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## Peer Review

## Review of: "Assessing AI Adoption and Digitalization in SMEs: A Framework for Implementation"

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Dear authors,

Your research holds pragmatic significance; however, its theoretical contribution and its relevance to managerial decision-making remain questionable. In the Abstract, you did not provide a background to your research problem. Beyond stating the research objective, it is essential to briefly describe the applied research methodology and discuss the implications of your findings—specifically, that SMEs face numerous barriers to AI adoption. Additionally, you should concisely outline how your research impacts theory, policies, and managerial practice in SMEs. Moreover, the Abstract lacks keywords at the end.

From a methodological perspective, your paper is substantively and technically insufficient, as it does not adhere to the standard IMRaD structure for reporting empirical research. When publishing your study, ensuring methodological rigor is crucial—not only for clarity but also to allow verification of the applied research methodology. Among the critical questions you should address are: What novel insights does our research provide?, What is the significance of our study?, and Is our research methodologically rigorous enough to support our conclusions?

Regarding the references, most of the sources used—except for a few—are outdated. In general, numerous high-quality studies that should support your hypotheses (notably, your study does not formulate research hypotheses) and facilitate a comparative discussion of your results have not been considered (e.g., <a href="https://doi.org/10.1016/j.techsoc.2024.102733">https://doi.org/10.1016/j.jik.2024.100610</a>, <a href="https://doi.org/10.1016/j.jik.2024.100616

Furthermore, a sample of 36 organizations across 14 industries raises concerns about the generalizability of the findings and the robustness of implications for an AI adoption framework in SMEs. Can the application of descriptive statistics alone convincingly answer your research questions? I recommend analyzing data from the Italian *Community Innovation Survey* database (if it includes information on firms' digitalization practices), which would allow access to a substantially larger sample across approximately 20 industrial sectors where SMEs predominate. Employing inferential statistics or econometric methods and models (e.g., panel data analysis) could facilitate statistically robust conclusions.

Many high-quality open-access journals publish empirical studies exploring various aspects and effects of digitalization and digital literacy in SMEs on innovation and competitiveness (e.g., *Technovation*, *Technological Forecasting and Social Change*).

To summarize, restructure your paper according to the IMRaD research report format, enhance your sample size, formulate and test research hypotheses, and ensure that the Discussion section highlights key findings, compares them with similar studies, and explains why your results align with or diverge from existing research. In the Conclusion, thoroughly discuss the implications of your study, address research limitations, and provide recommendations for future research.

Good luck!

## Declarations

 $\textbf{Potential competing interests:} \ \textbf{No potential competing interests to declare}.$