

# **Antecedents of Digital Innovation Implementation and its Impact on Firm Performance**

## **Abstract**

Innovation implementation is essential for improving firms' performance and growth. Extant literature suggests that most firms are unable to get the anticipated results because of failure in the implementation state. Many innovations fail because firms do not have appropriate implementation skills, or they do not consistently use the innovation. To acquire the intended benefits from innovation, firms must implement these effectively.

During the COVID-19 pandemic, many firms implemented digital innovations, and this became key enablers of their success. During the initial stages of the pandemic, various companies implemented digital innovation to assist employees working remotely, smoothing their workflow, and improving their customer outreach. This thesis explores the antecedents of successful innovation implementation in the current digital-innovation context.

The aim is to assess the role of the digital innovation implementation antecedents in improving firm performance against five objectives. First, through an extensive literature review using meta-analysis, the study identifies six strategic antecedents of innovation implementation: absorptive capacity, strategic flexibility, strategic resources, internal entrainment, technology acceptance, and external entrainment. Second, the scale to measure digital innovation implementation was generated using exploratory factor analysis with 204 participants. Third, the significance of the identified antecedents of digital innovation implementation was tested using PLS-SEM with 414 participants. The study finds that absorptive capacity, strategic flexibility, strategic resources, technology acceptance, and internal entrainment have a significant and positive relation with digital innovation implementation. Further, the thesis also aimed to understand the relation of the identified antecedents and firm performance. The

analysis finds significant and positive relation of absorptive capacity, strategic flexibility, strategic resources, technology acceptance, and internal entrainment with firm performance.

Fourth, the role of digital innovation implementation as a mediator between the identified strategic antecedents and firm performance was studied. The study confirmed that the digital innovation implementation partially mediates the relation between antecedents and firm performance. There was no mediation effect of digital innovation implementation found between external entrainment and firm performance. Additionally, the impact of the implementation climate as a moderating variable was studied between the antecedents and digital innovation implementation. The moderating effect of implementation climate was only significant for absorptive capacity and external entrainment. Further, the indirect effect of the moderator (implementation climate) and mediator (digital innovation implementation) was studied between the antecedents of digital innovation implementation and firm performance. The analysis shows that the indirect moderation-mediation effect was only established for the absorptive capacity-firm performance and external entrainment-firm performance. Finally, a modified total interpretive structural model (m-TISM) was developed by data collected from expert interviews. The case triangulation confirmed the impact of all the significant antecedents on the model tested.

The present thesis conceptualizes and examines the impact of identified strategic antecedents of digital innovation implementation on firm performance. This thesis extends the extant literature on innovation and digital innovation implementation and confirms the importance of the identified antecedents for successful digital innovation implementation and improved firm performance. The study strengthens the evidence for the resource-based and dynamic-capability approaches in the digital innovation implementation literature. Further, it sets out implications for practitioners, policymakers, and academicians for successful digital innovation implementation.