

Information technology for supply chain performance: a mediated covariance modelling based on the Dynamic Capabilities Theory

ABSTRACT

Information technology is an important supply chain innovation typology that enhances the integration of people and processes. Although, there is large body of literature on information technology, supply chain capabilities and supply chain performance, empirical studies on how innovation capability relates with information technology and supply chain performance is unknown. To cover this important research gap, the study proposes four hypotheses on the relationship between information technology and supply chain performance, information technology and innovation capability, innovation capability and supply chain performance and the mediation effect of innovation capability between information technology and supply chain performance. The study followed post-positivism epistemology based on the methodology of cross-sectional survey. A cross-section of 286 top managers of manufacturing companies in Nigeria was examined based on cluster and stratified random sampling. A four-stage regression analysis in two models was performed to test the proposed hypotheses using structural equation modelling with Amos graphics. Result in model 1 found a significant relationship between information technology and supply chain performance. The findings in model 2 suggest that the relationship between information technology and innovation capability ($X \rightarrow M$) as well as innovation capability and supply chain performance ($M \rightarrow Y$) are both significant. The initial positive and significant relationship between information technology and supply chain performance became non-significant with the introduction of innovation capability as mediating variable. Therefore, it is concluded that innovation capability is a full mediator between information technology and supply chain performance. The study has both implication for the theory and practice. It, thus, provide guidelines to managers of manufacturing companies on strategies to improve supply chain performance.

Keyword: Dynamic Capabilities Theory; Information technology; Innovation capability; Supply chain performance