

The Impact of Digital Financial Systems on Efficiency and Strategic Planning in Engineering-Oriented SMEs: Evidence from Emerging Countries

Vesel Usaj

Business Administration Department, University “Ukshin Hoti” Prizren, Prizren, Republic of Kosovo

Abstract

The present research aims at assessing the role of electronic financial systems on strategic planning and managerial efficiency within the engineering-driven small and medium-sized enterprises (SMEs) of Kosovo. As a part of worldwide reforming efforts in financial systems towards achieving economic and engineering development objectives, the present study discusses how computer technologies, like online accounting packages, AI-powered finance dashboards, and computerized taxation/reporting schemes, contribute to the decision-making abilities of SME managers.

A quantitative method was employed in the study with systematic questionnaires completed by 248 SMEs managers from sectors including construction engineering, industrial manufacturing, and energy. SPSS statistical analysis is employed in the study, descriptive analysis, correlation testing, and regression models to identify the most significant factors that affect the adoption of digital finance and its effects. The results show that 72.6% of organizations implementing digital finance systems saw improvement in the efficiency of their operations, and 71.3% saw enhanced accuracy and timeliness in financial reporting. Furthermore, digital finance implementation and forward-looking strategic planning are strongly positively correlated ($r = 0.74$, $p < 0.01$). It has been found using regression analysis that the use of computer systems is a strong predictor of increased financial control ($\beta = 0.57$, $p < 0.001$).

The research reveals that engineering-oriented SMEs reap enormous advantages from using digital financial tools, especially concerning managing cash flows, forecasting, and compliance. Nonetheless, challenges exist regarding the preparedness of infrastructure and the digital literacy of upper management. It is recommended to provide targeted financial incentives for digitalization, offer training in engineering finance, and develop digital platforms tailored to specific industries. This study contributes to the field of Engineering Economics by underscoring how digital financial systems can act as catalysts for innovation-driven economic transformation in emerging economies.

Keywords

Engineering Economics, Digital Financial Systems, SMEs, Strategic Planning, Innovation, Kosovo, Quantitative Analysis.

