AI-Enabled Sustainable Business Development: Transforming SME Competitiveness and Operational Efficiency in the Digital Economy

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Abstract

The paper considers how small and medium-sized enterprises can integrate artificial intelligence in such a manner as to develop sustainable business models. It is positioned at the intersection of the literature on digital entrepreneurship, the literature on the sustainability of our future, and the literature on aligning AI policy.

The paper adopts a blended and conceptual approach by utilizing the Resource-Based View (RBV), the Technology Organization Environment (TOE) approach, and the Dynamic Capabilities Theory. It is a five-pillar framework that brings AI use, sustainability agendas, theoretical insights, and the role of policy facilitators for SMEs.

Five strategic areas appear for the application of AI in improving competitiveness as well as sustainability in the case of SMEs: operation, customer engagement, supply chain management, finance, and sustainability reporting. Ecosystem challenges mentioned in the article include the lack of skills and resources.

It is still theoretical at the current level of development. It should be empirically tested. It should be tested on different scenarios of the SME. Small and medium sized enterprises (SMEs) can use this framework to help guide their sustainable transformation using AI. Policymakers can develop programs to deal with the challenges facing SMEs.

This could lead to inclusive innovation, green entrepreneurship, and the realization of the Sustainable Development Goals (SDGs) through broader access to AI for SMEs. In general, this article offers a new and policy-informed framework for AI and sustainability that is adapted to SMEs and addresses a gap in the literature that brings together digital entrepreneurship and sustainable development.

Keywords

AI Adoption, Digital Entrepreneurship, Sustainable Business Models, Small and Medium Sized Enterprises (SMEs), Policy Ecosystem.