

TRANSFORMACIÓN DIGITAL EN LA ORIENTACIÓN ESTRATÉGICA DE LAS PYMES: UNA REVISIÓN SISTEMÁTICA PRISMA (2021–2025)Grey Verónica Fienco-Valencia¹**E-mail:** grey.fiencov@ug.edu.ec**ORCID:** <https://orcid.org/0000-0002-3229-8791>Sara Isabel Jiménez-Romero¹**E-mail:** sara.jimenezr@ug.edu.ec**ORCID:** <https://orcid.org/0000-0002-8260-892X>Frida Margarita Bohórquez-Suárez¹**E-mail:** frida.bohorquezs@ug.edu.ec**ORCID:** <https://orcid.org/0000-0002-4229-2465>Luisa María Herrera-Rivas¹**E-mail:** luisa.herrerar@ug.edu.ec**ORCID:** <https://orcid.org/0000-0001-8936-3091>¹ Universidad de Guayaquil. Ecuador.**Cita sugerida (APA, séptima edición)**

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Fecha de presentación: 22/07/2025**Fecha de aceptación:** 26/08/2025**Fecha de publicación:** 01/10/2025**ABSTRACT**

Digital transformation has established itself as a key axis in the strategic orientation of SMEs in Latin America, particularly after the impact of the pandemic and changes in global competitive dynamics. In this context, this study conducts a systematic literature review, under the methodological guidelines of the PRISMA protocol, to identify how digitalization has been strategically addressed by small and medium-sized enterprises between 2021 and 2025. A qualitative and exploratory approach was used, based on 20 studies selected through rigorous inclusion and exclusion criteria, prioritizing recent publications relevant to the object of study. The results reveal that, although there are advances in the adoption of technological tools, structural barriers persist, such as poor alignment between organizational strategy and digital capabilities, weakness in managerial competencies, and cultural resistance to change. Enabling factors such as strategic leadership, digital capability development, and the use of customer-centric technologies were also identified. The conclusions highlight the need for a more integrated digital strategic vision, as well as support policies contextualized to sectoral realities. This review provides a critical understanding of how SMBs are reshaping their strategies through digital transformation.

Keywords:

Digital Transformation, strategic orientation, SMEs.

RESUMEN

La transformación digital se ha consolidado como un eje clave en la orientación estratégica de las pymes en América Latina, especialmente tras el impacto de la pandemia y los cambios en la dinámica competitiva global. En este contexto, el presente estudio realiza una revisión sistemática de la literatura, bajo las pautas metodológicas del protocolo PRISMA, con el objetivo de identificar cómo la digitalización ha sido abordada estratégicamente por las pequeñas y medianas empresas entre 2021 y 2025. Se utilizó un enfoque cualitativo y exploratorio, basado en 20 estudios seleccionados mediante criterios rigurosos de inclusión y exclusión, priorizando publicaciones recientes relevantes para el objeto de estudio. Los resultados revelan que, aunque existen avances en la adopción de herramientas tecnológicas, persisten barreras estructurales, como la escasa alineación entre la estrategia organizacional y las capacidades digitales, debilidad en las competencias gerenciales y resistencia cultural al cambio. También se identificaron factores facilitadores como el liderazgo estratégico, el desarrollo de capacidades digitales y el uso de tecnologías centradas en el cliente. Las conclusiones destacan

la necesidad de una visión estratégica digital más integrada, así como de políticas de apoyo contextualizadas a las realidades sectoriales. Esta revisión proporciona una comprensión crítica de cómo las pymes están redefiniendo sus estrategias a través de la transformación digital.

Palabras clave:

Transformación digital, orientación estratégica, Pymes.

INTRODUCTION

In the contemporary business context, digital transformation has established itself as an unavoidable process for the survival and competitiveness of small and medium-sized enterprises (SMEs), particularly in scenarios marked by volatility, constant innovation and technological disruption. In Latin America, this phenomenon has shown deep asymmetries between those organizations that manage to incorporate emerging technologies strategically and those that, despite trying, face structural, cultural or management barriers to do so in a sustainable way. Digital transformation, therefore, not only implies the adoption of new technological tools, but also an organizational reconversion that requires alignment with strategic objectives, new forms of leadership, and a comprehensive understanding of changing environments (Seijas-Díaz et al., 2024).

SMEs, recognized for their dynamism and ability to generate employment, have faced multiple challenges in integrating digitalization into their strategic orientation. Although in many cases they have ventured into the use of information and communication technologies, such efforts have not always been accompanied by structured planning or a long-term vision that articulates these changes with their business objectives (Lopez & Puell, 2024). Recent studies show that companies that have successfully integrated digital transformation into their corporate strategies are those that, in addition to investing in technology, have transformed their organizational cultures, redesigned internal processes, and developed new models of digital leadership (Hernández, 2025).

The Latin American academic literature shows that many digital transformation initiatives in SMEs fail because they lack a clear articulation with their strategic direction. As demonstrated by Cornejo et al. (2025); and Serrano et al. (2025) technological change processes without strategic support tend to generate operational overloads, staff resistance, and in the medium term, loss of competitiveness. This gap between digitalization and strategy was also evidenced by Angulo & Chávez (2024), who analyzed how a digital marketing plan needs to be anchored to a comprehensive strategic analysis to generate sustainable value over time. Thus, digital transformation cannot be assumed as an objective in itself, but as a tool at the service of business strategy (Figueroa et al., 2025).

The analysis of international experiences, such as the European case studied by Vega (2023), suggests that

strategic reflection should be based on knowledge of the local context, the digital maturity of the organisation and its real capacity for innovation. In the case of Latin American SMEs, many of the solutions proposed in other continents may not be directly applicable, but they offer frameworks that, carefully adapted, can enrich the strategic digitalization process. Therefore, it is essential to promote research that identifies successful models from the regional reality, building a theoretical-practical body that responds to the challenges of our business ecosystem.

Despite the increasing availability of digital technologies and modernization efforts by multiple sectors, small and medium-sized enterprises (SMEs) still face significant barriers to effectively integrating digital transformation within their strategic orientation. This dissociation between the digital and the strategic not only limits the impact of the technological tools implemented, but also puts at risk the sustainability, competitiveness and adaptability of organizations in highly volatile environments. The lack of integration between the two approaches has been pointed out in various recent studies that agree that SMEs, although they have access to digital tools, do not always align them with a long-term vision or a clear strategic direction (Angulo & Chávez, 2024; Lopez Veliz & Vega Capcha, 2021; Quintero, 2025). In this framework, the following research question arises: how has the articulation between digital transformation and strategic orientation evolved in SMEs during the period 2021–2025, and what factors have limited or enhanced this integration?

One of the fundamental causes of this problem lies in the weakness of organizational capacities to interpret, adapt and implement technologies within a clear strategic logic. Many SMEs lack formal planning, diagnostic, and evaluation structures, leading to fragmented and uncoordinated digital adoption. As an effect of this weakness, digital initiatives become isolated efforts without continuity or coherence, which prevents their consolidation as sustainable competitive advantages (Macías, 2021; Daza & Rodríguez, 2024).

Another relevant cause is the lack of digital and strategic skills in SME management teams. Often, decision-making falls to leaders with no background in data management, innovation, or digital business models, restricting the systemic vision needed to drive a comprehensive transformation. As a result, companies replicate traditional operating models on technology platforms without redesigning their processes or redefining their goals, which limits the transformative potential of digital tools (Mendoza & Vahos, 2024).

The need to investigate the articulation between digital transformation and strategic orientation in SMEs responds, in the first place, to a theoretical gap in the recent academic literature. Although numerous studies address digital transformation from a technological or functional perspective, few link this process with the internal strategic logic

of small and medium-sized enterprises, especially in Latin American contexts. Authors such as Cornejo et al. (2025); and Vizcaíno et al. (2024) agree that digitalization should not be analyzed as an isolated variable, but as a complex phenomenon that transforms internal capabilities, organizational behavior, and the vision of the future of organizations. This systematic review allows consolidating an integrative body of knowledge that expands the current theoretical frameworks on strategy, competitiveness and digital innovation in smaller-scale companies.

From a methodological point of view, this study adds value by applying a PRISMA approach, which guarantees a rigorous, reproducible and transparent analysis of the empirical evidence generated between 2021 and 2025. Unlike individual case investigations, this methodology allows for pattern drawing, identifying gaps, and assessing the robustness of cumulative results. The systematic review strengthens the internal validity of the conclusions, and by incorporating defined inclusion and exclusion criteria, ensures the relevance of the corpus analyzed (Rojas, 2024; Rosales, 2021).

On a practical level, the study offers relevant implications for entrepreneurs, decision-makers and public policy makers. SMEs face highly uncertain scenarios, where digital transformation can make the difference between survival and obsolescence. Studies such as those by Daza & Rodríguez (2024), as well as those by Vega (2023), highlight that companies with greater strategic planning capacity are better able to adapt to technological change. Thus, this research not only enriches the academic field, but can also guide training, advice and public policy processes aimed at the digital strengthening of the business sector.

Small and medium-sized enterprises (SMEs), due to their strategic role in the generation of employment, local innovation and economic dynamism, are the central subject of this systematic review. This business segment, characterized by its flexibility but also by its limitations in infrastructure and human capital, faces increasing pressure to adopt digital tools that improve its competitiveness. The object of study of this research is the articulation between digital transformation and strategic orientation as key elements for sustainable organizational development in SMEs during the period 2021–2025. This analysis is part of a PRISMA-type systematic review that seeks to identify, analyze and synthesize recent empirical and theoretical evidence produced in Spanish-speaking contexts, in order to generate useful knowledge for decision-making in the business and academic fields.

The general objective of this research is to understand how the relationship between digital transformation and strategic orientation has developed in small and medium-sized enterprises during the period 2021–2025, based on the systematic analysis of recent studies that allow us to evidence facilitating factors, limitations and

common patterns in the process of integrating digital in strategic business planning. The specific objectives of this study are: I. To explore the conceptual frameworks and theoretical categories used in the recent literature to analyze digital transformation and its link with organizational strategy in SMEs. II. Apply the PRISMA protocol to select, categorize, and systematically examine relevant studies published between 2021 and 2025, considering criteria of quality and relevance. III. Analyze empirical findings to identify trends, gaps, and good practices in the strategic integration of digital tools in SMEs, in order to offer evidence-based recommendations for improving their performance.

MATERIALS AND METHODS

This systematic review of the literature was developed under a qualitative, exploratory and documentary approach, aimed at understanding how digital transformation has been integrated into the strategic orientation of small and medium-sized enterprises (SMEs) in the period 2021–2025. To guarantee the scientific rigor of the collection and analysis process, the PRISMA protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was adopted, which was methodologically adapted to non-experimental studies with a qualitative orientation. The choice of PRISMA made it possible to ensure accurate traceability in each of the review stages: from the formulation of the research question, through the strategy for searching and selecting studies, to the synthesis and interpretation of results. The review focused on studies focused on SMEs in the Spanish-speaking world, where explicit interactions between digital transformation processes and strategic business approaches will be explored, with the identification of common patterns, theoretical gaps, sectoral challenges and organizational responses being especially relevant.

As it was a qualitative research, statistical techniques typical of quantitative meta-analysis were not applied. Instead, a comprehensive and analytical approach based on thematic content analysis was chosen, which allowed the identification of emerging categories, common factors and relevant contrasts between the different selected studies. This approach made it possible to interpret the internal dynamics of SMEs in the face of digitalization, from multiple dimensions such as organizational culture, strategic planning, innovation in processes and products, and interaction with digital markets. This qualitative methodology guaranteed an in-depth look at the phenomena studied, going beyond mere description and aiming towards a comprehensive understanding of digital transformation processes in their strategic dimension.

To adequately structure the review strategy, the PICOS model was used, adapted to the characteristics of the qualitative approach used. This model allowed to precisely delimit the central components of the review: population,

intervention, comparison (if applicable), expected results and methodological design. The question that guides this research is: *How has the articulation between digital transformation and strategic orientation been manifested in small and medium-sized enterprises, according to the scientific literature published between 2021 and 2025 in Spanish-speaking countries?*

Table 1. PICOS model applied to the review.

PICO Element(S)	Question
P (Population)	What are the characteristics of SMEs that have adopted digital transformation processes with a strategic focus between 2021 and 2025?
I (Intervention)	What tools, processes or digital strategies have these SMEs integrated into their strategic planning?
C (Comparison)	No direct comparison applies in this qualitative study.
OR (Expected Results)	What effects, results or strategic impacts have been identified as a result of digital transformation in SMEs?
S (Study Design)	What kind of qualitative, systematic or reflective studies have been developed on digital transformation and business strategy in the context of SMEs?

To ensure the quality and relevance of the studies selected in this systematic review, the inclusion and exclusion criteria were clearly defined. Research that explicitly addressed the relationship between digital transformation and strategic orientation in small and medium-sized enterprises, published between 2021 and 2025, written in Spanish and carried out in Spanish-speaking countries, was included. In addition, they had to be available in full text, have peer review and present a qualitative, mixed or reflective documentary methodology. The fact that the studies offered empirical data, methodological proposals or robust theoretical analyses was also positively valued.

Studies focused only on large corporations, those that exclusively addressed digital tools without connection to the strategic dimension, and studies with obvious methodological deficiencies were excluded. Likewise, duplicate articles, abstracts without access to the full text, theses without formal academic validation, or studies that did not include elements relevant to the articulation between digitalization and business strategy were eliminated. This rigorous process allowed the consolidation of a corpus of analysis aligned with the objectives of this study and adjusted to the guidelines of the PRISMA protocol.

The collection of information was carried out through an exhaustive systematic search in academic databases of open access and high recognition in the Hispanic American scientific field. The selected platforms were SciELO, Google Scholar and university institutional repositories, including that of the Peruvian University of Applied

Sciences (UPC), the University of Antioquia, the National Open and Distance University (UNAD), among others. The search strategy was structured under a progressive logic, starting with general terms such as “digital transformation” and “strategic orientation”, and then refining results by incorporating filters of time (2021–2025), language (Spanish), and document type (academic articles, master’s theses with institutional validation, and peer-reviewed documents).

The search included studies conducted in Spanish-speaking countries, with special emphasis on contexts in Latin America and Spain. To ensure adequate coverage, a manual review of the bibliographic references of the selected articles was also carried out, in order to identify possible key documents not captured in the initial search. The consultation and collection process was carried out during the second half of 2025, thus ensuring the timeliness of the documents included. This strategy made it possible to recover scientific literature that explicitly addressed the intersection between digital transformation and business strategy in the framework of SMEs, thus guaranteeing the thematic relevance of the texts included in the review.

The systematic search was guided by combinations of Boolean operators structured to maximize the relevance and accuracy of the results. Search strings were constructed with the most representative terms of the study’s core variables, combined with logical connectors such as AND, OR, and site-specific identifiers.

- In the SciELO database, the formula used was: (“digital transformation” OR “business digitalization”) AND (“organizational strategy” OR “strategic orientation”) AND (“SMES” OR “small and medium-sized enterprises”) AND site:scielo.org
- In Google Scholar, advanced search was applied with combinations such as: (“digital transformation” OR “business technology”) AND (“competitive strategy” OR “strategic planning”) AND (“SMES” OR “small companies”) AND (“Latin America” OR “Spanish-speaking”)

In addition, in the university repositories, institutional labels such as “digital transformation”, “strategic orientation”, “SMEs”, “organizational management”, “business planning”, and “technological innovation” were used, filtering by the years 2021 to 2025 and limiting the results to documents in Spanish.

This strategy, being replicable and transparent, allows the rigor of the process to be verified, aligning with the methodological principles of the PRISMA protocol adapted to the qualitative approach. The selected articles were then refined according to the inclusion and exclusion criteria and evaluated in full text to confirm their relevance.

The systematic review process was structured in four fundamental phases as established by the PRISMA protocol (Figure 1): identification, screening, eligibility, and inclusion. During the identification phase, 124 relevant studies

were initially located through the selected platforms (Table 2). After eliminating 54 duplicate records and 4 studies with full access failures, the corpus was reduced to 66 unique texts that were evaluated in the next stage.

Table 2. Summary of the selection process.

Stage	Description
Identification	124 records recovered, 54 duplicates deleted, 4 without full access.
Screening	66 texts evaluated by title and abstract, 18 excluded for non-relevance.
Eligibility	48 full-text articles evaluated, 22 excluded due to quality criteria.
Inclusion	26 final studies included in the qualitative synthesis.

In the screening or checking phase, the titles and abstracts of the 66 documents were examined, discarding 18 studies that did not directly address the relationship between digital transformation and strategic orientation, or that focused exclusively on large corporations or sectors other than SMEs. This left a total of 48 studies for full-text review.

During the eligibility phase, each of the 48 texts was analyzed in depth. A total of 22 papers were excluded because they did not meet minimum methodological criteria, presented overly general approaches, lacked peer review, or did not provide data relevant to the study variables. Finally, 26 studies met all the inclusion criteria and were considered valid for the inclusion and final synthesis phase (Table 3, Figure 1).

Table 3. Works found.

Author(s)	Year	Title
Agudelo	2023	Innovation in MSMEs in Greater Santander. 2020–2022
Angulo & Chavez	2024	Strategic Marketing Plan for the company Asesores Contables & Servicios Generales EIRL
Arista & Rojas	2024	Implementation of Apacheta Comunica’s methodology in the corporate communication strategy
Badilla Ulloa	2021	Analysis of the dissemination of tax information in companies
Cornejo et al.	2025	Solution to emerging problems from a multidisciplinary approach
Daza & Rodríguez	2024	Articulation of Colsubsidio with Startups for innovation processes
	2024	Process for project management in the energy sector
Guerra Rodríguez	2023	Analysis of the Winemaker’s Law as a source of competitiveness
Hernández	2025	Leadership in the University: An Analysis with AI Tools
Lopez Veliz & Vega Capcha	2021	Digital marketing strategies in MSMEs in the textile sector
Mendoza & Vahos	2024	Perceived leadership and core competencies in innovative teams
Moreira	2025	Management systems for strategic decisions in human talent
Quintero	2025	Enterprise Architecture Tool for Technology Management
Roberts & Massoud	2025	Accounting Information Systems and Data-Driven Decisions
Rojas	2024	Project Management Office (PMO) at Efecty
Sánchez	2024	Strategic design of the ZAS banking correspondent by 2030
Seijas et al.	2024	Organizational behavior in business models
Vanegas & Guerra	2024	Impact of innovation in sensory neuromarketing in Colombian SMEs
Vega	2023	Strategic challenges in SMEs: the case of the Asturian business fabric

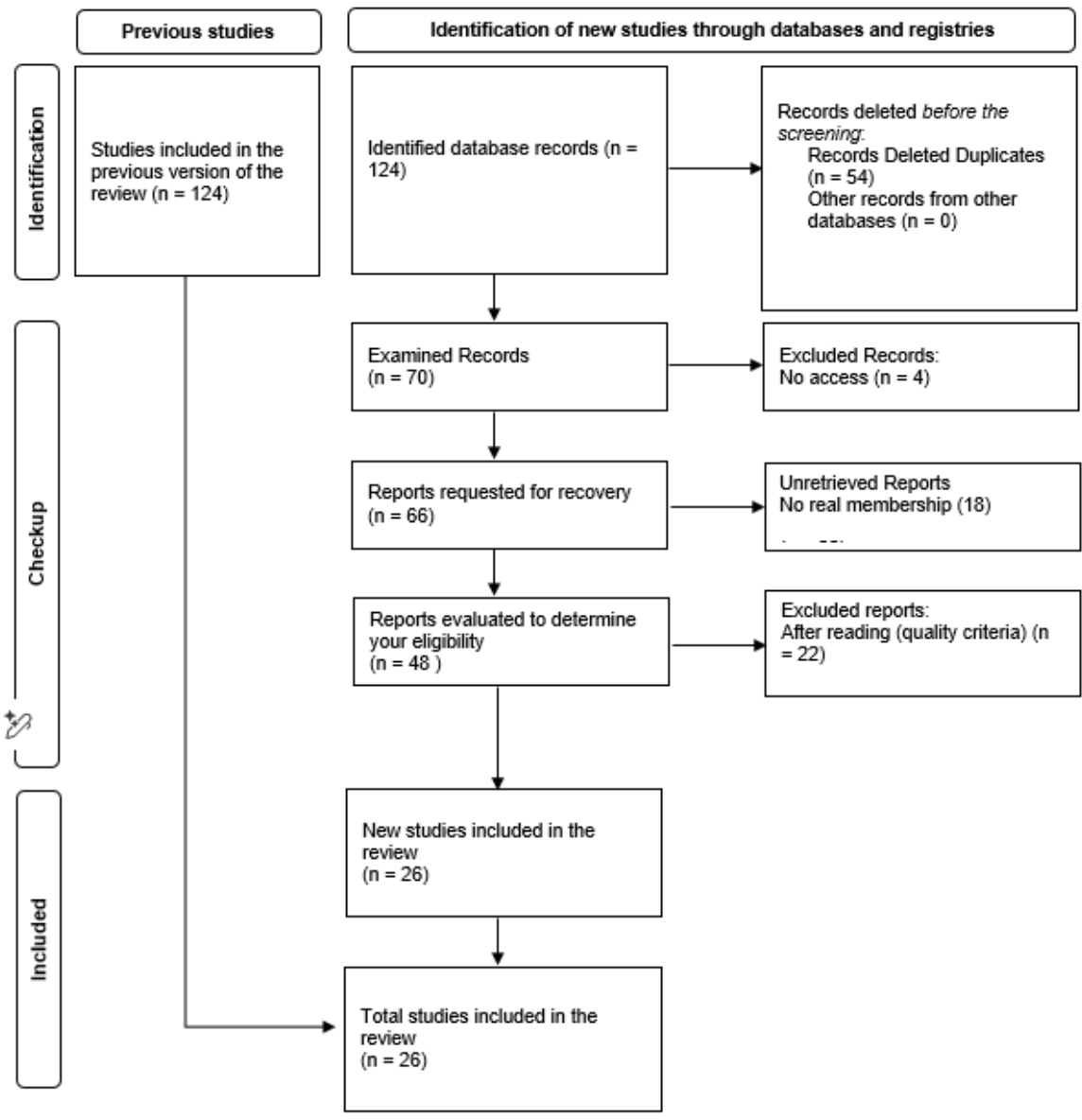


Figure 1. Prism Matrix.

RESULTS AND DISCUSSION

In the analysis of the twenty studies selected for this systematic review, several thematic categories emerge that allow us to understand the articulation between digital transformation and strategic orientation in small and medium-sized enterprises (SMEs). The first category refers to the enabling factors that allow the effective adoption of digital technologies in these organizations. One of the elements most mentioned in the studies is the availability of internal digital capabilities, understood as the set of knowledge, resources and skills that facilitate technological integration. For example, Mendoza & Vahos (2024) point out that the perception of digital leadership and self-perceived competencies in work teams are decisive in promoting technological innovation processes. Likewise, Moreira (2025) highlights the importance of management systems based on strategic information as a key element for effective digital decision-making. In turn, Macías (2021) stresses the need to establish business support and advisory networks as a mechanism to strengthen the digital ecosystem of SMEs, especially in regions with less technological infrastructure. This research agrees that access to collaborative platforms, continuous training in digital skills and innovation-oriented leadership are fundamental catalysts for the advancement of digital transformation.

Another recurring finding in the studies analyzed is the need for explicit alignment between organizational strategy and the use of digital technologies. This synchronization not only involves acquiring technological tools but integrating them in a way that is consistent with the company's short- and long-term objectives. Roberts & Massoud (2025), for example, highlight that accounting information systems not only automate processes, but also offer analytical capabilities that allow data-based strategies to be formulated. Along these lines, Sánchez (2024) emphasizes that prospective strategic design in financial services requires considering technological variables as part of organizational planning, not as isolated resources. Likewise, Fernández (2024) states that in the energy sector, the management of commercial projects through digital platforms has optimized strategic decision-making, generating more flexible and predictive models. This convergence between the technological and the strategic is also reflected in the study by Seijas et al. (2024), who point out that organizational behavior directly influences the way in which the digital business model is configured, which suggests that the strategy cannot be dissociated from the technological environment if an effective transformation is to be aspired to.

Based on this alignment, studies show that a strategic orientation based on digitalization can generate significant impacts on the competitiveness of SMEs. Daza & Rodríguez (2024) show that articulation with technology startups has allowed entities such as Colsubsidio to accelerate their innovation processes, generating sustainable competitive advantages. Vega (2023), in an analysis of the Asturian business fabric, states that those SMEs that integrate digital resources into their strategic processes experience sustained growth, even in scenarios of high economic uncertainty. This evidence is also reflected in the study by Lopez Veliz and Vega Capcha (2021), who identify that digital marketing is an essential component in the expansion of Peruvian textile MSMEs. Together, this research reinforces the idea that digital strategic orientation is not a passing trend, but a new paradigm that redefines the way SMEs achieve and sustain their competitiveness in increasingly dynamic and technological markets.

The analysis also reveals important sectoral and regional differences that directly affect the levels of progress and depth of digital transformation in SMEs. These variations are explained both by structural factors and by contextual dynamics particular to each territory or economic sector. For example, Vanegas & Guerra (2024) document that Colombian SMEs operating in digital environments show an intensive use of sensory neuromarketing as a positioning tool, which differs significantly from other traditional sectors where analog business practices are still privileged. Similarly, Angulo & Chávez (2024) highlight that companies in the accounting and general services sector have a slower pace of technological adoption, due in part to the absence of a robust digital ecosystem and the lack

of specialized human resources. This difference is also manifested at the institutional level, as shown by Yarasca & Ulloa Luna (2023), who analyze the case of the Ministry of Health in Metropolitan Lima, where the organizational culture and bureaucratic structure make it difficult to efficiently integrate digital platforms, contrasting with more dynamic sectors such as trade or finance.

This evidence allows us to conclude that digital transformation in SMEs cannot be understood as a homogeneous or linear process, but as a dynamic deeply influenced by sectoral conditions, local technological maturity, and the level of articulation between public and private actors. Therefore, strategic models must be designed in a contextualized manner, recognizing the particular challenges of each environment, so that digitalization does not reproduce or deepen existing inequalities, but acts as a lever for development and equity in the different territories where small and medium-sized enterprises operate.

The results obtained in this systematic review confirm that digital transformation in SMEs is not only a technological phenomenon, but a process of strategic reconfiguration that involves the redesign of business models, leadership, competencies and organizational culture. It was evident that successful digital initiatives are mediated by a clear strategic orientation that defines the direction of the organization and articulates technology as a tool to achieve previously defined objectives (Cornejo et al., 2025). Thus, the study reaffirms what Seijas-Diaz et al. (2024) have argued, arguing that organizational behavior is key to understanding technological adoption and its impact on competitiveness.

One of the main theoretical implications of the analysis is the recognition of digital transformation as a context-dependent process. Not all companies are moving at the same pace or facing the same challenges. While some, such as those studied by Vanegas & Guerra (2024), take advantage of digitalization to innovate in areas such as neuromarketing, others continue to face structural resistance that prevents effective implementation (Yarasca & Ulloa Luna, 2023). This heterogeneity coincides with the findings of Vega (2023), who stresses that the strategic challenges of SMEs vary significantly between economic sectors, which poses a challenge for the formulation of universally applicable public policies and regulatory frameworks.

From a practical perspective, it is identified that the digitalization of SMEs does not occur automatically after the incorporation of technological tools. On the contrary, it requires an internal cultural transformation led by senior management, as Mendoza & Vahos (2024) argue. Management skills, transformational leadership skills and willingness to change are decisive factors in the success of the digital process. Likewise, Agudelo (2021); and Quintero (2025) demonstrates that knowledge management and the incorporation of collaborative tools are

fundamental elements so that digital strategies do not become isolated or failed efforts.

The articulation between the technological and the strategic is reinforced by the evidence presented by Arista & Rojas (2024), who show how the application of digital communication methodologies generates positive impacts on organizational management, as long as there is a clear alignment with strategic objectives. In addition,

On the other hand, the discussion must also address the gaps found in the literature. Although progress is recognized in the understanding of the barriers and facilitators of digital transformation, there is still a lack of longitudinal studies that evaluate the sustained impact of these strategies over time. Most of the research reviewed focuses on case studies or exploratory analyses, which limits the possibility of generalizing findings or establishing comparable patterns between sectors and regions (Badilla Ulloa, 2021; Macías, 2021). This lack invites future research to adopt mixed methodological approaches that allow complementing the qualitative analysis with quantitative and objective metrics on post-transformation business performance.

Another aspect highlighted is the importance of the institutional and regulatory environment. As evidenced by Daza & Rodríguez (2024), public-private partnerships and state support programmes can accelerate the digitalization process if they are aligned with the real needs of SMEs. However, limitations are identified when these initiatives do not take into account the diversity of organizational capacities or regional differences, which can generate even deeper gaps between companies that manage to digitize and those that do not have access to the necessary resources (Areiza, 2022).

Digital strategic orientation must be understood as an organizational competency that allows anticipating changes in the environment and responding with agility, without losing sight of the guiding principles of the business. This proactive approach is evident in experiences such as that of Angulo & Chávez (2024), who designed digital marketing plans focused on concrete results for SMEs in the service sector.

Finally, the role of education and training in this process should be highlighted. Studies such as Hernández's (2025) reveal that the use of artificial intelligence tools in university environments generates replicable models that can be adapted by SMEs with an innovative vision. In addition, the work of Rosales (2021) indicates that senior management needs to update their competencies in digital environments, not only to lead change processes, but also to build an organizational culture aligned with digital logic.

CONCLUSIONS

This study made it possible to understand that digital transformation in small and medium-sized companies cannot be understood as an exclusively technological phenomenon, but as a comprehensive reconfiguration that crosses organizational, strategic and human processes. Based on the qualitative analysis of twenty studies between 2021 and 2025, it was possible to verify that those SMEs that manage to align their digital initiatives with a clear strategic orientation, obtain higher levels of competitiveness, operational efficiency and sustainability. Thus, digital transformation ceases to be a fad to become an organizational process with a structural impact on decision-making, value generation and adaptation to change.

One of the main conclusions lies in the importance of organizational culture and strategic leadership in the implementation of digitalization processes. Management competencies, together with a long-term vision, were identified as determining variables to overcome internal barriers, such as resistance to change, lack of technological training and poor strategic planning. SMEs that do not develop these aspects tend to experience fragmented transformations, without sustainable results, which reinforces the need to incorporate training processes aimed at strengthening managerial capacities in digital environments.

Another relevant finding is the need to recognize the heterogeneity of SMEs according to their sector, size, geographical location and degree of technological maturity. Not all companies face the same challenges or have the same resources. Therefore, digital transformation strategies must be designed based on personalized diagnoses, considering the particular characteristics of each organization. This review confirms that public policies, business support programmes and interventions in the digital ecosystem must move away from homogeneous approaches and towards flexible, comprehensive solutions adapted to the real contexts of SMEs.

From the methodological level, the use of the PRISMA protocol allowed a rigorous, systematic and transparent review process to be carried out, which strengthens the validity of the findings obtained. Qualitative synthesis based on emergent categories proved to be an adequate strategy to capture the complexity of the phenomenon studied. Likewise, there was evidence of an important gap in the academic literature with respect to longitudinal studies that evaluate the sustained impact of digital transformation on strategic indicators, which raises a future research agenda focused on monitoring and evaluation of medium- and long-term effects.

Finally, this study contributes both to the academic field and to the business sector. From the theoretical point of view, it contributes to the understanding of the links

between digitalization and strategy in SMEs, a topic that is still underdeveloped in the literature of organizational management. From a practical point of view, it offers a roadmap for companies interested in starting or consolidating their digital transformation process, underlining the importance of integrating technology with a solid strategic vision. It is hoped that these findings will serve as a basis for future research, public policy decisions and business actions aimed at strengthening SMEs in the contemporary digital environment.

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