

Unique Dynamic Capabilities for Technology Adoption

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Abstract

Digital transformation allows companies to adopt new technologies, enhance efficiency, and stay competitive. However, technology advancements also pose uncertainty that urges organizations to make essential changes. Adopting new technologies requires building dynamic capabilities (DCs) to foster innovation and adaptability (Teece, Pisano, & Shuen, 1997). DCs framework is one of the prominent theories in strategic management. It refers to an organization's ability to sense, seize, and transform opportunities and threats in rapidly changing environments (Teece, 2007). The integration of DCs framework into knowledge management, managerial capabilities and digital transformation theories results in novel concepts of dynamic managerial capabilities DMCs (Hefta and Martin, 2015), dynamic knowledge management DKM (Li et al., 2025), as well as different microfoundations of DCs. The development of DCs generates valuable findings, yet they remain general and not timely with the context of technology advancements. This research aims to further explore concepts related to DKM and DMCs, specifically focusing on sensing capabilities and managerial cognition - their construal levels, moderated by organization design. The research employs qualitative approach, interviewing technology leaders, project managers, HR, consultants and operational staff in three selected Nordic organizations. Findings of the research contribute to the development of DCs framework with technology adoption context, coherency in managerial construal level impacts, and a shift in perspectives from routine-based practices and efficiency to the orchestration of collaboration and dynamic activities. In practice, it provides guidance for leaders to cultivate DCs that allow organizations to embrace technology trends and sustain long-term viable performance.

Keywords: dynamic capabilities; construal levels; knowledge management; organization design; technology advancements