

Digital Transformation as a Strategic Driver of Efficiency and Sustainable Competitive Advantage: Evidence from Emerging Market SMEs

Eyup Kahveci

SBS Swiss Business School, Zurich, Switzerland

Abstract

This study examines the impact of digital transformation on the operational efficiency and sustainable competitive advantage of SMEs in the context of a developing country. Rather than analyzing digitalization in isolation, this research integrates three key dimensions: digitalization strategy, digital technology adaptation capacity, and digital technology level into a comprehensive framework offering a holistic perspective on the effects of digital transformation in SMEs. Based on a survey of 216 Turkish SMEs, this research employs structural equation modeling using Smart PLS to assess the relationships between these digital transformation dimensions and firm performance. The findings reveal that all three sub-categories of digital transformation positively influence operational efficiency. Furthermore, operational efficiency positively impacts competitive advantage highlighting the transformative role of digitalization in sustaining SME competitiveness. This multi-dimensional approach provides a comprehensive view of how digital transformation enhances SME efficiency beyond simple technology adoption. The study advances our theoretical understanding by demonstrating that digital transformation requires digital strategy integration into corporate strategy, awareness of emerging technologies, and the development of digital adoption capacity to drive SME performance. The findings suggest that SMEs should embed digitalization into daily business operations, enhance their capacity to adopt digital tools, and invest in technological infrastructure to achieve sustainable competitiveness.

Keywords: competitive advantage, digitalization, digital transformation, digital strategy, emerging markets, smes, operational efficiency, sustainability