Digital transformation and managing technological obsolescence in SMEs

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Abstract

The fast pace of change in technology and innovation creates waves of disruption across various industries as the obsolescence puzzle has become a focal issue for firms (Del Giudice et al., 2021). Obsolescence arises when a new service, product, or technology replaces an older one. We seek to enrich the literature by investigating the digitalization journey of a high-tech, manufacturing small and medium-sized enterprise (SME) to shed light on the topic. We undertook an interpretive longitudinal study between 2009 and 2020, capturing the transformation journey of an exemplary, award-winning high-tech SME in the UK that is designing and manufacturing high-end home entertainment systems including digital streaming products, music players, and speakers. This study offers important contributions to theory and practice. We conceptualize and define the link between technological obsolescence and the digital transformation process. We offer an innovative conceptual framework for managing technological obsolescence in the context of digital transformation in SMEs. In addition, our study has important implications for practice. SME managers should pay attention to developing non-cognitive dynamic capabilities to effectively respond to digitalization trends by orienting their employees toward careful management of technology obsolescence in a manner unique to the firm's history and experiences.