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ASSESSING CYBERSECURITY READINESS AMONG HIGHER EDUCATION INSTITUTIONS IN INDONESIA USING MANAGEMENT PERSPECTIVES

(2023) *ICIC Express Letters*, 17 (10), pp. 1151-1158.

DOI: 10.24507/icicel.17.10.1151

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Abstract

The COVID-19 pandemic is a disruptive era for the academic emerging technologies as a result of implementation of e-learning through an integrated higher education information system. Currently, the scientific literature to address the cybersecurity readiness level of higher education from the sociotechnical aspect is still little known. For this reason, the objective of this research is to determine the level of cybersecurity readiness of higher education institutions in Indonesia based on the user and management perspective and factors associated with cybersecurity readiness. An online survey was conducted amongst respondents who both manage and use information systems. Three aspects of the assessment were carried out based on the Sociotechnical System-Cybersecurity Framework (STS-CF) which assessed the infrastructure (hardware and software) readiness and organizational support. The survey results emphasized that social and technical readiness is significantly found related to cybersecurity readiness in higher education. In conclusion, most higher education institutions are ready to implement cybersecurity; however, several factors are needed to improve such as access to the infrastructure, cybersecurity policies, and standardized procedures for data security. ICIC International ©2023 ISSN 1881-803X.

Author Keywords

Cybersecurity framework; Cybersecurity readiness; Islamic higher education; Management perspective; Sociotechnical system

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Publisher: ICIC International

ISSN: 1881803X

Language of Original Document: English

Abbreviated Source Title: ICIC Express Lett.

2-s2.0-85172317013

Document Type: Article

Publication Stage: Final

Source: Scopus

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