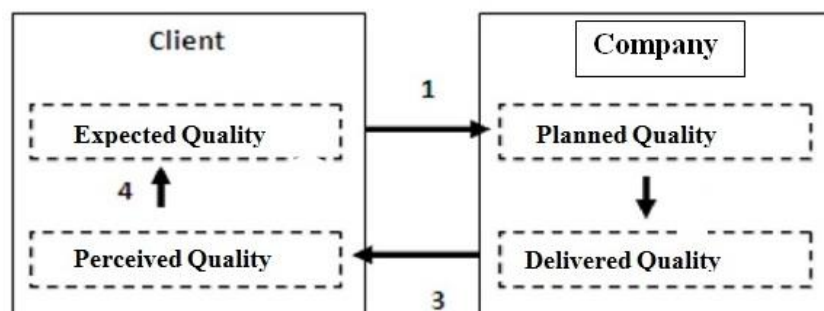
### Practical Study:

**Total Quality Methods:** Total quality, as a management concept, relies on various key methods and practices essential to organizational success. Among these methods are:

**1. Quality Management:** This approach involves developing quality policies, planning, implementing, controlling, and continuously improving processes to meet quality requirements. As highlighted by renowned quality expert Edward Deming, "Management must be directed not by comparing costs, but by comparing methods."



**2. Statistical Quality Control (SQC):** SQC relies on the use of statistical tools to monitor and improve the quality of products and processes. In the words of Walter Shewhart, one of the pioneers of SQC: "Variability is a measure of the level of quality."



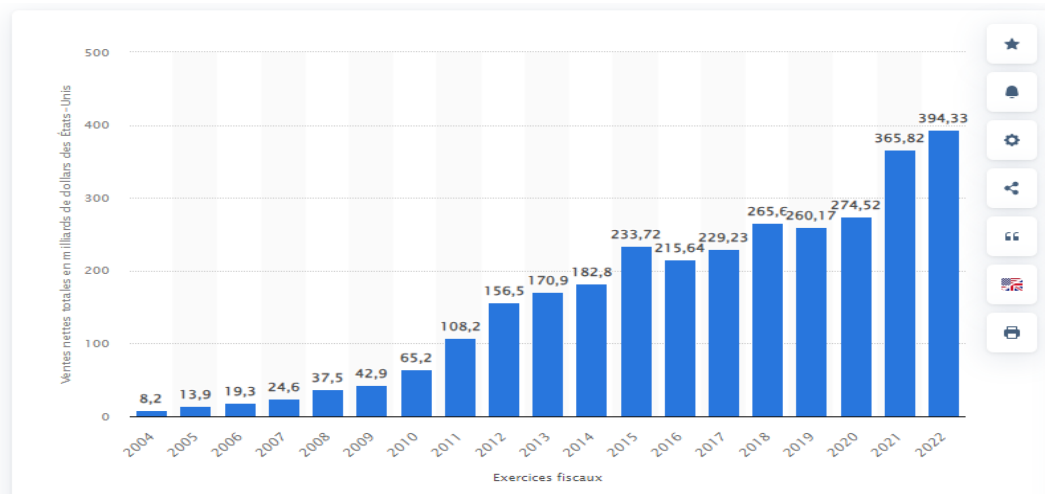
**3. 5S Method:** Originating from Japan, this method aims to improve organization, cleanliness, and standardization in the workplace. Its objective is to optimize operational efficiency and reduce waste.

## Advantages of Total Quality

### Apple:

- **Customer Satisfaction:** Apple has made customer satisfaction one of its top priorities. As co-founder Steve Jobs famously stated, "The secret of quality is to satisfy the customer. The key to satisfaction is quality." This focus on customer satisfaction has not only strengthened consumer loyalty but has also led to repeat sales and a positive brand image. Ultimately, these elements translate directly into the company's financial success.

- **Optimization of Internal Processes:** Apple has successfully optimized its internal processes through high-quality production and efficient supply chain management. As Warren Buffett, one of the world's most renowned investors, emphasized, "Quality is the best business plan." This optimization has enabled Apple to reduce production costs, improve efficiency, and maintain high profit margins



### Apple's Global Revenue (2004–2022)

Apple's global revenue experienced significant growth from 2004 to 2022. Starting from approximately \$8 billion in 2004, Apple saw a rapid rise in revenue, largely driven by the success of its innovative products like the iPhone, iPad, and Mac. By 2022, Apple's revenue reached over \$394 billion, reflecting its dominant position in the global tech market. This remarkable financial growth is a testament to Apple's strategic focus on quality, customer satisfaction, and supply chain optimization.

### Nokia:

• **Customer Satisfaction:** At its peak, Nokia was also a prime example of customer satisfaction due to the quality of its mobile phones. As Bill Gates once noted, "Your most unhappy customers are your greatest source of learning." The quality of Nokia's products was a key driver of customer satisfaction. However, as technology evolved, Nokia lost its competitive edge, leading to a decline in customer satisfaction. This shift had a negative impact on the company's sales and market share.

• **Optimization of Internal Processes:** Nokia was once renowned for its production efficiency. Total quality management helped the company reduce manufacturing costs and maintain healthy profit margins. However, as the company failed to remain competitive in the smartphone market, production costs eventually weighed down its profit margins, contributing to its decline in the market.



### Net Global Revenue of Nokia between 1999 and 2022

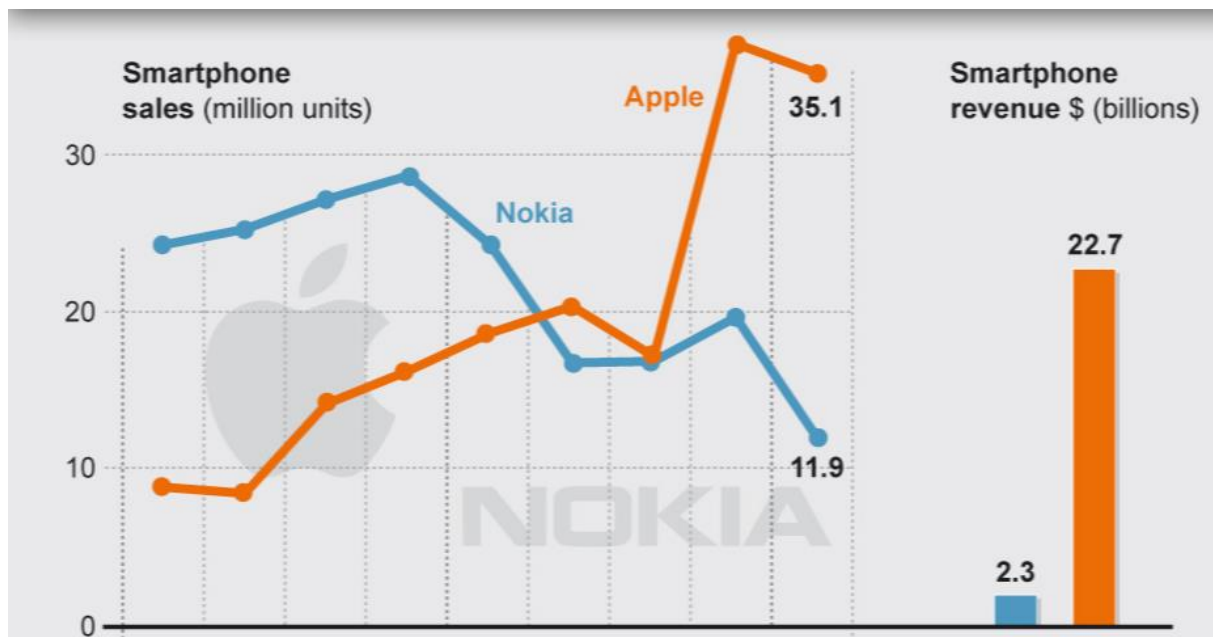
## Total Quality Management Constraints

### Apple:

- **Resistance to Change:** While Apple has adapted to technological advancements, constant innovation required significant investment in research and development. Steve Jobs once said, "Innovation distinguishes between a leader and a follower." However, this focus on quality increased costs, pressuring profit margins.
- **Dependence on Innovation:** Apple's reliance on continual innovation to maintain market leadership means any slowdown in innovation could impact financial performance.

### Nokia:

- **Resistance to Change:** Resistance became a major barrier for Nokia as the industry shifted to smartphones. Peter Drucker's quote, "Culture eats strategy for breakfast," emphasizes the need for adaptability in achieving success.
- **Competitiveness Drift:** Nokia lost its competitive edge by failing to keep up with technological advances, significantly affecting its sales and profit margins.



### Conclusion:

Total Quality Management (TQM) plays a critical role in helping organizations achieve a competitive edge in international markets. TQM methods such as quality management and statistical quality control help improve internal processes, attracting more customers globally and locally. Through applied studies on companies like Apple and Nokia, it was observed that both gained competitive positions but faced challenges like resistance to change and the need for continuous investment in research and development to innovate or improve existing products.

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