

An Empirical Study for the Data-Driven Digital Transformation of the Indian Telecommunication Service Providers

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Abstract : Being a major contributor to the Indian economy and a critical facilitator for the country's digital India vision, the Indian telecommunications industry is also a major source of employment for the country. Since the last few years, the Indian telecommunication service providers (TSPs), however, are facing business challenges related to increasing competition, losses, debts, and decreasing revenue. The strategic use of digital technologies for a successful digital transformation has the potential to equip organizations to meet these business challenges. Despite an increased focus on digital transformation, the telecom service providers globally, including Indian TSPs, have seen limited success so far. The purpose of this research was thus to identify the factors that are critical for the digital transformation and to what extent they influence the successful digital transformation of the Indian TSPs. The literature review of more than 300 digital transformation-related articles, mostly from 2013-2019, demonstrated a lack of an empirical model consisting of factors for the successful digital transformation of the TSPs. This study theorizes a research framework grounded in multiple theories, and a research model consisting of 7 constructs that may be influencing business success during the digital transformation of the organization was proposed. The questionnaire survey of senior managers in the Indian telecommunications industry was seeking to validate the research model. Based on 294 survey responses, the validation of the Structural equation model using the statistical tool ADANCO 2.1.1 was found to be robust. Results indicate that Digital Capabilities, Digital Strategy, and Corporate Level Data Strategy in that order has a strong influence on the successful Business Performance, followed by IT Function Transformation, Digital Innovation, and Transformation Management respectively. Even though Digital Organization did not have a direct significance on Business Performance outcomes, it had a strong influence on IT Function Transformation, thus affecting the Business Performance outcomes indirectly. Amongst numerous practical and theoretical contributions of the study, the main contribution for the Indian TSPs is a validated reference for prioritizing the transformation initiatives in their strategic roadmap. Also, the main contribution to the theory is the possibility to use the research framework artifact of the present research for quantitative validation in different industries and geographies.

Keywords : corporate level data strategy, digital capabilities, digital innovation, digital strategy

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