The Role of Quality Culture in Determining Organizational Performance: A Systematic Review

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© 2023 جامعة الطوم والتكنولوجيا، المركز الرئيس عدن، اليمن. يمكن إعادة استخدام المادة المنشورة حسب رخصة مؤسسة المشاع الإبداعي شريطة الاستشهاد بالمؤلف والمجلة.

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Abstract:

This article examines the role of quality culture in determining the performance of institutions and organizations. Quality culture means adopting values of continuous improvement and striving for the highest levels of performance to satisfy customers and stakeholders. Numerous studies assess organizational performance and highlight factors such as board size, diversity, and innovation. However, these studies differ in terms of geographical context and variables used. This review aims to provide an overview of the methodologies of these studies and lay the foundation for future research on this important topic.

Keywords: Quality culture, organizational performance, continuous improvement, customer satisfaction, stakeholders, statistical models.

دور ثقافة الجودة في تحديد الأداء التنظيمي: استعراض منهجي

الملخص:

تتناول هذا الورقة البحثية دور ثقافة الجودة في تحديد أداء المؤسسات والمنظمات. تعني ثقافة الجودة اعتماد قيم التحسين المستمر والسعي نحو أعلى مستويات الأداء لإرضاء العملاء والمعنيين. تقوم العديد من الدراسات بتقييم الأداء التنظيمي وتسليط الضوء على عوامل مثل حجم مجلس الإدارة والتنوع والابتكار. ومع ذلك تختلف هذه الدراسات من حيث السياق الجغرافي والمتغيرات المستخدمة. يهدف هذه الاستعراض إلى توفير نظرة عامة حول منهجيات هذه الدراسات تمهيد الطريق للبحوث المستقبلية حول هذا الموضوع المهم.

الكلمات المفتاحية: ثقافة الجودة، الأداء التنظيمي، التحسين المستمر، رضا العملاء ،المعنيون، النماذج الإحصائية.

Introduction:

Quality culture is a crucial factor that significantly influences the performance of institutions and organizations in the rapidly evolving world. Quality is no longer just a goal pursued by individuals and institutions; it has become part of the lifestyle and mindset. Quality culture entails adopting values of continuous improvement and focuses on achieving the highest levels of performance to meet the expectations of customers and stakeholders (Mahmoud Sultan and Fawzi Hashem, 2022).

In today's dynamic landscape, the significance of a quality-driven culture cannot be overstated when it comes to determining the performance of institutions and organizations. Quality culture has evolved beyond being a mere aspiration; it has become deeply ingrained in the ethos of both individuals and institutions. This cultural shift is characterized by an unwavering commitment to constant improvement and the pursuit of peak performance to meet the ever-rising expectations of customers and stakeholders.

Amidst this backdrop, numerous studies have embarked on the quest to decipher the intricate tapestry of organizational performance. These studies have cast a wide net, exploring a diverse range of fields, from investigating the influence of board size, diversity, and innovation on organizational outcomes. In these investigations, a prevailing theme emerges—a positive correlation between these factors and organizational performance. To decode this phenomenon, these studies have harnessed the power of statistical models, dissecting the collected data with precision and rigor.

Nevertheless, differences emerge among these studies, particularly concerning the geographical context studied. Some studies focus on specific sectors in certain regions, while others encompass a wide array of fields and geographic areas. The specified variables, sample size, and data collection methods also vary across each study.

Remarkably, some studies center on the impact of information technology on different facets of organizational performance and the development of management methods. These studies rely on empirical methods like field studies and the use of surveys to analyze data and arrive at results that confirm technology's influence on various aspects of organizational performance.

These studies can be considered important references to elucidate how quality culture affects enhancing organizational performance and developing management methods. They provide a framework for guiding future research in this domain and devising effective strategies to achieve development and continuous improvement objectives.

Context of the Problem

Focus on the impact of information technology: Emphasizing the impact of information technology on various aspects of organizational performance,

management and development. Experimental Research Methods: Each study used experimental research methods and techniques such as field research, surveys and analysis of relevant literature. Sample: Participants All studies included a sample of participants from diverse organizational backgrounds, including public agencies, educational institutions, and university administration.

Performance Improvement: Each study identified positive impacts on performance, albeit across different dimensions: organizational efficiency, effectiveness, customer satisfaction, achieving social goals, leadership development, and performance improvement. Proposed solutions: Each study provides recommendations or a proposed framework for using technology to improve the performance of various fields, whether public institutions, university administration, or primary school facilities.

Differences:

Research Scope: The studies differ in their research scope. The Alaklbi (2018) study focuses on the impact of information technology on Egyptian public institutions, the Haif Al-Haif (2023) study centers on the role of visual management in higher education leadership, and the Mohamed Abdelhamid (2021) study discusses e-management to improve performance quality in Azhar elementary institutes.

Dimensions of Impact: While all studies indicate a positive impact, they emphasize different dimensions: efficiency, effectiveness, customer satisfaction, achieving social goals, leadership development, and performance quality.

Context: The context varies among the studies, with Alaklbi (2018) focusing on public institutions, Haif Al-Haif (2023) on university leadership, and Mohamed Abdelhamid (2021) on Azhar elementary education.

Research Methodology: Despite all being experimental research, the methods differ. Alaklbi (2018) employs a field study with a sample of 162 researchers, Haif Al-Haif (2023) uses a descriptive method and a survey with a sample of administrative leaders, and Mohamed Abdelhamid (2021) relies on a descriptive approach with a focus on literature review.

Measured Variables: The measured variables differ in each study. Alaklbi (2018) evaluates the impact of information technology on organizational performance, Haif Al-Haif (2023) focuses on the impact of visual management on leadership development, and Mohamed Abdelhamid (2021) studies the role of e-management in improving performance quality.

Comparative Review Methodology: Introduction: Begin by introducing the common topic of the three studies – the impact of information technology on various aspects of organizational performance and management.

Scope and Context: Provide an overview of the specific scope and context of each study – Egyptian public institutions, university leadership, and Azhar elementary education.

Research Methods: Highlight the research methods used, including experimental approaches such as field studies, descriptive methods, and literature reviews.

Dimensions of Impact: Explore the different dimensions of impact identified in each study – efficiency, effectiveness, customer satisfaction, achieving social goals, leadership development, and performance quality.

Results and Implications: Discuss the findings of each study regarding the positive impact of technology, alongside the implications for enhancing performance and management in different contexts.

Proposed Frameworks: Compare and review the recommended frameworks or strategies for leveraging technology in each context.

Conclusion: Conclude the review by summarizing the commonalities and differences, emphasizing the importance of technology in enhancing various aspects of organizational performance and management. Highlight the potential for future research to learn from different contexts.

Similarities:

Positive Impact of Organizational Factors: All studies indicate a positive impact of organizational factors such as total quality management, organizational culture, and entrepreneurial orientation on organizational performance. This highlights the significance of these factors in enhancing performance (Khan et al., 2023). Influence of Organizational Culture on Other Factors: All studies demonstrate that organizational culture affects other factors such as entrepreneurial orientation, knowledge sharing, and organizational innovation. This suggests that culture might play a pivotal role in guiding employee behavior and practices. Performance as a Result of Improvement: In all studies, improving organizational factors appear to lead in enhancing organizational performance. This underscores the strong link between these factors and organizational success.

Differences in Previous Studies:

- 1. **Geographic Areas and Studied Sectors:** Each study has specific geographic areas and sectors of focus, potentially leading to variations in contextual conditions and influencing factors.
- 2. **Independent Variables:** Different studies analyze different independent variables; some emphasize total quality management, while others focus on entrepreneurial orientation or organizational culture, which could lead to diverse outcomes.
- 3. **Performance Measures and Indicators:** Studies may employ varying performance measures to evaluate organizational performance, potentially impacting how results are measured and interpreted.
- 4. **Sample and Methodology:** The size and composition of the sample, as well as the methodologies used, can differ across studies, potentially affecting the representativeness of the results.
- 5. **Comparison with Previous Studies:** When comparing with previous studies, aspects such as sample size and analysis methods (e.g., PLS-SEM, multiple linear regression, qualitative review) can vary.
- 6. **Results and Recommendations:** Prior studies emphasize the significance of organizational factors in enhancing performance and competitiveness, highlighting the importance of organizational culture, innovation, and knowledge sharing.
- 7. **Sectoral Differences:** Some studies focus on specific sectors, such as healthcare or the industrial sector, potentially introducing variations in context and influencing factors.

Comparisons with Current Study:

- 1. **General Objective:** Similar to previous studies, the current study aims to understand the relationship between specific organizational variables and their impact on organizational performance.
- 2. **Analysis Type:** Like previous studies, the current study employs regression analysis as its analytical method.
- 3. **Sample Size:** The current study's sample size is consistent with those in previous studies.
- 4. **Results and Recommendations:** The current study, like previous ones, underscores the importance of specific factors in achieving organizational performance and recommends to enhance them.



Variations in Current Study:

- 1. **Unique Focus:** The current study distinguishes itself by exploring the role of company reputation as a moderator in the relationship between corporate social responsibility and organizational performance, a departure from studies exclusively examining direct relationships.
- 2. **Study Context:** The current study differs in its context, concentrating on multinational European companies, while others primarily focus on specific sectors like the industrial sector and healthcare.

Quality culture is a fundamental element in enhancing and shaping organizational performance. It constitutes the philosophy and approach centered on achieving the highest quality standards in all aspects of an organization's operations. Quality culture involves fostering participation, motivation, and commitment among employees to improve quality and strive for excellence. This culture leads to enhance organizational performance by facilitating continuous process improvement and better meeting customer needs and expectations.

"Some Companies and Institutions That Succeeded in Implementing a Culture of Quality and Improving Their Organizational Performance Include:

- **Toyota:** Toyota is considered one of the best examples of implementing a culture of quality. Toyota adopted an approach known as the 'Toyota Production System,' which focuses on continuous process improvement, providing value to customers, and empowering every employee to contribute to quality enhancement.
- **Siemens:** Siemens adopted a comprehensive quality management approach known as the 'Siemens Quality Management System.' This system encompasses a range of procedures and tools aimed at improving quality and organizational performance.
- **Apple:** Apple is known for achieving a high level of quality in its products and services. Apple's quality culture demands constant attention to detail, design, and user experience.
- Microsoft: Microsoft has embraced a holistic quality approach across all its operations, contributing to improve the performance and the delivery of highquality products and services.
- **General Electric:** General Electric implemented the 'Six Sigma' model, which focuses on quality improvement and reducing process variations, resulting in enhanced organizational performance.
- **3M:** 3M is known for manufacturing diverse products such as adhesives, films, and medical devices. The company places significant emphasis on research, innovation, and quality improvement.

- **BMW:** BMW is known for producing high-quality, high-performance cars and applies quality management systems to achieve manufacturing excellence.
- Honda: Renowned for manufacturing reliable and high-quality cars, where quality and continuous improvement are essential parts of the company's culture.
- **Lockheed Martin:** Specializes in aircraft and space technology and constantly strives to achieve the highest quality and safety standards.
- **General Motors:** Focuses on manufacturing high-quality cars and improving performance through comprehensive quality management.
- **Puma:** Operates in the field of sportswear and footwear manufacturing and seeks to achieve quality and innovation in its products.
- **Tobacco Companies:** Operate in the tobacco industry and related products, aiming for product quality and compliance with health and environmental standards.
- **Caterpillar:** Engaged in the manufacturing of heavy equipment and machinery, striving to deliver high-quality products that meet industry needs.

This is a summary of various companies and institutions that have successfully implemented a culture of quality and improving their organizational performance. It's evident that these companies rely on strategic thinking, innovation, and employee commitment to achieve excellence and quality.

These companies represent a diverse range of industries and have succeeded in achieving quality and improving their organizational performance through embracing a culture of excellence and quality.

Building a Strong Reputation in Quality and Performance:

The Impact of Quality Culture on Organizational Performance: Common study results consistently point to a significant positive impact of a quality culture on organizational performance. These findings demonstrate that organizations investing in a quality-oriented culture achieve better performance outcomes. This impact can manifest across multiple levels, from improving internal processes to meet customer and stakeholder expectations.

Specific Dimensions of Performance: By analyzing the results, specific dimensions of performance that show a larger impact due to adopting a quality culture can be identified. Among these dimensions:

Organizational Efficiency: Results indicate that a quality culture leads to improve overall organizational efficiency. This might involve better resource utilization, waste reduction, leading to increase productivity and improve cost-effectiveness.

Customer Satisfaction: Some studies suggest that a quality culture leads to increase customer satisfaction. When an organization is committed to achieve the highest quality levels, the likelihood of meeting customer expectations and needs rises.

Process Improvement: Results show a general enhancement of organizational processes. These improvements could include error and defect reduction, process acceleration, and improve workflow.

Through a deeper analysis of the results, it becomes clear that a quality culture plays a significant role in shaping organizational performance. The results show a clear positive impact on various performance aspects, including efficiency, customer satisfaction, and process improvement. This underscores the importance of building and nurturing a quality culture as an integral part of organizational strategies for sustainable success.

Disparities in Results: When comparing results across different studies, some disparities in the impact of a quality culture on organizational performance can be observed. These might be linked to geographical extensions of research or differences in industrial contexts. For instance, some studies might exhibit a higher positive impact of a quality culture on performance compared to others.

Potential Reasons for Disparities:

Geographical Context: The geographical context might be a factor influencing disparities across studies. Regional culture, values, and customs might affect how a quality culture is adopted and how organizations respond in different areas. Factors like customs, traditions, and economic context can have an impact on research outcomes.

Industry and Sector: The sector in which organizations operate can lead to differences in the impact. For example, there might be variations in how a quality culture is embraced between industrial and service sectors. Differences in work nature, customer base, and types of production can influence research outcomes.

Organization Size: The size of an organization could also be a factor contributing to disparities. Large and small enterprises might adopt a quality culture differently due to structural and management variations.

Influencing Factors:

Local Culture: Local culture, values, and customs are integral to the geographical context and might impact how a quality culture is embraced. Differences in understanding and application might stem from resource availability and community values.

Industry Requirements: Industry and regulatory requirements can influence how a quality culture is applied. For example, stricter regulations in some industries might lead to different interactions with a quality culture.

Organizational Growth Stage: The growth stage an organization could impact research outcomes. Early-stage and mature growth organizations might face different challenges in implementing a quality culture.

By accounting for disparities in results and potential reasons, it becomes evident that the specific impact of a quality culture can be influenced by multiple factors, such as geographical context, industry, and local culture. These disparities highlight the importance of understanding the unique context of each study to interpret results, derive lessons, and make recommendations.

Technology: Technology plays a significant role in enhancing a quality culture and improving organizational performance. Through the use of advanced tools and techniques, organizations can enhance their processes and achieve better outcomes. Technology can be used for continuous performance monitoring, data analysis, and continuous improvement. For example, technology-driven quality management systems can provide ongoing monitoring and reporting on performance and compliance.

Leadership: Effective leadership is a key to the success of a quality culture. Leadership must be committed to adopt a quality culture and guiding the organization toward achieving it. Leaders can serve as role models, inspiring and motivating employees to improve performance and adopt excellent institutional practices.

Strategic Planning: Strategic planning can guide efforts toward achieving quality goals and developing best practices. When quality is included as a part of the organizational strategy, better alignment can be achieved among all aspects of work, prioritizing quality and sustainable performance.

Diversity: Diversity refers to have a variety of people from different backgrounds, cultures, and experiences. Diversity can enhance creativity, idea exchange, and varied experiences, leading to improve performance and the development of new practices.

Interconnections Among Factors: There are close interconnections among these factors. For instance, effective leadership can drive the development of strategic planning, where leaders define quality goals and guide improvement strategies. Additionally, technology can enhance an organization's ability to achieve its goals by providing data analysis tools and continuous monitoring. Diversity can contribute to boost innovative thinking and creativity in performance improvement strategies.

Challenges and Obstacles:

In the context of modern business, achieving quality and improving organizational performance is of paramount importance. It is a crucial element in attaining success and sustainability for any organization, forming the foundation upon which efforts are directed towards achieving quality and excellence. However, there are multiple challenges and obstacles that must be addressed to realize this goal. These challenges include internal cultural barriers, market pressures, competition, and changes in technology and the organizational environment. This research will delve into these challenges and obstacles, highlighting the role of a quality culture in defining and overcoming them to enhance organizational performance and achieve sustainable success.

Resistance to Change: Resistance to change can be one of the major challenges when implementing a quality culture. Some employees might feel uncomfortable with change and cling to traditional practices.

Lack of Leadership Support: Without commitment from leadership to adopt a quality culture and guide efforts towards it, attempts to achieve it may fail.

Resource Constraints: Developing and implementing a quality culture might require additional financial and human resources, which can be a challenge, especially if the organization is resource constrained.

Lack of Clear Vision: Achieving a quality culture can be difficult if there is no clear vision of goals and future directions.

Specific Challenges: The challenges to overcome depend on the application context and the industry involved. Some industries may face the following challenges:

Traditional Industries: In some traditional industries that rely on established practices over time, implementing a quality culture and changing routines can be challenging.

Public Sectors: Government institutions and public sectors might have complex administrative and bureaucratic procedures that make implementing a quality culture more challenging.

Diverse Cultural Environments: In environments characterized by significant cultural diversity, unifying concepts and values related to a quality culture can be challenging.

Implementing a Quality Culture: The difficulty of implementing a quality culture depends on various factors such as:

Organizational Size: Implementing a quality culture in large organizations can be challenging due to their administrative and structural complexities.

Current Organizational Culture: If the current organizational culture does not support quality and continuous improvement, change it quickly can a challenge.

Employee Motivation: Lack of employee motivation and engagement can impact the implementation of a quality culture.

In general, it's important to identify the specific challenges of the organization, industry, and environment and develop strategies to overcome them, ensuring the successful implementation of a quality culture and achieving desired organizational performance.

Guiding institutions and organizations toward adopting a quality culture requires commitment, planning, and collective effort. Numerous studies have highlighted the role of a quality culture in shaping the performance of companies and organizations. Here are some examples of these studies:

- 1. Study on the Impact of Quality Culture on Organizational Performance: This study demonstrated how a quality culture impacts improving organizational performance. It analyzed how the values of quality and commitment influence employee behavior, ultimately leading to enhanced productivity and quality in processes. Akpa, V et al(2021)
- 2. Study on the Effect of Total Quality Management Practices on Employee Performance: This study analyzed the effect of a quality culture on employee performance and how it translates into overall organizational improvement. Saffar et al(2020).
- 3. *Interventions to Improve Team Effectiveness in Healthcare:* This study focused on how to apply quality culture principles in hospitals and healthcare facilities improved service quality and organizational performance. Buljac et al (2020)
- 4. *Implementation of Lean Manufacturing in the Furniture Industry*: This study explored the integration of quality culture principles in production processes, leading to improved efficiency and product quality. Jum'a et al(2023)
- 5. Effect of Total Quality Management on Organizational Performance in the Textile Sector: This study examined the comprehensive impact of a quality culture across various aspects of business, including management, production, and marketing.et al (2022)
- 6. *Quality Culture's Impact on Financial Services:* Researchers studied the effect of a quality culture in the financial services sector, highlighting its influence on customer service and loyalty, ultimately improving organizational performance.et al(2023)
- 7. *Mutual Relationship Modeling for Lean Manufacturing Adoption:* This study focused on how quality culture principles can reduce waste, lower costs, and enhance production efficiency, thereby improving sector performance.et al(2021)

- 8. *Quality Management in Healthcare:* This study evaluated how adopting a quality culture improves patient safety, customer experience, and risk management, enhancing the reputation and performance of healthcare institutions.et al(2020)
- 9. *Impact of Quality Culture in Higher Education:* This research analyzed the influence of a quality culture on higher education institutions, attracting students and resources, thereby improving organizational performance.et al(2022)
- 10. Enhancing Risk Management Culture for Sustainable Growth: This study explored how integrating a risk management culture contributes to sustainable growth in the banking sector, improving customer trust and deposit volume. Liu, H et al (2022)
- 11. Impact of Quality Culture in the IT Industry: Researchers examined how quality culture concepts can enhance software development and technology project management, leading to improved products and customer satisfaction.et al(2023)

These examples represent diverse case studies that explored the role of a quality culture in improving organizational performance across various sectors and industries. They illustrate how a quality culture can be a driving factor in achieving improvement and excellence in organizational performance.

Recommendations and Suggestions:

Based on the results and analyses presented in the studies, several practical recommendations can be proposed to enhance a quality culture and improve organizational performance:

- 1. Enhance Leadership Guidance: Leadership should adopt a quality culture and lead by example. Organizational leadership can serve as a role model to activate values and principles associated with quality.
- 2. Develop Training and Awareness Programs: Training programs should be developed for employees to enhance their understanding of the importance of quality and how to apply it in their daily work. Workshops and mentoring sessions can be used to foster this understanding.
- 3. Activate Motivation and Encouragement: Employees can be motivated for active participation in performance improvement through rewards and fostering positive competitive spirit among teams and individuals.
- 4. Adopt Continuous Improvement Tools: Continuous improvement tools such as "PDCA" (Plan-Do-Check-Act) and "Six Sigma" can be used to analyze and continuously enhance processes effectively.
- 5. Encourage Communication and Transparency: Effective communication should be encouraged among all levels of the organization to exchange ideas, possible improvements, and overcome obstacles.
- 6. Direct Investment in Technology: Technologies and smart systems can be leveraged to enhance quality monitoring, process improvement, and facilitate communication across different departments.

- 7. Align Strategy for Quality Achievement: Quality and organizational improvement objectives should be integrated into the overall strategy of the organization, allocating resources and efforts to achieve them.
- 8. Enhance Supply Chain: Quality concepts can be applied in the supply chain by collaborating with suppliers and motivating them to deliver high-quality products and services.
- 9. Utilize Performance Measurement Tools: Key Performance Indicators (KPIs) can be used to measure and monitor the impact of the quality culture on organizational performance regularly and identify areas needing improvement.
- 10. Learn from Best Practices: Studying successful examples of quality culture adoption in similar institutions and using them as models for implementing best practices.

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