

Transforming Public Services: The Impact of Big Data on E-Government Implementation in Sri Lanka

M.B.F Sanjeetha

*Department of Management & IT,
Faculty of Management and Commerce, South Eastern University of Sri Lanka.*

Sanjeetha.mit@seu.ac.lk

ABSTRACT

Purpose: This research examines the usefulness and relevance of metadata in e-government services. It examines how big data, which has the 5V's (Volume, Velocity, Variety, Veracity, and Value), affects e-government platform efficiency and effectiveness. The emphasis is on how this integration may boost performance amid fast technology advancements and increased data complexity.

Design/methodology/approach: A standardized questionnaire is used to collect data from 242 senior, operational, and intermediate managers in four areas for quantitative research. Expert ratings and Cronbach's alpha coefficient confirmed the questionnaire's reliability and validity. SmartPLS 4 was used to evaluate the model's validity and dependability. The study examined how the 5Vs' big data criteria affect e-government services.

Findings: The research shows that big data is crucial to e-government service implementation. The research found that these parameters significantly improve e-government service stacking. Big data analytics helps digitally alter government services, improve decision-making, and improve service delivery.

Practical implications: The findings emphasize the need for big data analytics in e-government infrastructure to improve service quality and responsiveness. Big data may help governments increase public engagement, optimize resource allocation, and provide more personalized services.

Originality value: This paper provides empirical evidence of big data's 5V's impact on e-government services. The declaration emphasizes metadata and big data analytics as key tools for public sector digital transformation.

Keywords: *5Vs, E-Government Services, Big Data, Public Services, Sri Lanka*