

Chapter 10

Navigating the Digital Wave Equipping Public Officials for Technology-Driven Governance

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ABSTRACT

This chapter addresses the critical role of digital competence in the public sector amidst ongoing digital transformation. The rapid integration of technology into governance and administrative processes demands a workforce equipped with specialised digital skills. This study employs a mixed-methods approach with a literature review and a case study on the National Informatics Centre (NIC) in India, which contextualises and validates the identified strategies through practical applications. To bridge the gap, the authors have introduced the Digital Competency Matrix for Public Officials (DCMPO), a structured framework designed to evaluate and enhance the digital capabilities of public sector employees. Grounded in a synthesis of seminal literature and case study, the matrix outlines key competency domains, including data literacy, technological agility, strategic communication, and collaborative tool proficiency. The DCMPO serves as both an evaluative tool and a developmental roadmap, enabling public institutions to assess current skill levels and identify targeted areas for improvement.

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INTRODUCTION

Digital technologies have permeated every corner of our lives. From the way governments operate to how we educate our youth, from the intricacies of global commerce to our most personal interactions, no aspect of modern society remains untouched by this digital wave. This transformation transcends traditional time, space, and economic development boundaries. Ferrari et al., (2012), describe this digital competence as, “A combination of skills, knowledge, and abilities and a mindfulness to use them when using digital technologies and media in every aspect of our life”.

Digitalizing government services and operations has made digital competency a crucial skill for public officials. Worldwide this e-governance initiative has created a need for public servants to equip themselves with the know-how of digital technologies. A digital government endeavours to digitize public services and ensure higher e-participation and availability of open data. Knowledge of digital technology plays a crucial role in enabling and driving this transformation. This study reiterates how digital competence at individual and organizational levels strengthens digital transformation initiatives.

Though the primary focus of this digital transformation is individual it also requires aligning the organizational strategies. Several studies reiterate the need for digital competence to improve government services' productivity, innovation, and competitiveness. Digital Transformation in public sector organizations requires new ways of working with the various stakeholders, creating new ways of delivering services, and creating new forms of relationship with the public. (Escobar et al. 2023). Public e-services or e-seva, are services mediated through electronic devices to create value for the users. These are generally embedded in a specific organizational context and are not merely web pages. Some of the objectives of digitizing the public sector are, reducing public expenditure, improving the service quality, making operations more efficient, and increasing the chances of policies to be more effective. In other words, there is a shift from government to governance.

The digitalization of government services necessitates enhanced digital competency among public officials, as it is integral to effective e-governance. Research indicates that digital transformation initiatives, focus on improving administrative efficiency and public service accessibility through ICT adoption, while also addressing challenges like data security and technology accessibility in remote areas. Similarly, studies from European countries highlight the importance of stakeholder engagement and trust in the successful implementation of digital solutions (Goldbach et al., 2024). Furthermore, the need for digital skills is emphasized as essential for fostering innovation and improving public service delivery, with findings suggesting that collaboration across sectors can enhance these efforts. Overall, aligning individual digital competencies with organizational strategies is crucial for realizing the

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