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CALL FOR PAPERS

Special Issue



Integrating Artificial Intelligence in SMEs: Opportunities, Risks and Challenges

Submission Deadline: 30 October 2026

Guest Editors: Giovanni Battista Dagnino, Francesca Costanza, Elisa Martina Martinelli, Annalisa Tunisini

Piccola Impresa/Small Business is pleased to announce a call for papers for a special issue titled "Integrating Artificial Intelligence in SMEs: Opportunities, Risks and Challenges".

Artificial intelligence (AI) has been transforming contemporary business, thus shaping decision-making, operational efficiency, and innovation processes (Ruiz-Real et al., 2021; Menzies et al., 2024). Although most extant studies concern AI adoption in larger firms as their primary focus (Oldemeyer et al., 2025), emergent research has begun addressing AI in SMEs as a fruitful area of inquiry.



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First, scholars identify SMEs' distinctive challenges in AI adoption, e.g., financial constraints, lack of technical expertise, and cultural resistance (Ayinaddis, 2025; Aiudi et al., 2026). They also recognize that the effective use of AI in small and medium-sized businesses cannot be conceived as a mere transfer or adaptation of frameworks and practices developed for large firms (Oldemeyer et al., 2025). It rather requires a series of dedicated activities, such as change management initiatives, AI readiness assessments, and finance access that encompass directly the entrepreneurs'/top management's commitment and the development of a learning-oriented culture aimed at developing digital capabilities (Arroyabe et al., 2024; Lemos et al., 2025; Schönberger, 2023). Considering this awareness, we underscore the need to deepen research that explicitly theorizes AI adoption pathways and governance mechanisms expressly tailored to SMEs. Specifically, we suggest to reason on how, given the variability and rapid development of specific technologies (Borsani et al., 2026), the necessity of implementing a long-term strategic approach to AI adoption, rather than a purely instrumental application in the short term, may be fundamental.

Second, studies also highlight the benefits that AI may bring to SMEs, emphasizing improvements in operational efficiency and cost reduction (Schönberger, 2023), and the contribution of AI to specific organizational areas, such as risk management (Drydakis, 2022; Sotamaa et al., 2025), financing (Bu et al., 2025), purchasing and supply chain management (Allal-Chérif et al., 2020; Wang & Zhang, 2025), as well as marketing, social media marketing, and e-commerce (Basri, 2020; Wang, 2024). These contributions, while collectively highlighting the potential that AI bears for SMEs, tend to remain function-specific and locally oriented in organizational terms. We hence call for integrative theoretical frameworks able of explaining how AI affects strategic and managerial decision-making and activities across different organizational levels and functions in SMEs.

Third, studies have examined the technological aspects of AI adoption and implementation in SMEs, also in combination with complementary technologies such as cloud computing, analytics, and blockchain (Baabdullah et al., 2021; Kumar et al., 2023; Khan et al., 2023), underscoring the contribution of AI to broader digitalization trajectories. From this perspective, we encourage studies on different AI adoption paths related to the type of AI technologies employed, and on the differential effects of combining AI with other digital technologies to provide resource-efficient infrastructures that mitigate SMEs-specific AI adoption challenges.



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In this context, we also reward research on the role of platform-based solutions and interorganizational ecosystems that may support AI adoption and integration in SMEs, overcoming internal resource constraints (Wei & Pardo, 2022; Wang & Zhang, 2025). Conversely, research is welcomed on the drawbacks of AI adoption in SMEs, such as technological rigidity and dependency on external technology partners (Ledesma Chaves et al., 2026).

Fourth, existing research also recognizes that AI's capacity to recombine knowledge in novel ways positions it as potential driver of SME sustainable growth, generating productivity gains and innovation opportunities (Kopka & Fornahl, 2023). This applies to both the exploration of new technological trajectories (Grashof & Kopka, 2023) and to product and business model innovation (Shaik et al., 2024). While policy incentives and regulations can accelerate these growth effects (Arranz et al., 2023; Ruiz-Real et al., 2021), they need to be complemented by organizational AI readiness (Cimino et al., 2025; Segarra-Blasco et al., 2025). The latter may depend on firms' attributes such as size, lifecycle stage, and digital maturity (Kopka & Fornahl, 2023). Taken together, these insights call for further research that integrates technological, environmental, and organizational factors to understand how AI can contribute to innovation and growth trajectories in SMEs.

Fifth, another promising research direction concerns the extent to which AI integration influences SME competitiveness, growth, and overall performance metrics –both financial and non-financial (Ledesma Chaves et al., 2026; Soomro et al., 2025; Wang & Zhang, 2025). Evidence indicates that AI adoption is positively associated with SMEs' revenue growth (Ardito et al., 2025) and with the implementation and monitoring of sustainable practices, including waste reduction and improved environmental performance (Ferraro et al., 2025; Klimecka-Tatar & Kapustka, 2025). Nevertheless, recent literature has underscored that AI is highly energy-intensive (Hwang et al., 2025); therefore, scholarly debate is encouraged regarding the ambiguous impact of AI on sustainability outcomes. We consequently encourage additional investigation to disentangle the mechanisms and potential trade-offs through which AI may influence various dimensions of performance in SMEs.

Sixth, AI implementation in SMEs may well be sector-specific, although existing research remains fragmented and largely focused on the manufacturing industry (Peretz-Andersson et al., 2024). This condition pinpoints the need for further investigation across sectors to better understand the existing differences in application domains, value creation mechanisms, and



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organizational implications. Furthermore, we emphasize the importance of examining the distinct dynamics between small and medium-sized firms, as their respective resource constraints and structural characteristics may lead to divergent AI adoption patterns. We also point to the necessity of inquiring into the contextual factors and peculiarities of AI adoption in SMEs operating in underdeveloped countries characterized by a lack of institutional support and digital infrastructure, including internet connectivity and electricity supply (Ikpe, 2024; Ebuka et al., 2023).

Finally, at the same time, issues related to algorithmic bias, transparency, explainability, and data privacy remain insufficiently addressed in the literature. Therefore, we encourage research concerning the unintended negative consequences of AI integration in SMEs, such as reputational, operational, and strategic risks of value destruction (Canhoto & Clear, 2020), as well as ethical challenges related to AI in SMEs. These include, in particular, potential harm and injustice due to the indiscriminate use of AI (Crockett et al., 2021), responsibility profiles, and the tension between AI-driven and entrepreneurial rationality (Obschonka & Audretsch, 2020). In such context, research on AI in business lacks explicit ethical grounding and implicitly focuses on Western utilitarian, deontological, or virtue-based ethical assumptions, while alternative ethical perspectives (e.g., Eastern, indigenous, feminist) remain underexplored (White et al., 2024). Thus, we call for more research on the ethical challenges and potential pitfalls of AI integration in SMEs, including critical or alternative approaches that move beyond mainstream ethical frameworks to investigate their managerial and organizational implications.

Topics of Interest

We welcome conceptual and empirical contributions using qualitative, quantitative, or mixed-method approaches, addressing a wide range of topics related to the implementation of different types of AI and AI-based technologies in small businesses, including but not limited to:

- Drivers and barriers to AI adoption in SMEs: governance, strategic, and cultural factors.
- AI-driven innovation and entrepreneurship in SMEs: enabling conditions and scalability potential.
- AI role in SME networks, partnerships, and collaboration.
- Impact of AI on SME market competitiveness, customer satisfaction, and customer retention.



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- Impact of AI on supply chain resilience in SMEs.
- Impact of AI on intra-organizational processes: constraints and benefits of adoption beyond the functional level.
- Impact of AI on decision-making, managerial, and operational processes within SMEs, including AI-driven learning dynamics and workflow transformations.
- Impact of AI on performance measurement and management processes and tools within SMEs.
- Impact of AI on sustainability practices, stakeholder engagement, and environmental, social, and governance (ESG) performance in SMEs.
- Impact of different types of AI in SMEs: generative AI vs. agentic AI, and/or the use of open-source AI within firms.
- Organizational, financial, and contextual factors affecting AI adoption and successful implementation in SMEs, including integration with other technologies.
- Effects of entrepreneurial ecosystems on AI integration in SMEs.
- Risks and pitfalls of AI integration in SMEs.
- Effects of policies and regulations on AI integration in SMEs.

Submission Guidelines

Authors are invited to submit their manuscripts through the online platform by the deadline of 30 October 2026. All submissions will undergo a rigorous double-blind peer review process to ensure the publication of high-quality research.

Important Dates

- **Submission Deadline:** 30 October 2026
- **Notification of Acceptance:** 31 January 2027
- **Publication Date:** July 2027, November 2027

Manuscript Preparation

Manuscripts should be prepared according to the Piccola Impresa/Small Business guidelines, which can be found here: <https://journals.uniurb.it/index.php/piccola/about/submissions>. Submissions should not exceed a total of 22 pages and should include an abstract of up to 300 words.

Contact Information

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We look forward to receiving your contributions to this exciting and pertinent special issue.

Sincerely,

Prof. Tonino Pencarelli

Editor in Chief of the Journal

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