



RELISE

*DIGITAL ENTREPRENEURSHIP: STRATEGIC CONTRIBUTIONS FOR
SMALL AND MEDIUM ENTERPRISES¹*

**EMPREENDEDORISMO DIGITAL: CONTRIBUIÇÕES ESTRATÉGICAS
PARA AS PEQUENAS E MÉDIAS EMPRESAS**

Anderson dos Santos²

Maria Vitória da Silva dos Santos³

ABSTRACT

This study aims to identify the contributions of digital entrepreneurship to small and medium-sized enterprises (SMEs). To achieve this, an integrative systematic review of the literature was conducted, employing a qualitative approach and descriptive analysis of a selected set of articles from the Web of Science to fill a gap in the literature by exploring how digital entrepreneurship can strengthen the managerial capacity of SMEs, offering new perspectives and discussions on the topic. The results emphasize that the adoption of modern digital technologies is essential for increasing the competitiveness of SMEs in dynamic and volatile market environments. The analysis highlighted how the introduction of new technologies can have a significant impact on the operational dynamics of small and medium-sized companies. Finally, a research agenda is suggested, outlining paths to be followed that can contribute to the ongoing theoretical and practical development regarding the role of digital entrepreneurship for SMEs.

Keywords: digital entrepreneurship, SMEs, competitiveness, digital technologies.

RESUMO

Este estudo tem como objetivo identificar as principais contribuições do empreendedorismo digital para as pequenas e médias empresas (PMEs). Para isso, foi realizada uma revisão sistemática integrativa da literatura, com abordagem qualitativa e análise descritiva de um conjunto de artigos selecionados da *Web of Science* para preencher uma lacuna na literatura ao

¹ Received on 26/01/2025. Accepted on 19/02/2025. DOI: doi.org/10.5281/zenodo.19401112

² Universidade Federal de Sergipe. annderson.st@gmail.com

³ Universidade Federal de Sergipe. mv.sntos.adm@gmail.com



RELISE

explorar como o empreendedorismo digital pode fortalecer a capacidade gerencial das PMEs, oferecendo novas perspectivas e discussões sobre o tema. Os resultados ressaltam que a adoção de tecnologias digitais modernas é fundamental para aumentar a competitividade das PMEs em ambientes de mercado dinâmicos e voláteis. A análise realizada destacou como a introdução de novas tecnologias pode impactar significativamente a dinâmica operacional das empresas de pequeno e médio porte. Por fim, sugere-se uma agenda de pesquisas com caminhos a serem seguidos que podem contribuir para a continuidade do desenvolvimento teórico e prático sobre o papel do empreendedorismo digital para as PMEs.

Palavras-chave: empreendedorismo digital, PMEs, competitividade, tecnologias digitais.

INTRODUCTION

Technology is rapidly transforming the landscape of traditional entrepreneurship in the digital era. Recent studies on Small and Medium-sized Enterprises (SMEs) have highlighted the potential of digital entrepreneurship (DE) for maintaining and enhancing the strategic competitiveness of these businesses (Isensee; Teuteberg; Griese, 2023; Klein; Braido, 2023; Paul et al., 2023; Chatterjee et al., 2022; Franco et al., 2021).

It is known that digital technologies enable entrepreneurs to develop innovations that transcend conventional industry boundaries by integrating digital and non-digital assets to drive new ventures, products, services, and business models (Franco, 2020; North et al., 2019). Thus, the digital environment not only lowers entry barriers for new ventures but also provides various opportunities for businesses (Allen, 2019).

In this context, the objective of this research is to identify the main contributions of digital entrepreneurship to small and medium-sized enterprises. However, despite the growing use of digital technologies by entrepreneurs and companies to explore new market opportunities, there is still a lack of studies addressing the strategic contributions of DE to SMEs, representing a research gap (Franco; Godinho; Rodrigues, 2021; Hsieh; Wu, 2019).



The relevance of this study is underscored by the scarcity of research evaluating digital entrepreneurship in the literature (Pinto; Martens; Scazziota, 2023). According to Pinto, Martens, and Scazziota (2023), studies have prioritized the analysis of other aspects, such as resources, capabilities, and growth indicators of new ventures. In light of this scenario, this study aims to enrich knowledge about the contributions of digital entrepreneurship to SME management.

This study is structured as follows: following this introduction, the second section provides the theoretical foundation for the context of digital entrepreneurship and SME management; the third section describes the methodological procedures adopted; the fourth section presents the analysis and discussion of the results, including suggestions for a research agenda; and finally, the concluding remarks are presented.

CHARACTERIZATION OF DIGITAL ENTREPRENEURSHIP AND THE MANAGEMENT OF SMALL AND MEDIUM-SIZED ENTERPRISES

Entrepreneurship is a multifaceted concept that encompasses a firm's activities related to product markets, technological innovation, risk management, and proactive initiative, filling gaps and creating opportunities for entrepreneurs to discover, evaluate, and exploit them (Klein; Braido, 2023; Chatterjee et al., 2022; Hsieh; Wu, 2019; Shane; Venkataraman, 2000)

In the current scenario of constant technological evolution, the role of Digital Entrepreneurship in Small and Medium-sized Enterprises (SMEs) is becoming increasingly relevant. Within this dynamic context, there is a need to explore and understand the contributions of Digital Entrepreneurship to the effective competitiveness of these organizations through the adoption of digital technologies (Franco; Godinho; Rodrigues, 2021; Correia; Martens, 2020)



RELISE

143

Thus, for this research, the concept of digital entrepreneurship as outlined by Allen (2019) was adopted, which emphasizes that as technology advances, it becomes increasingly crucial to empower entrepreneurs for the constantly evolving digital environment. This concept is especially relevant for SMEs, as it highlights the importance of staying updated and prepared to seize opportunities and face the challenges of the digital world, thereby ensuring their competitiveness and sustainability in today's market through the use of digital technologies. In this sense, the term digital entrepreneurship describes how entrepreneurship will transform as businesses and society are continuously impacted by digital technology (Allen, 2019). Moreover, the concept proposed by Allen (2019) aligns with the focus of this research, since it seeks to identify the contributions of DE to SMEs. In this regard, Correia and Martens (2020) emphasize that digital entrepreneurship represents the integration of conventional entrepreneurship with new business practices in the digital era

According to Warner and Wäger (2019), digital entrepreneurship is no longer just a trend but has become an essential reality for companies. Global competitiveness requires organizations to adapt to this reality in order to grow and survive (Soares; Müller, 2018). Therefore, a business approach centered on digital entrepreneurship can generate added value across all sectors, especially in SMEs (Franco; Godinho; Rodrigues, 2021; Richter et al., 2017)

In this context, digital entrepreneurship focuses on the use of digital technologies in the creation of new economic activities, exploring the interaction between these technologies and how they shape business processes, establishing a reciprocal relationship (Correia; Martens, 2020; Allen, 2019; Richter et al., 2017). To understand digital entrepreneurship, it is essential that organizations remain attentive to market trends, develop innovative strategies, and adopt technologies to improve their operations (Pinto; Martens; Scazziota,



RELISE

144

2023), since by investing in this field, organizations will benefit from the outcomes of the technological era (Kraus et al., 2019)

However, SMEs face unique challenges in adopting digital technologies compared to larger organizations, due to limited available resources. Some of these challenges include lack of internal expertise, technological complexity, and difficulty integrating with existing systems (Çalli, B.; Çalli, L., 2021). This scenario is even more pronounced for SMEs in developing countries (Isensee; Teuteberg; Griese, 2023; Klein; Braido, 2023), although they play a significant role in job creation, stimulating innovation, promoting entrepreneurship, and driving economic growth (SEBRAE, 2023). In Brazil, for example, in 2023 SMEs outperformed Gross Domestic Product (GDP), with emphasis on the industrial sector, which ended the year with a growth of 7%, surpassing market projections for GDP in that year, which were 2.9% (Gonçalves, 2024)

In this study, the definition of SMEs used by the Brazilian Service of Support for Micro and Small Enterprises (SEBRAE) was adopted, since concepts may vary depending on the interaction context and may present differences in numerical definitions across countries. In Brazil, small enterprises are generally defined based on the number of employees, with up to 49 employees in the commerce and services sector, and up to 99 employees in the industrial sector. Medium-sized enterprises, in turn, have up to 99 employees in the commerce or services sector and up to 499 employees in the industrial sector (SEBRAE, 2023)

This study finds that, in order to remain competitive, organizations must seek in digital entrepreneurship the ability to use digital tools to innovate and sustain business operations effectively (Pinto; Martens; Scazziota, 2023), aiming to remain competitive and meet customer expectations (Soares; Müller, 2018). Thus, the sustainable competitiveness and growth of SMEs are increasingly linked to their ability to leverage digital technologies, which are creating opportunities for the emergence of new growth strategies (North et al., 2019;



RELISE

145

Warner; Wäger, 2019) by improving sales, strengthening relationships with customers and suppliers, and enhancing organizational capabilities (Çalli, B.; Çalli, L., 2021).

METHODOLOGICAL PROCEDURES

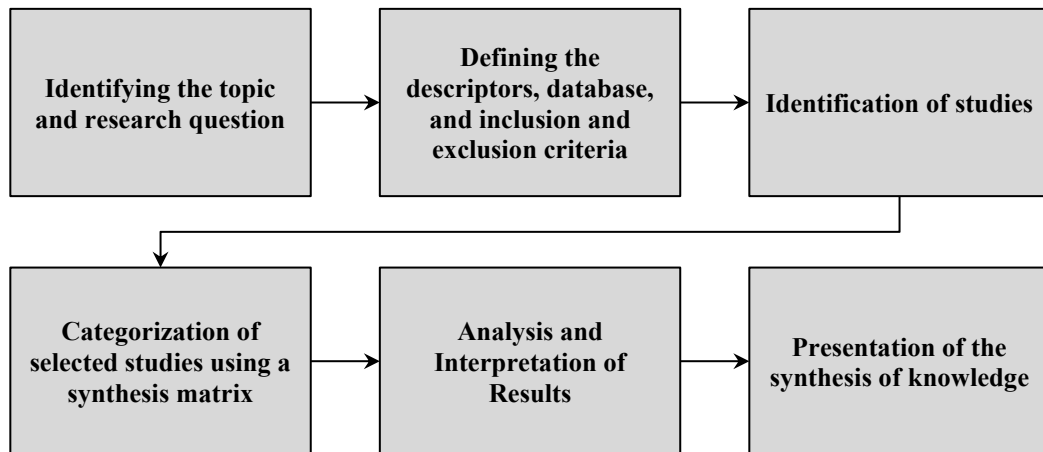
Literature reviews play a fundamental role in academic research, serving as an essential foundation for various types of investigation (Snyder, 2019). This article was developed based on a literature review using the integrative systematic review (ISR) method, adopting a qualitative approach through descriptive content analysis.

According to Whittemore and Knafl (2005), the ISR allows for the identification of gaps, deficiencies, and trends in existing evidence, providing a solid basis to guide and enrich future research in this field, making it a valuable tool for the academic community. For Botelho, Cunha, and Macedo (2011), a systematic review involves the thorough consolidation of all research relevant to a specific question, aiming to reduce bias in article selection, critically evaluate them, and synthesize all relevant studies on a given topic by developing a protocol that guides the research, with clearly defined steps that must be rigorously followed.

Thus, at the beginning of this systematic review study, a specific and clear question was formulated to establish the descriptors, search strategy, database selection, and inclusion and exclusion criteria. In the stage of identifying the theme and selecting the research question proposed by Botelho, Cunha, and Macedo (2011), as presented in Figure 1, the following research question was developed: how can digital entrepreneurship contribute to SMEs?



Figure 1- Steps in the systematic review study



Source: Elaborated by authors (2025).

For the development of this systematic review study, the Web of Science database was used, available through the CAPES Journal Portal, as it is recognized as a renowned scientific database across various research fields, standing out for its journal impact index, the Journal Citation Reports (JCR) (Carvalho et al., 2020).

To facilitate searches in Web of Science, the Boolean operator "OR" was used to retrieve records containing at least one of the searched terms, the proximity operator "" to retrieve terms appearing together, and the Boolean operator "AND" to retrieve searches related to the research descriptors (Schiavon, 2015). The use of these operators enabled the retrieval of studies on digital entrepreneurship and SME management.

In the Web of Science database, an advanced search was conducted across all editions of the Web of Science Core Collection. The search began with the Topic field, which includes title, abstract, and keywords. The following query was used with descriptors in English: (("SME*")) AND (("digital entrepreneur*") OR ("entrepreneur*") OR ("Digital business")) AND (("manage*")), resulting in 3,200 documents.



RELISE

To refine the search, a time frame of the last ten years (2014–2023) was applied to ensure that the retrieved studies (2,570) were the most recent, given the importance of being up-to-date and relevant. Next, a document type filter was applied, yielding 2,062 results. Finally, the category filter "management" was used (as it represents the scope of the study), resulting in 875 articles, as shown in Table 1.

Table 1 - Definition of the descriptors and the results found in the database

Descritivos	Filtros	Resultados na Web of Science
(((("SME*")) AND (("digital entrepreneur*")) OR ("entrepreneur*") OR ("Digital business*")) AND (("manage*"))))	Topicst	3.200
	Temporality (2014-2023)	2.570
	Article	2.062
	Category Managemen	875

Source: Elaborated by authors (2025).

After defining and validating the search descriptors and filters (Table 1), the subsequent stage of this study involved establishing inclusion and exclusion criteria, following the second step proposed by Botelho, Cunha, and Macedo (2011). The criteria adopted were: (1) relevance to digital entrepreneurship in small and medium-sized enterprises — included; (2) articles on SME management — included; (3) studies involving large companies — excluded; (4) articles focusing exclusively on technical aspects of digital technology implementation — excluded; (5) articles addressing entrepreneurial intention/orientation — excluded; and (6) articles not available for free access — excluded.

In the next phase, as suggested by Botelho, Cunha, and Macedo (2011), a thorough analysis of the titles of all pre-selected studies was conducted in order to assess their compliance with the inclusion and exclusion criteria and to select those most aligned with the objectives of this review. After this procedure, 123 articles were exported from the Web of Science and saved in Mendeley.

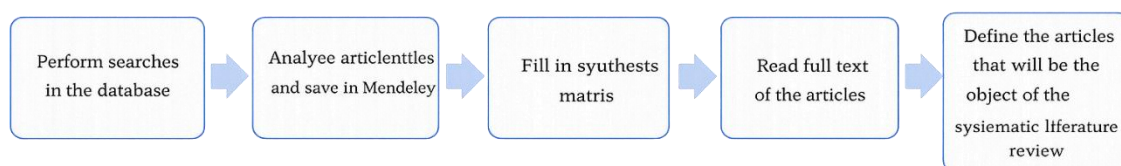


Subsequently, the categorization stage of the selected studies began (Vosgerau; Romanowski, 2014).

To facilitate the organization of this research, a synthesis matrix was developed using Microsoft Excel. This approach enabled the segmentation into multiple columns for including key elements from the identified studies, such as titles, authors, year of publication, journals, objectives, methodology, main findings, research limitations, and suggestions for future research, resulting in distinct analytical categories that support the analysis of this study's results (Andreazzi et al., 2017; Lopez; Torres, 2024; Vosgerau; Romanowski, 2014). Subsequently, all 123 selected articles were read in full, as recommended by Botelho, Cunha, and Macedo (2011).

At this stage, emphasis was placed on keywords, abstracts, results analysis, and final considerations. As a result, only 15 articles met the inclusion and exclusion criteria established for this study, which explains the relatively small number of studies in the selected portfolio. Thus, the present integrative systematic review was initiated, as detailed in Figure 2.

Figure 2 - Steps in the systematic review protocol



Source: Elaborated by authors (2025).

The analysis of the results adopted a qualitative approach, carried out through a descriptive content analysis of categories of analysis of the main findings of the selected scientific articles. This method will involve the selection, reading, and interpretation of the 15 chosen articles, as recommended by Bardin (2016), in order to understand the contributions of digital entrepreneurship to SMEs. The categories of analysis raised include: Digital technologies and marketing; Entrepreneurial education, leadership, and skills; Customer



RELISE

149

relationships; Institutionalization and strategy for digital entrepreneurship in SMEs.

ANALYSIS AND DISCUSSION OF RESULTS

This section presents the contributions of digital entrepreneurship to small and medium-sized enterprises, based on the content analysis of the main findings from the scientific studies selected for this systematic review, as well as the proposed research agenda that may support future investigations on the topic of this study.

Based on the portfolio of articles analyzed in this research, Chart 1 presents the diversity of themes addressed in digital entrepreneurship within SMEs. It is noteworthy that Brazil stands out as one of the leading contributors to research in the field of digital entrepreneurship, with four articles, followed by Sweden with two articles, while other countries such as China, Portugal, Italy, Malaysia, India, Egypt, Germany, and the United States contributed one article each.

Chart 1 – Review Summary

Author	Year	Objective	Region
Gupta e Mirchandani	2018	Investigate the factors that influence the success of SMEs led by women, focusing on personal, environmental, and government support factors.	Dubai
Ng e Kee	2018	Measure the impact of transformational leadership, entrepreneurial competence, and technical competence on company performance through innovation in owner-managed small and medium-sized enterprises (SMEs).	Malaysia
Yu <i>et al.</i>	2018	Investigate organizational transformation towards cloud service, based on strategic choice theory, management fashion theory, and trust research.	China
Franco, Godinho e Rodrigues	2021	Examine the influence of digital entrepreneurship on the digitization and management of small and medium-sized enterprises (SMEs), as well as contribute to the development of this topic, which has been underdeveloped worldwide.	Portugal
Troise	2021	Measure the impact of transformational leadership, entrepreneurial competence, and technical competence on company performance through innovation in owner-managed small and medium-sized enterprises.	Italy

Continues



Chart 1 – Review Summary - continuation

Author	Year	Objective	Region
Moura <i>et al.</i>	2021	Investigate the relevance of entrepreneurship to digital businesses, understanding the relationship between changing social behaviors and the increase in business through digital means, mainly due to technological advances.	Brazil
Carvalho <i>et al.</i>	2021	Review the most cited articles in the Web of Science database on management and/or innovation in the context of MSMEs, focusing on emerging themes such as sustainability, information-knowledge, and open innovation networks.	Brazil
Chatterjee <i>et al.</i>	2022	Identify the determinants that could impact corporate digital entrepreneurship for small and medium-sized enterprises (SMEs) in India. The study also investigates the moderating role that the adoption of artificial intelligence (AI) capabilities – customer relationship management (CRM) and strategic planning – has on corporate digital entrepreneurship.	India
Miniesy, Shahin e Fakhreldin	2022	Examine the determinants of engagement in digital entrepreneurship (DE), focusing on women and young male entrepreneurs who own informal MSMEs in Egypt. The study tests whether the characteristics, attitudes, objectives, and social media innovation attributes of an entrepreneur, in terms of perceived relative advantage, testability, and observability, resulted from the adoption of digital entrepreneurship.	Egypt
Rodrigues, Franco e Silva	2022	To prove the role and importance of digital entrepreneurship for the management of SMEs and its impacts on the processes and work environments of companies.	Brazil
Isensee, Teuteberg e Griesse	2023	To distinguish different types of sustainable digital entrepreneurs and explore their approaches to increase organizational resilience.	Germany
Kleine e Braido	2023	To analyze how institutional factors can affect digital entrepreneurship by SMEs and startups and what types of institutional changes are needed to support digital entrepreneurship by these companies.	Brazil
Schildt <i>et al.</i>	2023	To explore why key managers in SMEs focus their attention on digital innovation, focusing on the influence of organizational secrecy in inhibiting the flow of knowledge that facilitates bottom-up innovation.	Sweden
Paul <i>et al.</i>	2023	To address key issues related to digital entrepreneurship, such as the main themes, study contexts and methodologies employed, the evolution of the concept of digital entrepreneurship over the years, and future research directions in the area.	USA
Kindström, Carlborg e Nord	2024	To identify and map the challenges faced by growing SMEs, focusing on the areas of business model, leadership, and people management.	Sweden

Source: Elaborated by authors (2025).



Still considering the analysis of the studied portfolio, it was observed that some terms are recurrent in the objectives of the articles. These include: digital entrepreneurship, SMEs, innovation, transformational leadership, entrepreneurial and technical competencies, the impact of technology, and the advantages and challenges of DE. For this study, the recurrence of these terms suggests that these concepts are central and relevant in research on digital entrepreneurship in SMEs. This may indicate that authors are focusing on common themes considered essential for understanding how digital entrepreneurship relates to innovation and leadership in small and medium-sized enterprises, as well as the role of competencies and the impact of technologies in this context. The identification of these recurring terms may help map the main areas of interest and research trends within the field of digital entrepreneurship

Next, a summary of the adopted review is presented, highlighting relevant authors, years of publication, objectives of the analyzed studies, and the regions addressed

Based on the studies presented in Chart 1, the main contributions of digital entrepreneurship in SMEs were categorized. These contributions are detailed below, along with their respective summary in Chart 2.

The first category addresses digital technologies and marketing as essential tools for SME development. In this regard, the findings of Chatterjee et al. (2022) indicate that SMEs are fundamental to economic growth, job creation, and competitiveness in local and global markets. However, they face challenges in dynamic markets due to the scarcity of technologies and resources, corroborating Paul et al. (2023), Isensee, Teuteberg, and Griese (2023), and Klein and Braido (2023). In this sense, Chatterjee et al. (2022) highlight that the strategic adoption of digital technologies, such as AI-integrated CRM systems, can drive SME success, enabling them to compete effectively and achieve corporate digital entrepreneurship



RELISE

152

Minesy, Shahin, and Fakhreldin (2022) reinforce that digital entrepreneurship is essential for effective SME management, enabling expanded reach and access to new markets. The implementation of digital tools improves operational efficiency by automating processes, reducing costs, and increasing productivity. This makes SMEs more agile and competitive, while online marketing strategies and social media presence promote products and services, increasing visibility and attracting customers. Carvalho et al. (2021) concluded that SME competitiveness is strongly related to sustainability aspects, information knowledge, and open network innovation, suggesting that managers should focus on these aspects to enhance digital entrepreneurship, innovation, and competitiveness

The second category of analysis discusses the role of entrepreneurial education, leadership, and entrepreneurs' competencies in small business management. In this analysis, it was found that Isensee, Teuteberg, and Griese (2023) highlight that support and entrepreneurial education programs must be considered fundamental principles for SME resilience, thereby developing digital entrepreneurship competencies that lead to competitiveness. This aligns with Pinto, Martens, and Scazziota (2023), who state that to maintain competitiveness, SMEs need to incorporate digital entrepreneurship by using digital tools to innovate and sustain business operations effectively. This is also consistent with the findings of Ng and Kee (2018), who emphasize the importance of transformational leadership, entrepreneurial competence, and technical competence in owner-managed SMEs as pillars for effective management through the adoption of DE

Thus, training initiatives in digital entrepreneurship provide SMEs with the resources and knowledge necessary to fully leverage digital opportunities, driving their growth and development in the market (Minesy; Shahin; Fakhreldin, 2022;



RELISE

153

Troise, 2022), as well as improving communication and coordination between managers and employees, as highlighted by Rodrigues, Franco, and Silva (2022)

The third category of analysis identified the importance of relationships between business management and customers as one of the main contributions to SME success. It was found that the relationship between SMEs and customers in the context of digital entrepreneurship is crucial, as highlighted by Franco, Godinho, and Rodrigues (2021). They emphasize that the advantages of digital entrepreneurship for SMEs are directly linked to this relationship. The six main advantages identified include: facilitating global reach in business, increasing knowledge sharing with customers, promoting collaboration with customers through the adoption of digital technology, and the benefits derived from customer feedback regarding the digital technologies used. This strengthened relationship with customers drives SME success and innovation in the digital environment

Rodrigues, Franco, and Silva (2022) emphasize that the advantages of digital entrepreneurship are enhanced when seeking to maximize operational efficiency, improve customer relationships, and foster a collaborative and productive work environment among employees. Moura et al. (2021) highlight the need to improve technological skills related to business, the importance of digital marketing for micro and small enterprises, and the significant impact of digital entrepreneurship

Another aspect identified in this research, presented in the fourth category of analysis, is the correlation highlighted in the studies by Klein and Braido (2023) between the institutional role and SME success, as changes in the regulatory, political, and economic environment can significantly impact these firms' capabilities, given their limited access to resources. In this discussion, Schildt et al. (2023) add that it is important to consider the organization's internal context, beyond external factors and institutions that shape SME capabilities. Similarly, Gupta and Mirchandani (2018) argue that environmental factors and



government support have a positive and significant impact on SME success, as government support plays a crucial role in the development and growth of small and medium-sized businesses by facilitating access to resources, training, and digital infrastructure for effective management

Finally, Yu et al. (2018) highlight the relevance of institutional pressures and trust in the adoption of cloud services, emphasizing that SMEs have the opportunity to adjust their strategies to align with market trends and expectations. This adaptation can not only enhance innovation, operational efficiency, and the ability to meet the demands of the current digital environment but also strengthen the competitive position of these companies in the market

Schildt et al. (2023) further highlight that formal and informal processes that promote secrecy within organizations can significantly affect SMEs' ability to adapt and innovate in the current digital business environment. The authors emphasize the importance of entrepreneurs immersing themselves in the environment and carefully managing information flows to intensify the strategic focus on digital innovation

Thus, Schildt et al. (2023) stress the relevance of understanding how organizational secrecy may influence both digital innovation and strategic renewal in SMEs, underlining the urgent need for transparency, collaboration, and an organizational culture conducive to digital entrepreneurship. At the same time, SMEs must emphasize managerial challenges related to business models, leadership, stakeholder engagement, flexibility in entrepreneurial practices, knowledge transfer, agility, and interactivity, according to the findings of Kindström, Carlborg, and Nord (2024) and Troise (2022)

Given the presented context and the analysis of the studies adopted in this research, the categories of analysis and the identified contributions highlight how digital entrepreneurship can influence the way SMEs manage their



businesses in order to achieve competitive advantage in a constantly evolving and innovative market

Chart 2 - Categories of Analysis and the Contributions of Digital Entrepreneurship

Authors	Category of Analysis	Identified contribution
Chatterjee <i>et al.</i> (2022); Miniesy, Shahin e Fakhreldin (2022); Troise (2022), Moura <i>et al.</i> (2021); Yu <i>et al.</i> (2018).	Digital Technologies and Marketing	Adoption of digital technologies, such as AI-integrated CRM systems and cloud services. Implementing digital tools improves operational efficiency by automating processes, reducing costs, and increasing productivity. It is crucial for micro and small businesses to enhance their technological skills, recognizing the importance of digital marketing and the significant impact of digital entrepreneurship.
Kindström, Carlborg e Nord (2024); Isensee, Teuteberg e Griese (2023); Paul <i>et al.</i> (2023); Troise (2022); Troise (2022); Ng e Kee (2018).	Entrepreneurial Education, Leadership and Competence	Entrepreneurial support and education programs are essential to strengthen the resilience of SMEs, developing digital skills that will drive competitiveness. The importance of transformational leadership, entrepreneurial competence, and technical competence in owner-managed SMEs are pillars for the effective management of SMEs through the adoption of digital entrepreneurship.
Rodrigues, Franco e Silva (2022); Franco, Godinho e Rodrigues (2021).	Customer Relationships	The advantages of digital entrepreneurship include global business expansion, greater knowledge sharing with customers, enhanced collaboration with customers through digital technology, and the benefits of customer feedback on the digital technology adopted by the company.
Schildt <i>et al.</i> (2023); Kleine e Braido (2023); Carvalho <i>et al.</i> (2021); Gupta e Mirchandani (2018).	Institutionalization and Strategy	The institutional role and success of SMEs are interconnected, as environmental factors and government support have a positive and significant impact on SME success. Entrepreneurs must engage with the environment and control the flow of information to strategically focus on digital innovation.

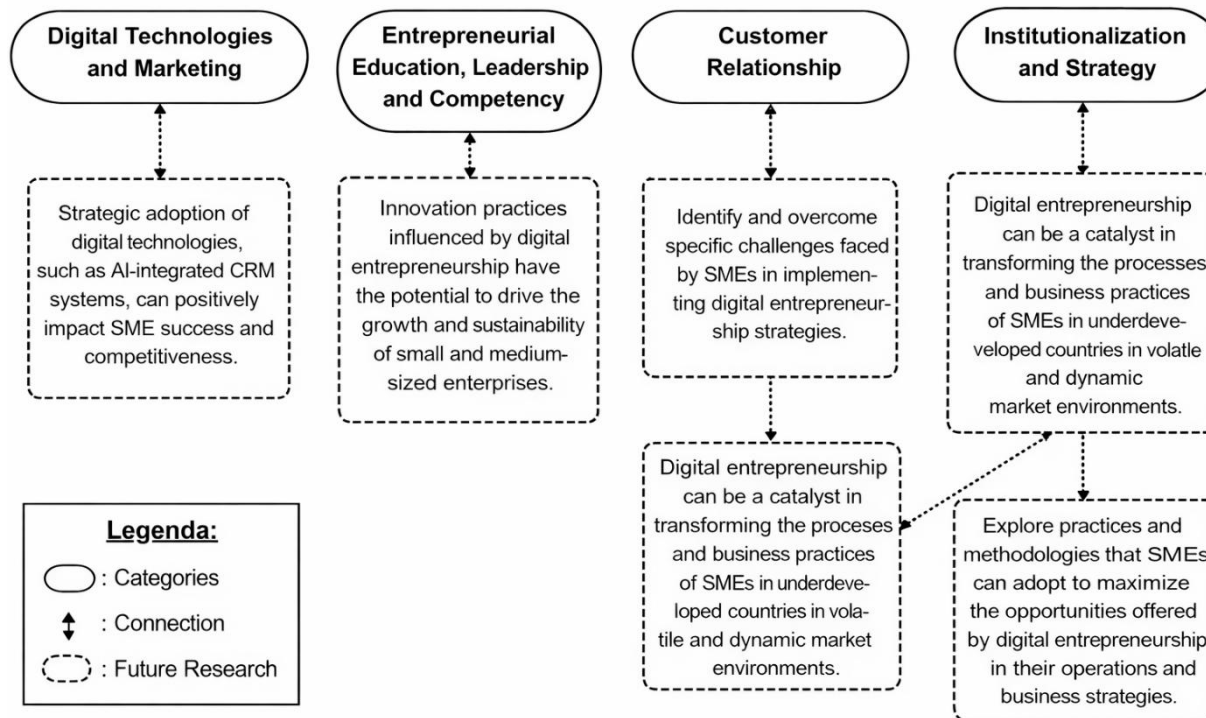
Source: Elaborated by authors (2025).

Based on the contributions highlighted in Chart 2, a research agenda is suggested so that future investigations can continue to contribute to the theoretical and practical development of the role of digital entrepreneurship for SMEs. In this way, future research can encompass the paths described in Figure 1:



RELISE

Figure 1 – Research Agenda



Source: Elaborated by authors (2025).



RELISE

157

FINAL CONSIDERATIONS

The main purpose of this research was to analyze the contributions of digital entrepreneurship to SMEs. To achieve this objective, a qualitative investigation was conducted using a portfolio of articles collected from the Web of Science.

This study demonstrated that the adoption of modern digital technologies plays a crucial role in strengthening the competitiveness of SMEs in volatile and dynamic market environments. Furthermore, it effectively addressed how the intensive use of advanced technologies and digital transformation have raised important questions regarding the evolution of SME business processes and practices. The analysis highlighted how the introduction of new technologies can significantly impact the operational dynamics of small and medium-sized enterprises.

In addition, the research pointed to the need for a broader research agenda on digital entrepreneurship in SMEs. It is suggested that further studies investigate in greater detail the impact of digital entrepreneurship on promoting innovative activities, as well as explore specific methodologies to support the relationship between digital entrepreneurship and SME management across different regions. Moreover, this study did not deeply address the innovation practices adopted by SMEs. Therefore, as directions for future research, studies are recommended to examine the impact of digital entrepreneurship on fostering innovative activities within the SME context.

Thus, the results reinforce the importance of digital entrepreneurship as a catalyst for the growth and development of small and medium-sized enterprises. The research contributes not only to the theoretical advancement of the topic but also offers practical approaches for managers, supporting strategic decision-making and adaptation to the opportunities provided by the digital era.

It is important to highlight the limitations of the methodology used in this study. By restricting the research to articles published in scientific journals



RELISE

158

indexed in the Web of Science database, the study excludes contributions from books and articles possibly published in other journals. Additionally, the list of descriptors used in the search does not aim to exhaust all possible keywords related to the research topic.



RELISE

REFERENCES

ALLEN, J. P. *What is digital entrepreneurship?* **Digital Entrepreneurship**. 2019.

ANDREAZZI, M. A. *et al.* Gestão energética: uma síntese de publicações científicas sobre biodigestão para gestão de resíduos. **Revista Ambiente & Água**, v. 6, p. 964–972, 2017.

BARDIN, L. **Análise de Conteúdo** (L. A. Reto & A. Pinheiro, Trad.). Edições 70. 2016.

BOTELHO, L.; CUNHA, C.; MACEDO, M. O método da Revisão Integrativa nos Estudos Organizacionais. **Revista Gestão e Sociedade**, v. 5, p. 121–136, 2011.

ÇALLI, B. A.; ÇALLI, L. Relationships between digital maturity, organizational agility, and firm performance: An empirical investigation on SMEs. **Business & Management Studies: An International Journal**, v. 9, n. 2, p. 486–502, 2021.

CARVALHO, G. D. *et al.* Innovation and management in MSMEs: A literature review of highly cited papers. **SAGE Open**, v. 11, n. 4, 2021.

CARVALHO, G. D. G. *et al.* Bibliometrics and systematic reviews: A comparison between the Proknow-C and the MethodiOrdinatio. **Journal of Informetrics**, v. 14, n. 3, 101043.

CHATTERJEE, S. *et al.* Digital transformation and entrepreneurship process in SMEs of India: a moderating role of adoption of AI-CRM capability and strategic planning. **Journal of Strategy and Management**, v. 15, n. 3, p. 416–433, 2022.

CORREIA, S. R. V.; MARTENS, C. D. P. Empreendedorismo digital e gestão de projetos: uma revisão sistemática da literatura. **Iberoamerican Journal of Project Management**, v. 11, n. 1, p. 01–24, 2020.

FRANCO, M. **Digital leadership - A new leadership style for the 21st century**. London, UK: IntechOpen. 2020.

FRANCO, M.; GODINHO, L.; RODRIGUES, M. Exploring the influence of digital entrepreneurship on SME digitalization and management. **Small Enterprise Research**, v. 28, n. 3, 269–292, 2021.

GONÇALVEZ, R. Pequenas e médias empresas têm desempenho acima do PIB brasileiro em 2023. **Correio Braziliense: Economia**. 2024. Disponível em:



RELISE

160

<https://www.correiobraziliense.com.br/economia/2024/02/6802754-pequenas-e-medias-empresas-tem-desempenho-acima-do-pib-em-2023.html>. Acesso em: 5 de junho de 2024.

GUPTA, N.; MIRCHANDANI, A. Investigating entrepreneurial success factors of women-owned SMEs in UAE. **Management Decision**, v. 56, n. 1, p. 219-232, 2018.

HSIEH, Y. J.; WU, Y. J. Entrepreneurship through the platform strategy in the digital era: Insights and research opportunities. **Computers in Human Behavior**, v. 95, p. 315–323, 2019.

ISENSEE, C.; TEUTEBERG, F.; GRIESE, K. M. Success factors of organizational resilience: a qualitative investigation of four types of sustainable digital entrepreneurs. **Management Decision**, v. 61, n. 5, p. 1244–1273, 2023.

KINDSTRÖM, D.; CARLBORG, P.; NORD, T. Challenges for growing SMEs: A managerial perspective. **Journal of Small Business Management**, v. 62, n. 2, p. 700–723, 2024.

KLEIN, A. Z.; BRAIDO, G. M. **Institutional factors related to digital entrepreneurship by startups and SMEs in the Latin American context: Two cases in Brazil**. Information Systems Journal. 2023.

KRAUS, S. *et al.* Digital entrepreneurship: a research agenda on new business models for the twenty-first century. **International Journal of Entrepreneurial Behavior & Research**, v. 25, n. 2, p. 353–375, 2019.

LOPES, J. K. P.; TORRES, P. L. Pesquisa e inovação responsáveis na área da educação: uma revisão sistemática. **Cadernos de Pesquisa**, v. 54, n. e10125, 2024.

MINIESY, R.; SHAHIN, M.; FAKHRELDIN, H. The determinants of digital entrepreneurship by informal micro and small enterprises (MSEs) in Egypt. **World Journal of Entrepreneurship, Management and Sustainable Development**, v. 18, n. 4, p. 425–445, 2022.

MOURA, D. F. de *et al.* Empreendedorismo para negócios digitais. **Revista Master**, v. 6, n. 11, 2021.

NG, H. S.; KEE, D. M. H. The core competence of successful owner-managed SMEs. **Management Decision**, v. 56, n. 1, p. 252-272, 2018.



RELISE

NORTH, K. *et al.* Digital maturity and growth of SMEs: a survey of firms in the Basque country (Spain). **IFKAD**, p. 1–18, 2019.

PAUL, J. *et al.* Digital entrepreneurship research: A systematic review. **Journal of Business Research**, v. 156, n. 113507, 2023.

PINTO, A. R.; MARTENS, C. D. P.; SCAZZIOTA, V. V. Empreendedorismo Digital em Organizações: revisão integrativa da literatura e proposição de elementos de análise sob a ótica das capacidades dinâmicas 1;2. **REAd - Revista Eletrônica de Administração** (Porto Alegre), v. 29, n. 3, p. 627–660, 2023.

RICHTER, C. *et al.* Digital entrepreneurship: Innovative business models for the sharing economy. **Creativity and Innovation Management**, v. 26, n. 3, p. 300–310, 2017.

RODRIGUES, M.; FRANCO, M.; SILVA, R. Digitalisation and innovation in SMEs: Influences on the advantages of digital entrepreneurship. **International Journal of Innovation Management**, v. 26, n. 08:2250066, 2022.

SCHIAVON, S. H. **Aplicação da Revisão Sistemática nas Pesquisas sobre Formação de Professores: uma discussão metodológica** [Dissertação de Mestrado]. Pontifícia Universidade Católica do Paraná. 2015.

SCHILDT, H. *et al.* Waking up to digital innovation: how organisational secrecy hampers top management focus on strategic renewal. **Innovation**, p. 1–27, 2023.

Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE). **Lei Geral da Micro e Pequena Empresa: conheça os benefícios da Lei Geral das Microempresas e Empresas de Pequeno Porte** [Artigo]. 2021. Disponível em: <https://sebrae.com.br/sites/PortalSebrae/artigos/lei-geral-da-micro-e-pequena-empresa>

Serviço Brasileiro de Apoio às Micro e Pequenas Empresas (SEBRAE). **Qual o papel das pequenas empresas na economia brasileira** [Artigo]. 2023. Disponível em: <https://www.sebrae-sc.com.br/blog/qual-o-papel-das-pequenas-empresas-na-economia-brasileira>

SHANE, S.; VENKATARAMAN, S. The promise of entrepreneurship as a field of research. **Academy of Management Review**, v. 25, n. 1, p. 217–226, 2020.



RELISE

SNYDER, H. Literature review as a research methodology: An overview and guidelines. **Journal of Business Research**, v. 104, p. 333–339, 2019.

SOARES, P. A. DE S.; MULLER, E. Die Rattenfänger von Digitalien. **Manager Magazin**, p. 68–77, 2018.

TROISE, C. Explorando a visualização do conhecimento na era digital: uma análise de benefícios e riscos. **Management Decision**, v. 60, n. 4, 2022.

VOSGERAU, D. S. R.; ROMANOWSKI J. P. Estudos de revisão: implicações conceituais e metodológicas. **Revista Diálogo Educacional**, Curitiba, v. 14, n. 41, p. 165-189, 2014.

WARNER K. S. R.; WAGER M. Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. **Long Range Planning**, v. 52, n. 3, p. 326–349, 2019.

WHITTEMORE R.; KNAFL K. The integrative review: updated methodology. **Methodological Issues in Nursing Research**, v. 52, n. 5, p. 546–553, 2005.

YU Y. *et al.* Effects of entrepreneurship and IT fashion on SMEs' transformation toward cloud service through mediation of trust. **Information & Management**, v. 55, n. 2, p.245-257, 2018.