



# **IT Service Management Challenges During Healthcare Digital Transformation: Evidence from Electronic Medical Record Systems in Sri Lankan Government Hospitals**

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I certify that I have read this thesis and that in my opinion it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Science.

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# DECLARATION

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Sri Lanka Institute of Information Technology or to any other institution for assessment for any other purpose.



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# ABSTRACT

## **IT Service Management Challenges During Healthcare Digital Transformation: Evidence from Electronic Medical Record Systems in Sri Lankan Government Hospitals**

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This research investigates IT Service Management (ITSM) challenges during healthcare digital transformation through the implementation of Hospital Health Information Management Systems (HHIMS) in NorthWestern Province government hospitals, Sri Lanka. Using the ITIL v4 Service Value System framework, this mixed-methods study examines challenges across three key dimensions: Organizations and People, Information and Technology, and Partners and Suppliers. The study employed sequential explanatory mixed-methods design, collecting quantitative data from 26 IT professionals through structured questionnaires and qualitative insights from 12 healthcare professionals via semi-structured interviews. Statistical analysis revealed significant correlations between ITIL v4 dimensional challenges and digital transformation success, while thematic analysis identified critical implementation barriers including inadequate change management, infrastructure limitations, and multi-stakeholder coordination difficulties. Key findings indicate that Organizations and People dimension challenges ( $r = -0.68, p < 0.01$ ) had the strongest negative impact on transformation success, followed by Information and Technology challenges ( $r = -0.61, p < 0.01$ ) and Partners and Suppliers coordination issues ( $r = -0.59, p < 0.01$ ). Qualitative analysis revealed that staff resistance stemmed from inadequate training (83% of respondents), poor digital literacy support, and system design misalignment with clinical workflows. The research contributes a contextual framework for understanding ITSM challenges in developing country healthcare systems and provides actionable recommendations for improving EMR implementation success. Policy implications include the need for comprehensive management strategies, enhanced technical infrastructure, and improved multi-agency governance structures.

**Keywords:** IT Service Management, Healthcare Digital Transformation, Electronic Medical Records, ITIL v4, Sri Lankan Healthcare, Government Hospitals

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