

INFORMATICS INSTITUTE OF TECHNOLOGY In Collaboration with UNIVERSITY OF WESTMINSTER

IDENTITY ACCESS MANAGEMENT CONCEPTUAL FRAMEWORK FOR SRI LANKA

A dissertation by

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Abstract

Identity Access Management (IAM) is crucial to the efficient and secure management of access to resources and services in the contemporary digital environment. Rapid technological development in Sri Lanka and an increasing reliance on digital systems have highlighted the need for a strong and context-specific IAM framework. The purpose of this thesis is to create a thorough Identity Access Management Conceptual Framework specifically designed for Sri Lanka's distinct sociocultural, economic, and technological environment. An extensive analysis of current IAM frameworks and best practices from both global and regional perspectives is the first step in the research. To address Sri Lanka's unique needs and challenges, it synthesizes key insights and modifies pertinent components. The proposed framework ensures a localized approach and aligns with the nation's legal and regulatory requirements through an iterative process of consultation with experts, policymakers, and stakeholders from various sectors. While acknowledging the significance of addressing potential privacy concerns, cultural nuances, and digital literacy limitations that may be prevalent in Sri Lanka, the IAM conceptual framework emphasizes the adoption of cutting-edge technologies. To balance security, convenience, and inclusivity while serving a diverse population with varying levels of digital experience, a user-centric approach is used. A number of pilot implementations are carried out throughout chosen public and private organizations in Sri Lanka to verify the framework's efficacy. Key performance indicators are assessed, providing empirical support for their applicability and relevance. Examples include security posture, user experience, compliance adherence, and resource utilization. The findings of this study make a significant contribution to the creation of an IAM strategy specifically designed for Sri Lanka, encouraging digital resilience, enhancing data protection, and encouraging effective access control across various sectors. It acts as a reference manual for decision-makers, businesses, and security experts, making it easier to adopt an identity access management system that reflects the country's particular needs while keeping up with international best practices.

Overall, this thesis report makes an important and timely contribution to the expanding field of identity access management, enabling Sri Lanka to move through the rapidly changing digital environment safely, effectively, and while protecting personal information and fostering digital inclusion.

Keywords: Identity and Access Management, Technologies, Framework, Policies