



Cyber Security Awareness and Behavior Change for IoT Users

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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is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources).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

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This research explores the factors affecting IoT security perceptions and user behavioral among different user groups. By using an integrated approach, we link research between user characteristics. Perceived Risk and contextual factors in determining safety practices. These research findings highlight the growing awareness of the importance of IoT security. But there is a significant gap between awareness and action. Many individuals display limited knowledge and security measures are used infrequently. They often rely on default settings and neglect to update. Additionally, technical expertise Perceived Risk and contextual factors influence safety behavior. From these insights We propose a proactive, user centric framework. with an emphasis on tailored education User friendly security solution and share common responsibilities to promote a secure IoT ecosystem.

Keywords:

Internet of Things (IoT), Cyber Security, Security Awareness, Behavior Change, User-Centric Security, Risk Perception, Security Practices, Empirical Investigation, Mixed Methods Research, IoT Adoption, Vulnerability Management, Threat Modeling, Data Privacy, User Education.

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