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	Title of research article  Total Quality Management: Evolution, Principles, Implementation Challenges, and Strategic Contributions to Organizational Excellence
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Abstract This article provides a comprehensive exploration of Total Quality Management (TQM) as a modern managerial philosophy and operational framework that seeks to enhance organizational performance across all levels. The study addresses multiple interconnected themes, including the conceptual foundations of TQM, its historical evolution, and the principles that underpin its implementation. It examines the benefits that organizations derive from adopting TQM—such as improved service delivery, heightened customer satisfaction, reduced operational inefficiencies, and strengthened competitiveness. The discussion extends to the organizational requirements necessary for successful implementation, including leadership commitment, continuous employee training, integration of information systems, and alignment with strategic objectives. Additionally, the study highlights the common obstacles that hinder effective TQM adoption, ranging from cultural resistance to limited financial resources and inadequate training. The article argues that TQM is not a static concept but a dynamic, evolving system that adapts to new managerial challenges, technological innovations, and global market demands. By analyzing case-based literature and theoretical perspectives, the study underscores the vital role of TQM in fostering organizational excellence and sustainability. This research contributes by presenting a holistic view that integrates both theoretical insights and practical considerations, offering decision-makers a structured framework to guide implementation and overcome challenges.	
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Introduction

Organizations are witnessing significant development in improving and delivering services, due to the intense competition among them, in addition to the need to enhance services in order to achieve customer satisfaction and provide better and higher-quality service. However, this remarkable improvement and development does not arise out of a vacuum; rather, it is the result of the efforts of those managing the organization through studying its shortcomings, identifying major scientific and technological developments, analyzing employee behavior, consumer culture, and the economic, social, political, legal, and even security environment.

Such efforts cannot be achieved without the assistance of experts and consultants whose experience greatly contributes to enhancing the organization's performance. In recent years, researchers have particularly focused on improving quality across all parts of the organization or more precisely, on total quality management (TQM), which has received considerable attention from researchers, experts, and specialists due to its crucial role in enhancing organizational performance.

Leaders of pioneering organizations are well aware of the importance of improving quality. However, such improvement must cover all departments and units of the organization in order to include every part and every employee. This is exactly what total quality management aims to achieve: serving and satisfying customers. Certainly, leading organizations place great emphasis on improving services and developing quality. Through this article, we will attempt to present the key elements and essential information related to total quality management.

1- The Concept of Total Quality Management (TQM)

According to Hamidi (2013, p. 17), total quality management is one of the most prominent contemporary administrative concepts that seeks to bring about radical changes in the organization's system and philosophy, while introducing comprehensive improvements at all stages of work in accordance with specified standards that align with the needs and desires of customers—not merely to satisfy them, but to delight them.

Ramissa (2014, p. 28) considers total quality management as a managerial strategy based on a set of values. It saves effort and time, ensures customer satisfaction, and derives its momentum from information that allows the investment and utilization of employees' talents and intellectual capabilities across the different stages of the organization, from planning to follow-up.

Shatta (2015, p. 41) views total quality management as a modern administrative philosophy that takes the form of a comprehensive management system. It is built upon the foundation of creating positive changes in everything within the organization, including thought, behavior, understanding, organizational beliefs, managerial concepts, leadership style, and systems and procedures of work and performance. This is aimed at improving and developing all components of the organization to achieve the highest level of customer satisfaction by fulfilling their needs and desires.

Stevenson (2015, p. 385) defines total quality management as a philosophy in which all employees of the organization participate in a continuous effort to improve quality and thereby achieve customer satisfaction.

Hamzat (2016, p. 52) argues that total quality management is an administrative philosophy encompassing all organizational systems. It builds a distinguished culture of performance in which the efforts of all employees at all levels and in all units and departments converge to perform tasks correctly from the very beginning, in a way that meets the current and future needs and expectations of customers and society, while achieving the organization's goals with the highest degree of efficiency and effectiveness.

2- The Development of Total Quality Management (TQM)

The concept of total quality management emerged in the 1980s and encompassed several elements and principles that formed its foundations. These included processes and strategic planning to ensure the quality of products and services, their timely delivery, and the improvement of performance. The concept emphasized the importance of teamwork and collaboration both among employees themselves and between employees and managers—in decision-making processes within organizations. In addition, total quality management focused primarily on customer satisfaction and on strengthening mutual relationships with suppliers, investors, and other organizations, which contributes positively to enhancing competitiveness and performance quality. Great importance was also given to employee training programs and the development of their experience and skills (Mashagba, 2014).

The pioneers of total quality management provided views and theories that were developed in later periods, which can be considered as stages in the evolution of this field. The contributions of **Crosby, Deming, and Juran** in the 1980s represented a breakthrough in administrative processes, as TQM practices spread worldwide. The emphasis was placed on strategic planning, teamwork based on harmonious collaboration, and the application of behavioral and statistical sciences in functional performance (Baki, 2013).

The origins of total quality management can be traced back to Japan after World War II, when there was a pressing need to ensure quality development and to control its tools within the manufacturing sector. The pioneers of this field sought to establish the principles and practices necessary to increase organizational efficiency and improve performance. The concept of TQM later spread to the United States, the United Kingdom, and other Western countries, which applied it within the manufacturing sector.

Subsequently, the idea of total quality management evolved rapidly until it led to the establishment of the global ISO 9000 standards. The principles and practices of TQM have had a profound impact on continuous improvements and positive changes in organizational performance and competitiveness, particularly through emphasizing employee participation, senior management commitment, empowerment of workers, and the development of their capabilities (Talib, 2013).

3- Principles of Total Quality Management (TQM)

The principles of total quality management are diverse, and their importance has been demonstrated through their implementation by managers and employees within organizations. According to **Dassanayake (2014)**, the principles of TQM can be summarized in the following six points:

First: Customer focus. This is considered one of the most important principles that contribute to maintaining strong relationships with both current and future customers. To retain customers, management must understand and meet their requirements and needs, strive to avoid deficiencies and errors in providing services or products, and ensure timely delivery.

Second: Good leadership. Effective leadership plays a central role in ensuring the continuity of organizational success and performance by creating and reinforcing an efficient work environment that allows employees to be fully engaged in the organization's plans and objectives and to participate in decision-making.

Third: Employee involvement. The importance of involving employees at all levels and in all functions of the organization contributes significantly to improving overall organizational performance.

Fourth: The scientific approach. Following a scientific methodology in applying TQM strategies helps raise the efficiency and accuracy of administrative processes and improve organizational performance. Through adopting a systems approach to management, organizations can identify and understand how administrative processes are interconnected, avoid errors in their implementation, and define and clarify objectives to enhance organizational efficiency and performance capabilities.

Fifth: Continuous improvement. This principle ensures the sustainability of organizational performance and the effective fulfillment of responsibilities and tasks in a timely manner.

Sixth: Mutually beneficial relationships with investors and suppliers. This is one of the key principles on which organizations rely to enhance and develop their competitive advantage, strengthen positive relations with other organizations, and thereby contribute to improving performance and productivity.

However, **Saberi & Romle (2015)** argue that the principles of TQM consist of senior management commitment, providing employee empowerment and training programs, meeting all employee needs, and creating a suitable work environment that allows employees to express their creativity and innovations and integrate them into the organization's operations to achieve common developmental objectives. In addition, they emphasize customer retention, meeting customer needs, and achieving customer satisfaction.

From the above, the researcher concludes that the principles of TQM focus on the fundamental bases for ensuring, monitoring, and continuously improving quality, with the aim of achieving high standards in the final product. They also stress the importance of continuous improvement of that product in scientific, practical, and cognitive aspects, among others.

4- Benefits of Total Quality Management (TQM)

There are several benefits that an organization can achieve through the application of the philosophy of total quality management. The most important of these include:

- **Improved profitability and competitiveness:** Enhancing quality enables organizations to sell at competitive prices without triggering negative customer reactions or increasing marketing costs. It also boosts sales volume, thereby increasing organizational profitability and strengthening competitiveness.
- **Increased organizational effectiveness:** TQM fosters greater capacity for teamwork, improves communication, engages all employees in problem-solving, and strengthens the relationship between management and employees. As a result, employee turnover decreases while loyalty and commitment to the organization increase.
- **Customer satisfaction:** TQM focuses on identifying and meeting customer needs and desires. Since customers are part of society, TQM also emphasizes preserving the environment and public health.
- **Strengthening the organization's competitive position:** TQM is an integrated system that consistently aligns with customer demands and future expectations of the product being manufactured. This results in delivering high-quality products that meet customer requirements at the right price and at the right time, thereby increasing customer loyalty to the product. This, in turn, positively reflects on the organization, making it stand out from competitors and enabling it to gain a larger market share.
- **Maintaining organizational vitality:** TQM is a journey rather than a final destination. Organizations adopting this approach are required to continuously innovate in production processes as well as in the quality of their products, without halting at a certain point.

5- The Importance, Objectives, and Principles of Total Quality Management (TQM)

It is essential to recognize the importance of ensuring quality in goods and services, both for the customer who receives these goods and services, and for the organization (the producer) that provides them (**Al-Daradkeh & Al-Shibli, 2002, p. 61**).

5.1 The Importance of Total Quality Management

1. The importance of TQM for the customer:

The level of quality in products and services provided to customers has become a critical factor for them. In today's context, customers increasingly demand quality when making purchasing decisions. They may refrain from purchasing local goods even if the prices are lower and instead prefer foreign products, which often offer higher quality. For instance, American customers tend to prefer many Japanese products, especially automobiles and electronics, over their American counterparts (**Krajewski & Ritzman, 1996, p. 143; Hazier & Render, 1999, p. 80**).

The necessity of ensuring quality in goods and services for customers has also led to the establishment of specialized associations dedicated to protecting consumers and guiding them toward safer, higher-quality goods and services.

2. The importance of TQM for the producing organization:

The significance of quality for the producing organization is reflected in the purposeful application of TQM, which enables the achievement of various dimensions of success, including:

- a. Reducing customer complaints through a comprehensive understanding of their needs and desires, and working to meet them (**Okland, 1992, p. 9**).
- b. Raising employee job satisfaction and fostering team spirit and collaboration (**Jouda, 2001, p. 40**).
- c. Improving and developing work methods and techniques.
- d. Reducing service and operating costs (**Aleemat, 2004, p. 32**).
- e. Increasing organizational efficiency in achieving customer satisfaction by providing high-quality products (**Evans, 1997, p. 40**).
- f. Enhancing profitability and competitiveness through continuous quality improvement, which makes it possible to sell at higher prices while reducing quality-related costs by "doing things right the first time" (**Oqaili, 2001, p. 60**).

5.2 Objectives of Total Quality Management (TQM)

According to **Al-Sulami (1995, p. 40)** and **Al-Taie & Al-Abadi (2005, pp. 163–164)**, total quality management pursues several objectives in any administrative organization when applied. Among the most important objectives are the following:

- Enhancing the organization's competitiveness.
- Achieving customer satisfaction while excelling and outperforming competitors.
- Increasing the productivity of every element within the organization.
- Increasing the organization's dynamism and flexibility in dealing with environmental changes.
- Ensuring comprehensive and continuous improvement across all sectors, levels, and activities of the organization.
- Enhancing the overall capacity of the organization for sustainable growth.
- Increasing profitability and improving organizational economics.
- Reducing routine work procedures and shortening them in terms of time and cost.

Meanwhile, **Al-Saqqaf (2005, p. 15)** argues that the primary objective of implementing a TQM program in business organizations is to improve the quality of products and services while simultaneously reducing costs, minimizing

wasted time and effort, and enhancing the service delivered to customers in order to gain their satisfaction. This core quality objective, in turn, encompasses three key benefits.

6- Characteristics of Total Quality Management (TQM)

Scholars of quality management have provided several definitions of TQM, and these definitions have been built around a set of shared characteristics that appear in most of them. These characteristics are as follows (Abdel Sattar, 2000, p. 498):

- TQM is based on philosophies and a set of principles aimed at improving and developing products within the organization.
- It focuses on achieving the ultimate goal of customer satisfaction, which is considered the primary objective of business organizations.
- It relies on modern and precise scientific methods for administrative decision-making in organizations.
- It does not only emphasize the final quality of the product but also pays attention to all stages of the production process. It ensures the efficient and effective use of financial, material, and human resources in order to optimize their utilization.
- It addresses all aspects of the organization, meaning that it covers all departments and units.
- It moves away from traditional control systems and instead emphasizes the development of self-control among employees.
- It relies on fostering motivational systems for employees and providing them with the necessary support to encourage them to exert their full potential.
- It adopts the principle of teamwork, avoiding reliance on individual work approaches, and pays attention to employees by developing their capacities through training.
- It depends on providing machinery and equipment that enable employees to produce goods in line with the required specifications.
- In the framework of TQM, quality is not limited to the product or service itself but extends to include the quality of activities, processes, and the organization as a whole. In other words, quality becomes embedded in the organizational culture.
- Individuals are considered supporters of quality within every function of the organization, and they are fully responsible for it regardless of their position or organizational level. Every individual becomes accountable for the quality of the work they perform and for the team to which they belong, as quality is a collective responsibility.
- All organizational functions are concerned with achieving quality. Quality is not limited to functions directly related to production but also includes support functions, administration, marketing, human resources, and other managerial activities.
- TQM takes into account all customer needs and expectations in terms of cost, timing, performance, and quality as defined from the customer's perspective.
- Prevention of problems rather than correction and treatment is a fundamental principle of TQM, where every function directs its material and human resources toward continuous improvement.

7- Stages of Implementing Total Quality Management (TQM)

The process of adopting the ideas of total quality management (TQM) and attempting to implement and institutionalize them is not easy. It requires passing through three stages and introducing many changes across all areas of the organization's activities and operations. These stages can be summarized as follows (**Stephen Cohen & Ronald Brand, 1997, p. 04**):

First Stage:

The first stage consists of attempting to instill and build a new organizational culture within the institution to prepare an appropriate environment for implementation. Organizational culture refers to a set of informal beliefs, principles, and values that form the basic rules guiding individual and collective behavior within institutions. Changing organizational philosophy and culture requires significant efforts from management to ensure that individuals adopt a new culture compatible with the philosophy of TQM and aligned with both the internal and external environment. It also requires setting a clear plan to be followed and assessing the readiness of the institution's members for this change. Ultimately, this depends on the leadership chosen to guide the transformation process, which must be capable of building a cooperative team and encouraging the implementation of TQM methodology (**Abdel Sattar, 2000, p. 498**).

Second Stage:

After preparing the environment for TQM implementation, the second stage involves strategic planning for total quality—marking the beginning of its actual application. Strategic planning for TQM is defined as “the process of setting long-term objectives and the steps necessary to achieve them in order to develop a comprehensive strategic plan for total quality.”

This requires analyzing different operational areas in need of improvement, such as leadership, information, employees, business and industrial processes, and results, while linking them to the organization's main objectives—namely, satisfying customers, employees, and managers alike. This is achieved through the following steps (**Bino Engström**):

- **Defining strategic objectives of the organization:** Long-term objectives are established, encompassing a wide range of changes across the organization's culture, operations, policies, and procedures.
- **Analyzing the internal work environment:** Identifying strengths to capitalize on and weaknesses to address.
- **Analyzing the external environment:** Examining the competitive environment and the organization's surroundings to identify opportunities to exploit and threats to counter.
- **Developing a strategic plan:** A plan that includes clear, objective goals aligned with environmental conditions in which the organization operates.

Once this strategic plan is established, it serves as the framework for implementing the TQM strategy.

Third Stage:

The third stage involves establishing the appropriate organizational framework for implementing TQM. This is done through (**Abdel Sattar, 2000, p. 97**):

- Restructuring the organizational hierarchy by replacing the long vertical structure with a horizontal one characterized by integration and coordination among its sub-units.
- Redesigning and reengineering processes and functions by introducing fundamental changes in methods and procedures to align with the set strategy.

- Redistributing new authorities, responsibilities, and powers among members of the organization.
- Forming work teams at all levels composed of individuals with the necessary skills and capabilities.
- Establishing a quality council made up of experienced leaders.
- Providing the material, technical, technological, and human resources required to achieve total quality.

8- Requirements for Implementing Total Quality Management (TQM)

The success of applying the TQM approach is linked to fulfilling a set of requirements. Although researchers differ regarding their number, most agree on their content. The most important requirements for the effective implementation of TQM are as follows:

- **Top management support:**

Securing the support and conviction of top management regarding the necessity of applying TQM methodology is crucial for its success. Their role must be evident at every stage and in every area of TQM—starting with setting the strategic vision, formulating the mission statement, establishing quality objectives, and defining quality policies and strategies, down to middle and lower management. These latter levels are responsible for clarifying and raising awareness among subordinates about these objectives and policies to ensure their active participation in achieving the required change toward total quality.

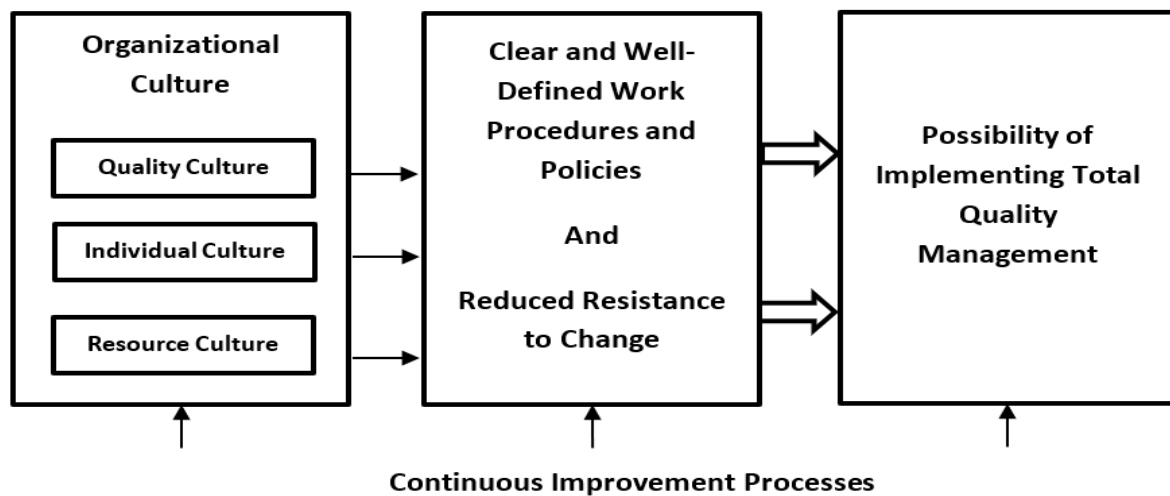
- **Adopting a leadership style consistent with the philosophy of TQM:**

The philosophy of TQM emphasizes involving employees in setting goals, participating in decision-making, and delegating authority. All these characteristics align with the democratic leadership style, which suits the principles of organizations aiming to adopt TQM. Conversely, if top management addresses its employees from an “ivory tower,” relying solely on orders and instructions, the organization will fail to apply this methodology—even if top management expresses a desire to do so—because subordinates will lack trust and therefore refuse to follow. Leaders, therefore, must possess certain personal qualities to successfully apply this methodology, including: the ability to influence others, the ability to face challenges, fairness and equity, broad vision, creativity, continuous optimism, situational leadership, and a strong sense of commitment to themselves and others.

- **Promoting a culture of quality:**

Beginning to apply quality management in a hostile environment lacking the conditions for success is like planting seeds in barren soil it will never flourish. Therefore, the organization must work on establishing an organizational culture whose values are aligned with those of TQM and on creating an organizational climate conducive to its implementation. This requires instilling in employees an awareness of the importance of TQM, directing their behavior toward achieving customer satisfaction, delivering high-quality products, and making quality the responsibility of everyone.

It should be noted that it is essential to assess the extent to which the organizational culture—encompassing the relationships between different hierarchical levels, work policies, and recruitment procedures supports the implementation of total quality management. The figure illustrates this.



- **Ethical and social responsibility:**

This refers to the material or moral behavioral actions of the organization toward its environment, by producing goods or services of high quality that benefit its surroundings. Moreover, any organization seeking to implement TQM is required to preserve environmental safety and protect it from pollution, poverty, unemployment, inflation, noise, and other issues.

The success of applying the TQM approach depends on the extent to which the organization is attentive to meeting the needs and expectations of its current customers, monitoring the developments that may occur in their future needs and aspirations, and reinforcing the idea that “the customer manages the organization.”

- **Focus on training and continuous improvement:**

The philosophy of TQM is based on the uninterrupted and ongoing training of employees, with the ultimate aim being perfection—even if it can never be fully attained.

- **An effective communication system:**

The communication system serves as the nervous system of the organization. Its role is to deliver accurate and real-time information to users in all directions. It relies on modern methods of data analysis and processing, with the ability to activate the internal environment, monitor changes in the external environment, and capture essential information in its embryonic stage. This allows the organization to seize opportunities before competitors and thereby achieve a distinctive advantage.

- **Establishing performance measurement standards:**

The success of TQM is tied to establishing performance measurement standards at both the overall and partial levels of the organization. These standards form part of a rigorous performance measurement system based on appropriate statistical methods. Organizations often resort to measuring various administrative practices and benchmarking them against competing institutions, which fosters continuous improvement of these standards in line with the enhancement of organizational performance (Tawfiq Mohamed, 2002, p. 172).

9- Obstacles to Total Quality Management (TQM)

- The novelty of the TQM concept, especially in developing countries.

- Lack of qualified human resources in this field.
- Insufficient budget allocation for the implementation of TQM.
- Resistance to change among some employees and lack of harmony within and between work teams.
- Lack of knowledge of statistical methods for quality control.
- Absence of an effective system for communication and feedback.
- Frequent changes in administrative leadership, which prevent the establishment and development of organizational cultures.
- Differing priorities and interests across organizations.
- Management's failure to provide rewards and recognize individual achievements (**Bashrawi Adel, p. 63**).
- The belief that technology is more important than people.

There are also many indicators that may reflect the decline of quality in a production or service organization, including (**Mohsen Ali, 2008, p. 48**):

- Delays, lost opportunities, and postponements.
- Frequent customer complaints.
- Prevalence of crisis management methods.
- Excessive overtime and blaming employees.
- Declining employee morale.

Conclusion

Organizations are witnessing significant development in improving and delivering services, due to the intense competition among them, in addition to the need to enhance services in order to achieve customer satisfaction and provide better and higher-quality service. Such efforts cannot be achieved without the assistance of experts and consultants whose experience greatly contributes to enhancing the organization's performance. In recent years, researchers have particularly focused on improving quality across all parts of the organization or more precisely, on total quality management (TQM), which has received considerable attention from researchers, experts, and specialists due to its crucial role in enhancing organizational performance.

Methodology

This article adopts a qualitative research approach based on a descriptive and analytical review of existing literature. Academic books, peer-reviewed journal articles, and reports were examined to extract definitions, principles, benefits, and challenges associated with TQM. The study follows a comparative method, highlighting similarities and differences among scholars' perspectives (Hamidi, 2013; Ramissa, 2014; Shatta, 2015; Stevenson, 2015; Hamzat, 2016). Data analysis relied on thematic categorization, enabling the classification of TQM concepts into core domains such as philosophy, implementation, and obstacles. The research is theoretical in scope, but its outcomes are directed toward practical application in diverse organizational contexts.

Findings

The analysis revealed several key findings:

1. TQM as a Holistic Philosophy: It is not limited to product or service quality but represents a comprehensive cultural and managerial transformation across all organizational units.

2. Customer-Centric Orientation: Customer satisfaction, and more importantly customer delight, forms the core purpose of TQM.
3. Importance of Employee Involvement: Success in TQM depends heavily on the commitment and motivation of employees at all levels.
4. Evolutionary Nature: TQM has evolved since the 1980s, integrating teamwork, continuous improvement, supplier relations, and knowledge management into its framework.
5. Barriers to Implementation: Resistance to change, insufficient training, lack of leadership support, and limited resources are persistent obstacles.
6. Strategic Outcomes: Organizations that effectively implement TQM achieve higher efficiency, stronger competitiveness, and sustainable growth.

Ethical Considerations

This article is based on secondary sources and does not involve human participants or personal data. All cited works have been properly acknowledged to maintain academic integrity and prevent plagiarism. Ethical standards of research transparency, accurate referencing, and scholarly fairness were observed throughout the writing process.

Novelty of the Study

Unlike many studies that focus only on one dimension of TQM (such as customer satisfaction or leadership), this paper provides an integrated overview of TQM's conceptual, practical, and strategic aspects. The novelty lies in its multi-layered synthesis, which combines theoretical definitions, historical development, practical benefits, requirements for implementation, and obstacles into a single structured framework. It also emphasizes the dynamic adaptability of TQM to modern challenges, making it a valuable resource for both scholars and practitioners.

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Conflict of Interest

The author declares References

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