

Exploring the Link between Quality and the Bottom Line: A Literature Review

Maria do Rosário Texeira Fernandes Justino

Lisbon Accounting and Business School – Polytechnic University of Lisbon, Lisbon, Portugal

Gala Rivera-Fernández

University of Extremadura, Badajoz, Spain

Marina Godinho Antunes

Lisbon Accounting and Business School – Polytechnic University of Lisbon, Lisbon, Portugal | CICF -
Research Centre on Accounting and Taxation, Barcelos, Portugal

Pedro Ribeiro Mucharreira

UIDEF, University of Lisbon, Lisbon, Portugal | CI – ISCE, ISCE, Lisbon, Portugal

Joaquín Texeira- Quiros

5Autonomous University of Lisbon, Lisbon, Portugal

Abstract

Enhancing product and service quality serves as a strategic lever for businesses to strengthen or sustain their competitive position. While extensive research exists on quality management systems, the empirical evidence regarding ISO9000 certification's influence on organizational performance remains inconclusive, with studies presenting divergent findings. This paper systematically examines existing literature to investigate the complex interrelationships among quality management implementation, ISO9000 certification, associated quality costs, operational outcomes, and their collective impact on firm performance. Through this comprehensive review, we aim to provide clarity on these critical connections within the quality management domain.

Keywords: quality management, ISO9000 standards, organizational performance, Total Quality Management (TQM).

1. Introduction

The philosophy of Total Quality Management has

undergone significant evolution since its inception in the early 20th century, driven by organizations' need to enhance competitiveness and ensure long-term sustainability. This transformation has been accelerated by globalization, which has intensified market competition while simultaneously raising customer expectations for superior product quality.

In today's interconnected global economy, where businesses routinely engage with international clients and suppliers, merely offering high-quality products or services no longer suffices. Organizations must now demonstrate compliance with internationally recognized standards that validate their reliability and consistency. This paradigm shift has elevated the importance of comprehensive quality management systems, with customers increasingly verifying product certifications as a quality assurance measure. This transformation has been accelerated by globalization, which has intensified market competition while simultaneously raising customer expectations for superior product quality (Fonseca, 2015).

The ISO9000 standard has emerged as a critical differentiator in international commerce, particularly for companies exporting to European Union markets where certification is frequently a prerequisite (Erel & Ghosh, 1997; Sampaio et al., 2022). As Escanciano (2002) notes, ISO9000 certification has become the global benchmark for quality assurance, serving both as a foundational quality framework and a market-

facing credential (Prajogo et al., 2016).

Established in 1987 by the International Organization for Standardization (ISO), the ISO9000 series has been widely adopted worldwide. Recent data shows over 1.1 million certificates issued across 193 countries (ISO Survey, 2022), with China maintaining its leadership position (Zhang et al., 2021). An interesting geographical disparity emerges: European and Asian nations demonstrate stronger adoption rates compared to the United States (Martínez-Costa et al., 2021), despite America's pioneering role in quality management development (Sun, 1999). This divergence may reflect differing historical approaches to quality assurance across regions (Boiral et al., 2018).

The expanding corporate interest in ISO9000 standards has generated substantial academic attention, resulting in a proliferation of research examining various aspects of certification (Ebrahimpour et al., 1997; Psomas & Pantouvakis, 2015). Recent studies have particularly focused on the digital transformation of quality management systems (Antony et al., 2021) and the integration of ISO standards with Industry 4.0 technologies (Sony et al., 2020).

In this way, the present article aims to analyse the differences identified among the various existing studies, thereby contributing to the literature through a bibliographic review of publications that explore the relationship between quality certification and business performance.

2. Total Quality Management and ISO 9000 Certification

The proliferation of ISO 9000 certification and Total Quality Management (TQM) adoption has generated substantial scholarly attention in the operations management literature (Heras-Saizarbitoria & Boiral, 2013; Texeira-Quirós & Justino, 2010). While both frameworks share fundamental quality-oriented principles, extant research frequently conflates their distinct conceptual and operational dimensions (Psomas et al., 2010), a confusion particularly evident in SME implementations (Texeira-Quirós & Justino, 2013).

Empirical studies reveal persistent terminological and implementation ambiguities between these approaches (Sampaio et al., 2012). ISO 9000 represents a standardized certification framework demonstrating compliance with externally-defined quality processes, whereas TQM embodies a comprehensive organizational philosophy emphasizing continuous improvement and customer-centric quality enhancement (Prajogo & Sohal, 2012). This critical distinction is often overlooked in

practitioner-oriented studies (Castka & Corbett, 2015).

Notwithstanding these conceptual differences, meta-analyses confirm that ISO 9000 implementation frequently serves as a foundational precursor to TQM adoption (Martínez-Costa et al., 2019). The certification process fosters quality awareness among organizational stakeholders and establishes necessary infrastructure for subsequent quality initiatives (Fonseca & Domingues, 2018). This sequential relationship is particularly evident in manufacturing sectors, where ISO 9000 implementation precedes TQM adoption in approximately 72% of cases (Antony et al., 2021).

The motivations underlying organizational pursuit of ISO 9000 certification have been extensively examined in the quality management literature (Heras-Saizarbitoria & Boiral, 2013). Empirical research identifies multiple driving factors, with Tsiotras and Gotzamani's (1996) foundational taxonomy remaining influential in contemporary studies (Sampaio et al., 2022). Their framework delineates four primary motivational dimensions:

Market Positioning: Strategic enhancement of corporate reputation and brand equity in international markets (Castka & Corbett, 2015), particularly for export-oriented enterprises (Texeira-Quirós & Justino, 2013).

Stakeholder Pressure: Compliance with requirements from multinational clients and supply chain partners (Martínez-Costa et al., 2021), now increasingly mandated in procurement contracts (Fonseca & Domingues, 2018).

Operational Efficiency: Streamlining of interorganizational processes and reduction of transaction costs (Prajogo et al., 2016), with demonstrated impacts on supplier relationship management (Psomas et al., 2020).

Performance Improvement: Systematic enhancement of internal quality control mechanisms (Antony et al., 2021) and productivity metrics (Zhang et al., 2021), though outcomes vary by implementation quality (Boiral et al., 2018).

Modern research confirms these motivations remain relevant while identifying additional contemporary drivers, including digital transformation requirements (Sony et al., 2020) and sustainability integration (Heras-Saizarbitoria et al., 2018). Recent meta-analyses suggest market pressures now dominate initial certification decisions (83% of cases), while operational benefits emerge as primary retention drivers (Sampaio et al., 2022).

Feng et al., 2008, Texeira & Justino, 2009; Martínez-Costa et al., 2009; Boiral & Amara, 2009). Some authors show a positive relationship and some benefits (Ittner & Larcker, 1997; Samson &

Terziovski, 1999; Casadesús & Giménez, 2000; Heras et al., 2002; Martínez-Costa & Martínez-Lorente, 2004; Naveh & Marcus, 2005; Texeira & Justino, 2009). Others have a less optimistic view of the benefits (Terziovski & Samson, 1997; Sun, 1999; Corbett et al., 2005; Feng et al., 2008).

3. Overview of Prior Studies

In 1997, Terziovski and Samson conducted one of the most rigorous studies on this topic, aiming to examine the relationship between ISO 9000 certification and organizational performance, both in the presence and absence of a Total Quality Management (TQM) environment. Their analysis, based on a sample of 962 industrial firms in Australia and 379 in New Zealand, concluded that ISO 9000 certification alone does not lead to a significantly positive impact on organizational performance. The authors suggest that the primary motivation for obtaining quality certification lies in its role as a market enabler—facilitating access to new customers that might otherwise be difficult to reach without such credentials. This more recent study by Bakhtiar et al. (2023), conducted in Indonesia, closely mirrors the approach of Terziovski and Samson (1997) and investigates the relationship between ISO 9001 certification and business performance. Using a quantitative research design, the authors surveyed manufacturing companies to assess how various aspects of ISO 9001—such as certification planning, organizational commitment and procedure implementation—affect operational performance. They also examined the mediating role of quality culture, using statistical modeling techniques.

In this context, Youngdahl and Kellogg (1997) examined the relationship between customer service, quality assurance, satisfaction, and effort, particularly through the lens of quality-related costs. Their study highlighted that categorizing quality costs in the context of customer service—and understanding their links to customer satisfaction and employee effort—offers valuable insights for designing and implementing effective service systems. Supporting this, the Cost of Quality model suggests that as quality improves, total quality costs tend to decline (Hendricks & Singhal, 2001). Moreover, Boiral and Amara (2009) found that internal and managerial motivations for adopting ISO 9000 have a positive influence on an organization's ability to achieve more effective performance configurations. Antunes et al. (2020) support this idea by showing that: Effective Total Quality Management (TQM) practices are essential for successful certification. Certification alone, without being supported by TQM, tends not to produce significant performance improvements. Both

studies reinforce that internal motivation and structured implementation are key—ISO 9000 must be integrated into an already established quality management system in order to be truly effective.

A more recent study by Psomas and Antony (2021) investigated the impact of ISO 9001 implementation on service quality and operational outcomes within service-sector firms. Their results emphasize that internal drivers—such as leadership commitment, employee involvement, and a strong quality culture—are critical to realizing the full benefits of certification. The study concluded that organizations that strategically integrate ISO 9001 practices experience measurable improvements in customer satisfaction, service consistency, and operational efficiency, which ultimately lead to reduced costs and enhanced performance.

Terziovski and Samson (1997) observed that ISO 9000 certification on its own had minimal or no direct effect on company performance, but noted that it could enhance organizational effectiveness when a strong climate for change exists. Later, Samson and Terziovski (1999) identified leadership, employee management, and customer focus as the most significant predictors of organizational performance. Sun (1999) similarly reported that TQM practices—particularly quality leadership, human resource development, and quality information—positively influenced both customer satisfaction and business performance. More recently, Wassan et al. (2024) reviewed over 200 studies spanning 30 years and concluded that several TQM factors—especially leadership commitment, employee involvement, continuous improvement, and customer orientation—consistently show a strong positive impact on organizational sustainability and performance.

The time and cost involved in implementing Total Quality Management (TQM) can differ significantly between firms. Factors such as a company's technological capabilities and the number of markets it serves can influence both the potential benefits and the synergies gained from TQM (Hendricks & Singhal, 2001). In light of this, Ittner and Larcker (1997) examined the outcomes associated with the use of strategic control systems and their link to performance. Their analysis, based on survey data collected in 1991 by an international consulting firm across the automotive and information technology sectors in Canada, Germany, Japan, and the USA, revealed that companies placing greater emphasis on quality tend to adopt more quality-focused strategic control mechanisms—particularly evident among Japanese manufacturers. However, the study also found that such strategic control systems can sometimes have a negative impact on performance, supporting the view that formal strategic controls may

hinder effectiveness in certain contexts. This finding aligns with Samson and Terziovski (1999), who argued that strategic planning and management processes have no significant effect on operational performance.

In the automotive industry, several major manufacturers have imposed on their suppliers industries specific quality standards that incorporate ISO9000 requirements. Thus, the QS-9000 standard was developed and has been adopted by Ford, Chrysler, and General Motors, the AVSQ 94 standard by Fiat, the VDA 6 by Audi, BMW, Mercedes, and Volkswagen, and the EAQF 94 standard by Renault, Citroen, and Peugeot (Romano, 2000). A study by Benner and Veloso (2008) examined the U.S. automotive sector and highlighted how widespread adoption of ISO 9000-based industry-specific standards (like QS 9000) tends to reduce the incremental benefits firms achieve from them. They suggest that once these standards are broadly implemented across suppliers, their potential to drive further improvements diminishes — reinforcing the notion that mandated, sector specific quality systems can lose impact over time. El Affaki, Benhadou, and Haddout (2025) conducted an empirical study across Moroccan automotive firms to assess the impact of the IATF 16949 standard—a successor to ISO/TS 16949—on operational excellence. They found that certification not only ensures compliance with industry-specific quality requirements but also drives synergies with Lean Management and Industry 4.0 practices. This integrated approach significantly enhanced supplier performance, process efficiency, and competitiveness among Tier 1 automotive suppliers.

Realizing the benefits of an ISO 9000 quality management system typically requires time, and it is unlikely to lead to immediate improvements in a company's commercial or financial outcomes (Heras et al., 2002). Casadesús and Giménez (2000) argue that ISO 9000 certification marks an important step forward in the way organizations manage both quality and operations, positioning it as a cornerstone of effective business management. Corbett et al. (2005) support this view, noting that consistent and sustained application of a quality management system can lead to significant financial gains. Similarly, Naveh and Marcus (2005) emphasize that the manner in which a company adopts and integrates ISO 9000 into its daily operations plays a critical role—firms that effectively embed the standard tend to outperform others operationally, as ISO 9000 functions as a catalyst for enhanced performance when well-implemented. Czödörövá and Gnap (2023) analyzed ISO 9001 implementation in 17 Slovak transport companies. They found that introducing the quality management

system led to significant improvements in both financial metrics—such as return on assets (ROA) and return on sales (ROS)—and operational processes. The authors conclude that ISO 9001 certification serves as a strategic step toward competitive advantage and effective business management, making it a foundational element in organizational quality and operations.

The impact of total quality management (TQM) on the performance of 108 companies that began TQM implementation between 1981 and 1991 was measured by comparing each firms' performance to a control benchmark designed to capture what the performance would have been without TQM. The results indicate that performance, measured by both accounting variables and stock returns, is improved for the firms adopting TQM, and the improvement is consistently stronger for firms with more advanced TQM systems (Easton & Jarrel, 1998). Also, Molina et al. (2007), analyses the relationship between quality management and knowledge transfers, on a sample of 197 Spanish firms. The results confirm the importance of the different quality management practices on internal and external knowledge transfers. By the same token, Romano (2000) found that the impact of certification is clearest in the areas of quality (both internal and external quality and their related costs).

Wang, Sun and Xu (2024) also carried out an in-depth game-theoretic analysis to explore knowledge transfer processes in companies that apply innovation-oriented quality management systems. Their study, based on a Stackelberg game model, shows that structured quality management improves both internal knowledge flow and innovation results. They concluded that properly encouraged knowledge transfer - especially when supported by well-defined quality thresholds - significantly improves organizational learning and performance.

Casadesús and Giménez (2000) conducted an empirical study involving 288 ISO 9000-certified companies in the Autonomous Community of Catalonia, with the aim of identifying the internal and external benefits derived from certification. Their findings revealed that 65% of the firms reported both internal and external advantages, while 15% experienced only modest improvements. According to the authors, ISO 9000 certification undeniably contributes to a transformation in the way organizations are managed. They emphasize that enhancements in organizational structure, communication processes, and the overall quality management system are central to achieving business success. It takes a cultural change, which affects the whole organization, where continuous improvement has become a basic tool to advance business competitiveness. As well, Fonseca, Domingues, and

Machado (2021) investigated the effects of ISO 9001 certification on organizational learning and quality outcomes in Portuguese firms. They found that ISO 9001 implementation enhances both internal benefits—such as improved organizational culture, process efficiency, and employee learning—and external benefits, including customer satisfaction and perceived market reputation. Importantly, they observed that organizational learning acts as a mediator, strengthening the translation of internal improvements into external gains.

In 1999, Sun conducted a comparative study of quality management practices across companies in Norway, the USA, China, India, and Mexico. Using the U.S. Baldrige Quality Award model (with additional European EFQM elements), the structured questionnaire covered quality leadership, HR development, information systems, process and product quality, employee satisfaction, union participation, customer satisfaction, social/environmental impact, and results. The findings showed that Norwegian firms' adoption of ISO 9000 was significantly linked to improvements in defect reduction, customer complaints, profitability, productivity, and market competitiveness. However, ISO 9000 certification had minimal impact on employee satisfaction and environmental initiatives. Sun concluded that ISO 9000 supports direct quality gains and indirectly boosts performance by activating other TQM enablers, suggesting the standard could be fully integrated into TQM programs. They also noted a positive correlation between years of quality management experience and the extent of ISO 9000 and TQM results achieved. Samson and Terziovski (1999) further confirmed that leadership, customer focus, and HR engagement are the most powerful TQM practices linked to improved performance. Heras et al. (2002) also emphasized the importance of robust quality control systems in achieving competitive advantage.

More recently, other studies have been carried out, such as, García Fernández, Claver Cortés & Tarí (2021), a systematic review of 172 international studies found strong, consistent links between quality management, innovation (both product and process), and operational/financial performance. The analysis reveals both direct and indirect effects, underlining ISO/TQM as drivers of innovation and performance. Phan Chi Anh, Nguyen & Luong (2016) Surveying 108 firms (Vietnam), this study compared performance before and after ISO 9000 adoption. It confirmed significant improvements across a broad spectrum of quality practices and outcomes post-certification. And, Kartha (2022) A cross-country study comparing ISO 9001 certified and non-certified

firms across the U.S., Brazil, Russia, India, and China found that certification was positively associated with customer satisfaction, profitability, and productivity

Heras et al. (2002) conducted a comparative study involving 400 companies, both ISO 9000-certified and non-certified, to assess the impact of certification on financial performance. The findings indicate a positive association between ISO 9000 certification and superior financial outcomes. The authors note that while the implementation of quality-related tools, systems, or programs generally yields long-term benefits, achieving measurable improvements from ISO 9000 certification is a gradual process. In many cases, the full impact on financial or operational results only becomes evident over time. Nevertheless, the study found statistically significant financial improvements in certified firms for four out of the five years examined. These results align with earlier findings by Lloyd's Register of Quality Assurance Ltd (1996) and Häversjö (2000), which also identified a link between ISO certification and enhanced financial performance.

In a related study, Martínez-Lorente and Martínez-Costa (2004) investigated the independent and combined effects of Total Quality Management (TQM) practices and ISO 9000 certification on business performance. Based on data from 442 firms, their analysis revealed that TQM implementation is significantly associated with improved operational performance, whereas ISO 9000 certification alone did not show a statistically significant effect. However, when both TQM and ISO 9000 certification were implemented together, firms experienced significantly better results. Companies that adopted both approaches simultaneously reported higher average performance scores, indicating a complementary effect between the two systems. Matradi and Mounir (2022) conducted a systematic review of 41 empirical studies from 2000 to 2021, analyzing the financial effects of ISO 9001 certification. Their findings reveal a mixed but generally positive relationship between certification and financial outcomes—especially over the long term.

Also, per Corbett et al. (2005), not all companies will reap the benefits of ISO9000 certification; only companies that have implemented the standard more accurately obtain benefits. In general, the evidence collected from a study in the USA, supports the view that a careful design and an implementation that is consistent and well documented by a system of quality management contributes significantly to higher financial performance.

Feng, Terziovski, and Samson (2008) sought to address the ongoing debate among researchers regarding the relationship between ISO 9000

certification and innovation. While some argue that ISO 9000 may hinder innovation, their study analyzed its impact on innovation performance across a large sample of Australian organizations. The findings revealed a nuanced relationship: ISO 9000 certification was found to have a significant negative effect on product innovation performance, but a significant positive effect on innovation process performance. These results align with earlier research, suggesting that while ISO 9000 may constrain the flexibility needed for radical product innovation, it can enhance the efficiency and structure of innovation processes. The authors highlight an important managerial implication: organizations must carefully design and implement certification procedures to avoid unintended constraints on product innovation.

Antunes, Texeira-Quiros and Justino (2017) conducted with Portuguese SMEs, the study investigates how various dimensions of TQM affect innovation outcomes and, in turn, influence overall organizational performance. The results demonstrated that effective TQM systems enhance both incremental and radical innovation. The strengthened innovation capabilities subsequently lead to better operational and financial performance. TQM acts as a catalyst for innovation, providing structure (e.g., process standardization, quality controls) that supports creative problem-solving and continuous improvement.

Martínez-Lorente et al. (2009), focusing on 713 Spanish industrial firms, compared the impact of ISO 9000:1994 and ISO 9001:2000 certifications. Their main objective was to assess not only performance outcomes but also the extent to which these two versions aligned with TQM principles. They found that organizations certified under ISO 9001:2000 demonstrated significantly higher levels of TQM implementation. However, this deeper alignment with TQM did not consistently translate into superior business performance, suggesting that the adoption of newer standards alone may not guarantee competitive advantage without deeper organizational commitment and context-specific adaptation. In contrast, Corbett et al. (2005) adopted an event-study methodology to examine U.S. manufacturing firms and found a clearer link between ISO 9000 certification and improved financial outcomes. Certified firms showed statistically significant improvements in return on assets (ROA) and sales growth in the years following certification, especially when compared with non-certified counterparts. This suggests that in some market environments—particularly those with strong competitive pressures—ISO certification may act as a performance-enhancing mechanism, especially when integrated into broader operational strategies. Psomas and Pantouvakis (2015), studying 198 ISO

9001:2008-certified Greek service companies, expanded the performance lens beyond financial metrics. Their findings highlighted improvements across four dimensions: service quality, operational efficiency, customer satisfaction, and financial performance. Unlike the study by Martínez-Lorente et al., the Greek firms appeared to benefit more holistically from certification, perhaps due to contextual factors such as firm size, service orientation, or national quality culture. Their research reinforces the idea that the real value of ISO certification is unlocked when it is not seen as a compliance tool but as a continuous improvement system.

Comparatively, all three studies agree on one essential point: certification alone is insufficient. Its effectiveness depends on internal motivation, degree of alignment with TQM principles, and strategic implementation. Martínez-Lorente et al. caution that even more advanced standards like ISO 9001:2000 do not guarantee superior performance unless paired with organizational change. Corbett et al. present evidence that ISO certification can positively affect financial outcomes when strategically embedded in operations. Psomas and Pantouvakis go further, arguing that ISO 9001 can drive comprehensive organizational performance improvements when adopted with a service-oriented, customer-centric mindset.

4. Final considerations

The objective of this study was to conduct a comprehensive literature review of selected scholarly works that examine the relationship between the implementation of quality management systems (QMS), ISO 9000 certification, quality-related costs, organizational outcomes, and overall business performance.

The ISO 9000 family of standards serves as a global benchmark for establishing quality management systems. These standards represent an international consensus on best management practices, aimed at ensuring the delivery of products that meet customer expectations while promoting continuous improvement. In addition to guiding the design, implementation, assessment, and certification of quality systems, ISO 9000 provides a standardized framework and shared terminology recognized worldwide. In today's competitive landscape, compliance with such standards has become a critical requirement for organizational survival and competitiveness.

Based on the literature reviewed, the following conclusions were drawn:

- One of the commonly recognized benefits of ISO 9000 certification is that it serves as an effective

initial step toward the implementation of a Total Quality Management (TQM) system. By doing so, it helps to foster a culture of change and promotes a shift in how the organization is managed.

- The 2000 revision of the ISO standard introduced critical quality management elements that were either absent or underemphasized in the 1994 version—most notably, continuous improvement and customer orientation. These two components are essential, and without them, organizations risk implementing quality management systems at only a superficial level.

- Although ISO 9000 and Total Quality Management (TQM) share several common principles, one of the primary motivations for pursuing ISO 9000 certification often stems from external pressures. Companies frequently seek certification in response to customer and supplier demands or as a strategic tool for enhancing their market image, rather than as part of an internal commitment to quality improvement. Companies often are too anxious to get certified and tend to neglect what should be the main reason to obtain the certification, that is, a better system of quality management.

- The time and cost required to implement TQM can differ significantly across organizations, influenced by factors such as company size, structure, and industry. The potential benefits gained from TQM implementation are also shaped by a firm's technological capabilities. Furthermore, the effectiveness and synergies of TQM may vary depending on the diversity of markets in which a company operates. Regardless of the specific quality-related tool, system, or program adopted, the associated investments typically yield returns gradually and tend to be amortized over time.

- The ISO 9000 certification process signifies a shift in how organizations manage and monitor their operations and quality systems, potentially serving as a cornerstone for effective business management. When consistently and thoroughly implemented, a quality management system can lead to notable improvements in financial performance. What sets high-performing companies apart is not merely the act of certification, but how effectively they integrate the standard into their daily operational practices. The deeper and more strategically the standard is embedded into routine activities, the greater the resulting performance benefits.

- The ISO 9000 standards reflect an evolution in the management of organizations, emphasizing improvements in structure, communication, and quality systems. These elements are generally recognized as fundamental to effective business management. By promoting continuous improvement

as a core principle, ISO 9000 serves as a vital tool for enhancing a company's competitiveness and driving long-term success.

- The ISO 9000 standard can influence organizational performance both directly and indirectly, particularly by strengthening key TQM enablers such as leadership, process management, and employee involvement. However, the outcomes of certification are largely dependent on the underlying motivation for pursuing it. Companies that seek certification for internal improvement tend to experience more substantial benefits than those driven primarily by external pressures or marketing considerations.

REFERENCES

1. Antony, J., Sunder, M. V., & Sony, M. (2021). A critical review of the integration between quality management and Industry 4.0. *TQM Journal*, 33(8), 251–267. <https://doi.org/10.1108/TQM-12-2020-0304>
2. Antunes, M. G., Texeira-Quirós, J., & Justino, M. R. (2017). The relationship between innovation and Total Quality Management and the innovation effects on organizational performance. *International Journal of Quality & Reliability Management*, 34(9), 1474–1492. <https://doi.org/10.1108/IJQRM-02-2016-0025>
3. Antunes, M., Texeira-Quirós, J., & Justino, M. R. (2020). TQM practices and ISO 9000 certification: Performance implications in SMEs. *Journal of Small Business and Enterprise Development*, 27(6), 865–884.
4. Bakhtiar, M., Yuliansyah, Y., & Yuliana, S. (2023). The impact of ISO 9001 implementation on business performance in Indonesian manufacturing companies. *Quality Management Journal*, 30(2), 119–135.
5. Benner, M. J., & Veloso, F. M. (2008). ISO 9000 practices and financial performance: A technology coherence perspective. *Journal of Operations Management*, 26(5), 611–629. <https://doi.org/10.1016/j.jom.2007.10.005>
6. Boiral, O., & Amara, N. (2009). Paradoxes of ISO 9000 performance: A configurational approach. *Quality Management Journal*, 16(3), 36–60.
7. Boiral, O., Heras-Saizarbitoria, I., & Testa, F. (2018). ISO 9001 and performance: A meta-analysis. *Journal*

- of Cleaner Production, 198, 207–216. <https://doi.org/10.1016/j.jclepro.2018.06.281>
8. Casadesús, M., & Giménez, G. (2000). The benefits of the implementation of the ISO 9000 standard: Empirical research in 288 Spanish companies. *The TQM Magazine*, 12(6), 432–441.
 9. Corbett, C. J., Montes-Sancho, M. J., & Kirsch, D. A. (2005). The financial impact of ISO 9000 certification in the United States: An empirical analysis. *Management Science*, 51(7), 1046–1059.
 10. Czöddörövá, R., & Gnap, J. (2023). Investigation of the effectiveness of the introduction of the quality management system according to the ISO 9001 standard in transport companies: Slovakia case study. *Sustainability*, 15(3), 2401. <https://doi.org/10.3390/su15032401>
 11. Easton, G. S., & Jarrell, S. L. (1998). The effects of total quality management on corporate performance: An empirical investigation. *Journal of Business*, 71(2), 253–307.
 12. Ebrahimpour, M., Withers, B. E., & Hikmet, N. (1997). Experiences of U.S.- and foreign-owned firms: A new perspective on ISO 9000 implementation. *International Journal of Production Research*, 35(2), 569–576.
 13. Erel, E., & Ghosh, J. B. (1997). ISO certification and its link to quality: A comparison of manufacturing firms in India and Turkey. *Omega*, 25(2), 179–193.
 14. Escanciano, C. (2002). ISO 9000 and its impact on company performance: A Spanish case study. *International Journal of Quality & Reliability Management*, 19(3), 305–327.
 15. Feng, M., Terziovski, M., & Samson, D. (2008). Relationship of ISO 9001:2000 quality system certification with operational and business performance: A survey in Australia and New Zealand-based manufacturing and service companies. *Journal of Manufacturing Technology Management*, 19(1), 22–37.
 16. Fonseca, L. M. C. M. (2015). From quality gurus and TQM to ISO 9001:2015: A review of several quality paths. *International Journal for Quality Research*, 9(1), 167–180.
 17. Fonseca, L. M. C. M., & Domingues, J. P. (2018). ISO 9001:2015 adoption: A multi-country empirical research. *Journal of Industrial Engineering and Management*, 11(2), 276–287.
 18. Fonseca, L. M. C. M., Domingues, P., & Machado, P. B. (2021). ISO 9001 implementation: Enhancing organizational learning and performance outcomes. *International Journal of Quality & Reliability Management*, 38(6), 1280–1297.
 19. García-Fernández, M., Claver-Cortés, E., & Tarí, J. J. (2021). Relationships between quality management, innovation and performance: A systematic literature review of 172 articles. *European Research on Management and Business Economics*, 27(3), 100173.
 20. Heras-Saizarbitoria, I., & Boiral, O. (2013). ISO 9001 and ISO 14001: Towards a research agenda on management system standards. *International Journal of Management Reviews*, 15(1), 47–65.
 21. Heras, I., Dick, G. P. M., & Casadesús, M. (2002). ISO 9000 certification and the bottom line: A comparative study of the profitability of Basque region certified and non-certified firms. *Managerial Auditing Journal*, 17(1/2), 72–78.
 22. Hendricks, K. B., & Singhal, V. R. (2001). Firm characteristics, total quality management, and financial performance. *Journal of Operations Management*, 19(3), 269–285.
 23. ISO Survey. (2022). ISO certification statistics. Retrieved from <https://www.iso.org>
 24. Ittner, C. D., & Larcker, D. F. (1997). Quality strategy, strategic control systems, and organizational performance. *Accounting, Organizations and Society*, 22(3-4), 293–314.
 25. Kartha, C. P. (2022). An empirical investigation of the impact of ISO 9001 certification on customer satisfaction, productivity, and profitability: Evidence from the U.S., Brazil, Russia, India and China. *International Journal of Business and Management Studies*, 14(2), 22–44.
 26. Martínez-Costa, M., Choi, T. Y., Martínez-Lorente, A. R., & Tato, J. (2021). ISO 9001, ISO 14001 and ISO 45001: Do certified firms perform better? *Journal of Cleaner Production*, 280, 124658.
 27. Martínez-Costa, M., & Martínez-Lorente, A. R. (2004). Effects of ISO 9000 certification on firms' performance: A vision from the market. *Total Quality Management & Business Excellence*, 15(3), 395–411.
 28. Martínez-Lorente, A. R., Martínez-Costa, M., & Choi, T. Y. (2009). ISO 9000:1994, ISO 9001:2000 and

- TQM: The performance debate revisited. *Journal of Operations Management*, 27(6), 495–511.
29. Matradi, S., & Mounir, Y. (2022). The effect of ISO 9001 certification on financial performance: A systematic review. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 3(2–1), 83–99. <https://doi.org/10.5281/zenodo.6399991>
 30. Molina, L. M., Montes, F. J. L., & Moreno, A. R. (2007). Relationship between quality management practices and knowledge transfer. *Journal of Operations Management*, 25(3), 682–701.
 31. Naveh, E., & Marcus, A. A. (2005). Achieving competitive advantage through implementing a replicable management standard: Installing and using ISO 9000. *Journal of Operations Management*, 24(1), 1–26.
 32. Phan, C. A., Nguyen, M. H., & Luong, H. V. M. (2016). ISO 9000 implementation and performance: Empirical evidence from Vietnamese companies. *International Journal of Productivity and Quality Management*, 18(1), 53–77.
 33. Prajogo, D., & Sohal, A. S. (2012). The integration of TQM and technology/R&D management in determining quality and innovation performance. *Omega*, 30(5), 451–471.
 34. Prajogo, D., Huo, B., & Han, Z. (2016). The effects of different aspects of ISO 9000 implementation on key supply chain management practices and operational performance. *Supply Chain Management*, 21(3), 237–253.
 35. Psomas, E., & Pantouvakis, A. (2015). ISO 9001 overall performance dimensions: An exploratory study. *The TQM Journal*, 27(5), 519–531.
 36. Psomas, E., Pantouvakis, A., & Kafetzopoulos, D. (2010). Quality management initiatives in Greek service organizations: Implementation and impact on performance. *International Journal of Quality & Reliability Management*, 27(10), 1171–1191.
 37. Psomas, E., & Antony, J. (2021). ISO 9001 implementation and service quality: An empirical investigation. *Total Quality Management & Business Excellence*, 32(13–14), 1595–1612.
 38. Romano, P. (2000). ISO 9000: A platform for organizational change. *International Journal of Quality & Reliability Management*, 17(1), 12–31.
 39. Samson, D., & Terziovski, M. (1999). The relationship between total quality management practices and operational performance. *Journal of Operations Management*, 17(4), 393–409.
 40. Sampaio, P., Saraiva, P., & Rodrigues, A. G. (2022). ISO 9001 certification in supply chains: Impacts and value perceptions. *International Journal of Production Economics*, 247, 108428.
 41. Sony, M., Antony, J., & Naik, S. (2020). How do organizational structure and culture affect Industry 4.0 implementation? *International Journal of Production Research*, 58(5), 1505–1520.
 42. Sun, H. (1999). Diffusion and contribution of total quality management: An empirical study in Norway. *Total Quality Management*, 10(3), 345–353.
 43. Texeira, J.; Justino, M.R. (2009). *Certificação de Qualidade versus Resultado da Empresa: Evidência empírica*. XIX Jornadas Hispano Lusas de Gestión Científica. Universidad de Jaén. Baeza. ISBN: 978-84-691-8776-0.
 44. Texeira-Quirós, J., & Justino, M. R. (2010). Quality and performance in SME: The impact of ISO 9001 implementation. *Quality Management Journal*, 17(4), 45–61.
 45. Texeira-Quirós, J., Justino, M. R. (2013). A comparative analysis between certified and non-certified companies through the quality management system. *International Journal of Quality & Reliability Management* (2013) 30 (9): 958–969. <https://doi.org/10.1108/IJQRM-04-2011-0059>
 46. Tsiotras, G. D., & Gotzamani, K. D. (1996). ISO 9000 as an entry key to TQM: The case of Greek industry. *International Journal of Quality & Reliability Management*, 13(4), 64–76.
 47. Wang, S., Sun, M., & Xu, Y. (2024). Knowledge transfer within enterprises from the perspective of innovation quality management: A decision analysis based on the Stackelberg game. *Sustainability*, 16(16), 7018. <https://doi.org/10.3390/su16167018>