THE ROLE OF CYBER SECURITY IN NATIONAL IDENTITY MANAGEMENT WITH SPECIAL FOCUS ON FORENSIC AND BLOCKCHAIN

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Abstract

The technological know-how developed as a result of this research will serve as a milestone for the Sri Lankan government's modern information technology. Further streamline the dayto-day operations of the National Information Center and Personnel Registration Agencies, which are selected from the state institutions under the Sri Lankan government and have the potential to influence national security, and thus expedite the process of engaging with the public. Additionally, this research is expected to secure identity management in the Sri Lankan Government's centralised information database, which was developed using blockchain technology, and to identify solutions for national-level problems that prevent the government from operating in an accurate manner. Alternatively, this proposed framework will address secure blockchain for identity management as well as digital forensics for incident analysis and management. This proposed framework incorporates advanced technology and is based on global examples to illustrate the concept. The majority of global examples are comparable to implementing the entire proposed solution. Sri Lanka's current situation necessitated a slew of difficulties in implementing this proposed solution. As a result of this research's knowledge gap in this subject area, implementing this solution in the Sri Lankan national government's identity management process will be extremely difficult. Additionally, this thesis' methodology philosophy was primarily effected to gain a clear understanding of the national government sector's implementation process. This proposed framework has a significant technology gap at the national level.

Keywords: Blockchain, Identity management, Digital Forensic, Notarization, Data Immutability