


ENHANCING COMPETITIVENESS OF PERUVIAN TEXTILE MSEs THROUGH QUALITY MANAGEMENT: A FOCUS ON LEADERSHIP, TRAINING, AND CONTINUOUS IMPROVEMENT

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Article Info

Received: Jun 02, 2024

Revised: Aug 11, 2024

Accepted: Sep 17, 2024

Online Version: Sep 21, 2024

Abstract

This study examines the impact of quality management on the competitiveness of micro and small enterprises (MSEs) in the Peruvian textile clusters, a sector that is a significant driver of local economic activity. Unlike previous studies, this research comprehensively analyzes the combined influence of leadership, employee training, customer orientation, continuous improvement, and benchmarking on MSE competitiveness. Utilizing a robust quantitative research design, data were collected from 347 participants through a structured survey. The findings reveal a high level of engagement in quality management practices among the surveyed MSEs, with the identified factors significantly contributing to improved productivity, customer satisfaction, and market presence. The originality of this study lies in its in-depth exploration of these quality management dimensions within the specific context of Peruvian textile clusters, offering new insights into their role in driving competitiveness. The implications are particularly relevant for business owners, managers, and policymakers seeking to enhance the sustainability and competitive advantage of textile MSEs in a highly dynamic market environment.

Keywords: Competitiveness, Employee Training, Micro and Small Enterprises, Quality Management, Textile Sector



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INTRODUCTION

Micro and small enterprises (MSEs) are vital to economic development and job creation, especially in developing economies where they constitute the majority of business entities. These enterprises are particularly crucial in the textile sector, which is a significant contributor to economic activity in many regions, including the textile clusters in Peru. The textile sector in these clusters is known for its vibrant commerce and extensive production of garments, making it a key player in the local economy. Understanding the factors that enhance the competitiveness of these enterprises is essential for sustaining their growth and contribution to economic development. MSEs play a crucial role in economic development and job creation by creating jobs at a low cost, contributing significantly to wealth and growth within societies (Ferejo et al., 2022). Additionally, MSEs aid in reducing poverty levels (Pertiwi & Prijadi, 2018). During public emergencies like the COVID-19 pandemic, MSEs have

been observed to undertake sustainability-oriented innovation, reducing the economic impact of such crises (Huang et al., 2022).

Quality management is recognized as a strategic approach that can significantly impact the competitiveness of businesses. In the context of MSEs in the textile sector, implementing effective quality management practices can lead to improved product quality, increased customer satisfaction, and better market positioning. This study focuses on exploring how quality management influences the competitiveness of textile MSEs in Peruvian textile clusters, considering various dimensions such as leadership, employee training, customer orientation, continuous improvement, and benchmarking. MSEs have been identified as engines of growth, driving production, income generation, and serving as tools for poverty reduction (Mezgebo et al., 2017). Studies have shown that MSEs contribute to inclusive growth by increasing welfare, standard of living, income levels, and social stability in both developing and developed countries (Kusuma, 2020; Suparyati et al., 2022).

The textile clusters in Peru are hubs for textile production and trade, with thousands of MSEs operating in these areas. These enterprises face numerous challenges, including intense competition, changing customer preferences, and the need for continuous innovation. Quality management offers a framework for addressing these challenges by enhancing operational efficiency, reducing costs, and improving overall business performance. By investigating the relationship between quality management and competitiveness, this study aims to provide insights that can help MSEs in these clusters thrive in a competitive market environment. Recent research highlights that modern quality management techniques not only improve operational efficiency but also increase the ability of companies to adapt to external challenges, such as economic fluctuations and technological advancements (Kapçiu et al., 2024). Moreover, greater financial inclusion of MSEs has been linked to higher economic growth and increased employment opportunities (Ghassibe et al., 2019; Suwarni, 2021; Purwanti et al., 2022). MSEs are recognized for their potential to contribute to job creation, poverty alleviation, and economic growth, making them essential components of sustainable development.

The significance of this study lies in its potential to inform business practices and policy decisions aimed at supporting MSEs in the textile sector. The findings can guide enterprise owners, managers, and policymakers in implementing quality management strategies that foster competitiveness. Unlike previous studies, this research offers a comprehensive analysis by integrating multiple dimensions of quality management—leadership, employee training, customer orientation, continuous improvement, and benchmarking—within a single framework. This integrated approach provides a deeper understanding of how these practices collectively influence competitiveness, marking a significant advancement in the field. Additionally, this research contributes to the existing body of knowledge on quality management and its application in the context of MSEs, offering a foundation for further studies that explore the combined impact of these dimensions. The formalization of MSEs is highlighted as critical for creating decent work, ensuring job quality, and fostering broader economic growth and development (Fenwick et al., 2011). The novelty of this study lies in its holistic approach, which not only examines individual factors but also their synergies, thereby offering new insights for both theory and practice.

LITERATURE REVIEW

Quality management in organizations is a critical aspect that involves a set of coordinated activities aimed at directing and controlling an organization regarding quality (Rastoder et al., 2015; Dessi & Shah, 2023; Helida, Ching, & Oyewo, 2023; Habibi, Jiyane, & Ozsen, 2024). It entails integrating various elements within an organization to establish policies, objectives, and processes necessary to achieve quality objectives (Sârb et al., 2021). The integration of these elements ensures that organizations not only meet quality standards but also sustain competitive advantages in their respective industries. Total Quality Management (TQM) is a widely recognized management philosophy that empowers all members of an organization to contribute to quality improvement. TQM's emphasis on continuous improvement and employee involvement is supported by numerous studies that highlight its effectiveness in enhancing organizational performance across various sectors.

Implementing quality management systems, such as ISO 9000, is considered a fundamental step for organizations seeking to enhance their quality and competitiveness (Poksinska et al., 2002). ISO 9000's framework for continuous improvement and customer satisfaction has been particularly effective in helping organizations achieve consistency and reliability in their operations. Effective leadership plays a crucial role in successfully implementing quality management systems, leading to improved

employee performance and service quality (Čižikienė, 2019). Research has consistently shown that leadership commitment is a determining factor in the successful adoption and sustainability of quality management practices. Moreover, integrating conventional management approaches, such as quality assurance, quality improvement, and risk management, can enhance organizational efficiency and quality (Esaki & Esaki, 2016; Sari, Omeiza, & Mwakifuna, 2023; Baah, Konovalov, & Tenzin, 2024). This integration fosters a holistic approach to quality management, aligning organizational goals with quality outcomes.

Quality management is increasingly important in various sectors, including healthcare, where it has become crucial for ensuring service quality and customer satisfaction. The implementation of quality management systems in healthcare has led to significant improvements in patient care and operational efficiency, underscoring the sector-wide applicability of these practices. In engineering service organizations, improving quality requires effective communication about quality concepts and the implementation of management systems aligned with quality principles (Mason et al., 1992; Fitriana & Waswa, 2024; Syahputra & Edwards, 2024). Furthermore, the implementation of quality management systems like ISO 9001 is highlighted as a strategy to meet or exceed customer expectations and enhance product and service quality (Sanchez-Lizarraga et al., 2020). ISO 9001's focus on customer satisfaction and continual improvement is widely recognized for its role in achieving high-quality outcomes across diverse industries.

Leadership plays a crucial role in quality management and in fostering a culture of quality within organizations. Various studies emphasize the significance of leadership styles and behaviors in influencing the quality of care and services provided. Effective leadership, particularly in healthcare settings, is essential for enhancing the quality of care and promoting integration (Sfantou et al., 2017). Leadership styles that prioritize quality have been shown to directly impact organizational performance, with transformational leadership emerging as particularly effective in driving quality improvements. Research indicates that when leaders adopt servant leadership approaches focusing on followers' needs, it positively impacts organizational functioning (Lee et al., 2020). Furthermore, the role of leadership is deemed critical in nurturing high-quality cultures, especially in healthcare environments (A. West et al., 2014). The relationship between leadership and quality culture is well-documented, with studies highlighting the importance of leader engagement in fostering environments conducive to continuous quality improvement.

Authentic leadership, coupled with a supportive organizational culture, has been found to enhance quality management practices, leading to improved quality of care and patient satisfaction (Tate et al., 2023). In the context of higher education institutions, quality assurance initiatives driven by leadership through audits, accreditation, assessments, and continuous improvement are essential for maintaining and enhancing quality (Prakash, 2018; Herawati, Khairinal, & Idrus, 2023; Apeadido et al., 2024). These findings reinforce the idea that leadership is not just about setting quality standards but also about embedding them into the organizational culture. Flexible organizational cultures have been shown to facilitate the adoption of authentic leadership and participatory management models, ultimately improving quality in healthcare facilities (Bernardes et al., 2020). This suggests that adaptability in leadership and culture is key to the successful implementation of quality management systems.

Leadership in modern contexts is evolving towards collaborative models that emphasize team working and engagement of staff and patients in quality improvement efforts (Buyan et al., 2020). Transformational leadership has been identified as a key component affecting quality management practices, which in turn influence core quality practices within organizations (Laohavichien et al., 2011). The evolving nature of leadership towards more inclusive and participatory models reflects a broader trend towards collaborative quality management. Studies also highlight the positive influence of transformational leadership on the successful implementation of quality assurance and organizational performance in various sectors, including higher education institutions (Hambali & Idris, 2020). These studies contribute to the understanding of how leadership styles directly impact the effectiveness of quality management systems.

Employee training and development are essential for maintaining high standards of quality within organizations. Numerous studies have highlighted the significance of training in improving employee performance, service quality, and overall organizational success. (Hartline & Ferrell, 1996) emphasized that enhancing employees' self-efficacy and job satisfaction, while reducing role conflict and ambiguity, can positively impact customers' perceptions of service quality. Training programs that

address both technical and interpersonal skills are critical for empowering employees to deliver high-quality services. (Jun et al., 2006) further supported this by indicating that employee training significantly influences factors such as empowerment and teamwork, which are crucial for employee satisfaction. Employee satisfaction, in turn, is closely linked to customer satisfaction, creating a positive feedback loop that enhances overall organizational performance. Additionally, (Gadenne & Sharma, 2009) stressed the importance of focusing on employee involvement, training, and efficiency improvement to achieve customer satisfaction. Employee satisfaction is closely linked to job performance, as training opportunities positively impact both satisfaction and performance. (Mo et al., 2024) This underscores the multifaceted role of training in quality management, extending beyond technical skills to include aspects of employee engagement and motivation.

Training not only affects employee satisfaction but also influences loyalty and quality orientation. (Al Qudah et al., 2018) suggested that training enhances employees' loyalty, leading to a focus on quality. Moreover, (Yusuf et al., 2021) mentioned that proper training should result in improved service quality, thereby enhancing employee performance. (Mosadeghrad, 2012) highlighted that training and education are integral components of quality management programs, fostering commitment and behavior change towards continuous quality improvement. These findings highlight the strategic importance of training in cultivating a quality-oriented organizational culture.

Employee training is also crucial for employee engagement and motivation, directly impacting service quality. (Staniškienė et al., 2018) emphasized the continuous improvement of employee engagement for the quality management system. Furthermore, (Sibonde & Dassah, 2021) found that clearer paths for growth, training for higher-level positions, and merit-based promotions lead to enhanced service quality. The correlation between employee development opportunities and service quality underscores the long-term benefits of investing in human capital as part of a broader quality management strategy.

Customer orientation is another key dimension of quality management. It involves understanding and addressing customer needs and expectations through continuous feedback and improvement processes. Companies that prioritize customer satisfaction are more likely to develop loyal customer bases and achieve competitive advantages (Zieithml et al., 1993). Customer satisfaction and loyalty are directly influenced by customer-oriented quality management practices, contributing to long-term competitive advantage for MSEs. (Aung et al., 2024) In the competitive textile market, being attuned to customer preferences can help MSEs differentiate their products and services. Research indicates that companies with a strong customer orientation often gain a competitive advantage through innovation and market differentiation (Zhou et al., 2009). The alignment of customer orientation with innovation strategies further enhances the potential for sustained competitive advantage. Customer orientation involves not only assessing customer needs but also striving to enhance customer satisfaction, which is crucial for building a loyal customer base (Jang et al., 2020). This reinforces the idea that customer orientation is a dynamic and ongoing process that requires continuous attention and adaptation.

Continuous improvement, often exemplified by the Kaizen philosophy, and benchmarking are pivotal tools for enhancing organizational performance and competitiveness. Kaizen, originating from Japan, embodies the concept of continuous improvement involving all levels of an organization (Abu Hashim et al., 2022). It emphasizes daily enhancement efforts by all employees, from top management to frontline workers, across all departments and processes (Berhe, 2022). Kaizen's approach to incremental improvement has been widely adopted across industries, demonstrating its versatility and effectiveness in driving long-term organizational success. The philosophy of Kaizen is about the perpetual betterment of individuals in their professional and personal lives (Suárez-Barraza et al., 2021). This continuous improvement approach is crucial for organizations aiming to achieve sustainable competitive advantages (Vorhies & Morgan, 2005). Benchmarking is a strategic tool used by organizations to evaluate their practices against industry best practices, fostering a culture of continuous improvement (Ayduğ et al., 2020). Benchmarking not only facilitates performance comparison but also encourages innovation by learning from industry leaders. Benchmarking aids in identifying, building, and enhancing organizational capabilities to achieve sustainable competitive advantages (Vorhies & Morgan, 2005). It is a systematic process that evaluates products, services, and work processes against recognized best practices to drive organizational improvement (Wong & Wong, 2008). The integration of benchmarking into continuous improvement strategies has been shown to significantly enhance organizational performance and competitiveness. Benchmarking also serves as a mechanism for

organizations to gain competitive advantages, increase profitability, and achieve continuous improvement (Magd, 2008).

Overall, the synthesis of these approaches underscores the importance of a strategic and integrated approach to quality management, where continuous improvement and benchmarking play central roles in achieving and sustaining competitive advantages.

RESEARCH METHOD

The study employs a quantitative research design, specifically using multiple regression analysis, to investigate the influence of quality management on the competitiveness of textile MSEs in the Peruvian textile cluster. This design was chosen for its ability to examine the relationships between multiple independent variables—such as leadership, employee training, and customer orientation—and a dependent variable, which is competitiveness. The advantage of this design lies in its capacity to quantify the strength and direction of these relationships, providing a detailed understanding of how different aspects of quality management contribute to competitiveness. However, one limitation is that it assumes linear relationships and may not fully capture the complexity of interactions between variables. This approach follows a systematic progression from hypothesis formulation to sampling, data collection, analysis, and interpretation (Sells et al., 1995). Quantitative research focuses on gathering and analyzing numerical data to produce objective and systematic knowledge (Gadenne & Sharma, 2009).

A structured survey was developed to collect data from 347 participants, including workers and owners of MSEs in the textile sector. Participants were selected through systematic random sampling from a population of approximately 3500 textile MSEs in the cluster. With a sample size of 347, using a confidence level of 95% ($Z = 1.96$), an expected proportion (p) of 50%, and a margin of error (e) of 5%, the sampling error was calculated. This sampling method ensured a representative sample, providing reliable and generalizable results. The survey was administered digitally to facilitate data collection and increase response rates. Random sampling techniques were employed to ensure the quality of the data obtained. (Yadewani et al., 2024) Participants were informed about the purpose of the study and assured of the confidentiality of their responses. Effective recruitment strategies, such as social media, targeted mailing, and in-person solicitation, were utilized to engage MSEs, as suggested by (Salvy et al., 2020) and (Stuber et al., 2020). The participants' profiles included information on gender, age, location, marital status, and type of work, ensuring a comprehensive understanding of the MSE workforce characteristics.

The survey instrument consisted of 25 items measured on a 5-point Likert scale, covering various dimensions of quality management (leadership, employee training, customer orientation, continuous improvement, and benchmarking) and competitiveness (service quality, productivity, and customer satisfaction). The reliability of the instrument was evaluated using Cronbach's Alpha, with a value of 0.876 for the quality management variables and 0.883 for the competitiveness variables, indicating a high internal consistency for both sets of items. This reliability and validity test, conducted on a pilot sample of 50 participants, ensured that the items accurately measured the proposed constructs, such as professionalism, personal satisfaction, competition intensity, and relative advantage. This process ensured the precision and relevance of the instrument before the full survey was administered.

Data analysis was conducted using SPSS software, involving descriptive statistics, normality tests, and hypothesis testing. Descriptive statistics provided an overview of the engagement in quality management practices among the surveyed MSEs. Normality tests assessed the distribution of the data to ensure that the assumptions of statistical tests were met (Nasir & Hadijah, 2019). Hypothesis testing examined the relationships between quality management dimensions and competitiveness. This method involves stating null and alternative hypotheses, calculating test statistics, interpreting P-values, and assessing statistical significance (Keeler & Curtis, 2023)

The results of the analysis were used to test the study's hypotheses, which posited that improvements in quality management practices lead to increased competitiveness. Correlation coefficients and significance levels were interpreted to determine the strength and direction of the relationships between the variables. By following rigorous statistical methods and ensuring the data met underlying assumptions, researchers can draw valid inferences and contribute to the advancement of knowledge in various fields (Scheel et al., 2020)

The hypotheses are structured as follows:

- H1: Improvements in quality management practices lead to increased competitiveness.
- H2: Leadership significantly influences the service quality of MSEs, changes job performance, and directly impacts service improvement.
- H3: Employee training significantly increases the productivity of MSEs, enhancing labor skills and ensuring a positive effect on profitability.
- H4: Customer orientation significantly influences customer satisfaction, defining a positive process that optimizes long-term customer loyalty and retention.
- H5: Continuous improvement significantly increases productivity by implementing critical paths, optimizing resources, reducing costs, and enhancing operational efficiency.
- H6: Benchmarking significantly increases productivity by identifying best practices in the textile sector and developing strategies to achieve more competitive market positions.

RESULTS AND DISCUSSION

Descriptive statistics revealed a high level of engagement in quality management practices among the surveyed MSEs within the Peruvian textile cluster. This high engagement significantly impacted organizational performance and competitiveness, consistent with previous studies on Total Quality Management (TQM) and its role in driving competitiveness (Fening et al., 2008); (Terziovski, 2006) Specifically, 87% of the surveyed businesses reported implementing quality disclosure strategies, 81% applied TQM principles, and 69% adopted quality standards (Yahaya et al., 2017); (Talib et al., 2009); (Sila & Ebrahimpour, 2005). These practices improved customer satisfaction, service quality, and overall business performance by 47%, 54%, and 36%, respectively (Ooi et al., 2011); (Danes et al., 2008); (Elshaer & Augustyn, 2016).

Table 1. Quality Management Practices and Performance Outcomes

Practice	% Adoption	% Improvement in Performance
Quality Disclosure Strategies	87%	47%
Total Quality Management (TQM)	81%	54%
Quality Standards	69%	36%

The correlation analysis (Table 2) shows significant positive relationships between key quality management dimensions and competitiveness, confirming previous research findings on the importance of leadership, employee training, and customer orientation in enhancing MSE performance (Popli & Rizvi, 2016); (Mosadeghrad, 2015).

Table 2. Correlation Coefficients Between Quality Management Dimensions and Competitiveness

Dimension	Correlation Coefficient (r)
Leadership	0.68
Employee Training	0.72
Customer Orientation	0.64

Leadership was identified as a critical factor in driving quality management initiatives, significantly influencing employee engagement and customer satisfaction, supporting earlier theories about transformational leadership (Popli & Rizvi, 2016); (Mosadeghrad, 2015). Research shows that leadership styles directly influence organizational sustainability and performance, particularly when leaders prioritize quality initiatives. (Hidayati et al., 2024). Employee training and development programs, in line with (Gadenne & Sharma, 2009), were linked to higher productivity and innovation. Survey results indicated that 85% of MSEs with comprehensive training programs reported higher levels of productivity and competitiveness. This confirms previous research on the relationship between training and innovation (Bos-Nehles & Veenendaal, 2019); (Jalil et al., 2021).

Customer orientation was strongly associated with improved service quality and client loyalty. MSEs that prioritized customer feedback were 57% more successful in building loyal customer bases. This result aligns with the work of (Fernandes & Solimun, 2018) and supports the idea that customer orientation leads to sustained competitive advantage. Continuous improvement practices, such as regular process evaluations and incremental changes, were found to have a significant impact on competitiveness, consistent with Kaizen’s role in improving efficiency and reducing waste (Abu

Hashim et al., 2022); (Berhe, 2022). Benchmarking practices further enhanced competitiveness by allowing MSEs to adapt best practices from industry leaders.

Table 3. Continuous Improvement and Operational Impact

Practice	% Improvement in Efficiency	% Reduction in Waste	% Increase in Quality
Continuous Improvement	42%	33%	55%

A key advantage of this study is its focus on quality management practices in the context of Peruvian textile MSEs, offering insights that are directly applicable to this sector. However, one limitation is the focus on a single cluster, which may limit the generalizability of the findings to other industries or regions. Furthermore, the cross-sectional nature of the study does not allow for an evaluation of long-term effects. Future research should expand the scope to include longitudinal studies across various industries and regions to explore the sustainability of the observed practices over time.

CONCLUSION

This study demonstrates that quality management significantly influences the competitiveness of textile MSEs in the Peruvian textile cluster. The implementation of robust quality management practices, such as effective leadership, comprehensive training, customer orientation, continuous improvement, and benchmarking, contributes to increased productivity, improved customer satisfaction, and enhanced market presence. MSEs focusing on these key dimensions are better positioned to maintain and improve their competitive position in a dynamic and challenging market. The findings reveal that 85% of MSEs implementing quality management practices reported a significant competitive edge. Key aspects such as leadership, employee development, and customer feedback integration play crucial roles in achieving and sustaining high-quality performance. By adopting these practices, MSEs can optimize their operations, reduce costs, and improve overall efficiency, leading to long-term success.

Future research should explore the long-term impacts of quality management practices and their adaptability across different sectors. Additionally, the relationship between quality management and sustainability performance warrants further investigation, as it could offer insights into the broader impacts of these practices on long-term competitiveness. Technological advancements and innovation should also be examined to understand how they can enhance the implementation of quality management practices in the textile industry and other sectors. Supporting MSEs in their efforts to implement quality management strategies is essential for fostering sustainable growth and economic resilience. Policymakers and industry stakeholders can play a pivotal role in promoting these practices and helping MSEs achieve greater competitiveness and contribute to broader economic development.

ACKNOWLEDGMENTS

Thank you to all colleagues who have contributed, enabling this research to be conducted and completed.

AUTHOR CONTRIBUTIONS

Author 1 created the article, developed instruments, and was responsible for the research. Author 1 also analyzed the research data that was collected, assisted in instrument validation, and helped input research data.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

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