

Cyber Security Awareness and Behavior Change for IoT Users

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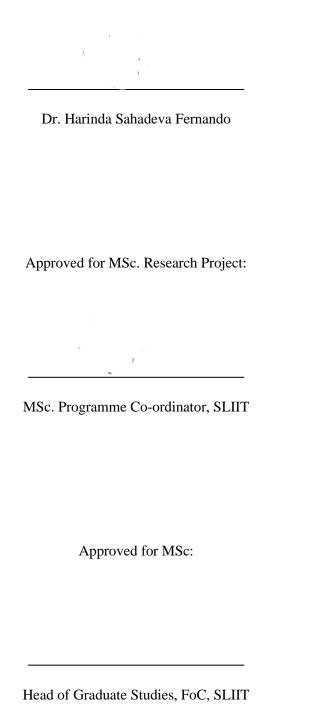
A THESIS

SUBMITTED TO

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IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY (CYBER SECURITY)

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.



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is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources).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

DECLARATION	ii
ABSTRACT	iv
ACKNOWLEDGEMENT	······································
TABLE OF CONTENTS	
List of Figures	iv
List of Tables	······································
Chapter 1 Introduction	1-1
1.1 Background	1-1
1.2 Research problem	1-1
1.3 Objectives	1-2
Chapter 2 Literature Review	2-1
2.1 Review of Existing Literature	2-1
2.2 Cybersecurity Threats in the IoT Landscape	2-1
2.3 User Behavior and Security Awareness in the Context of IoT	2-10
2.4 Strategies for User Awareness and Behavior Change in IoT	2-16
2.5 User-Centric Security Solutions	2-17
2.6 Promoting Positive Behaviour Change	2-17
2.7 Standardization and Regulations for IoT Security	2-19
2.8 The Role of Regulations	2-20
2.9 The Role of Technology in Addressing IoT Security Challenges	2-21
2.10 Gap Identification	2-23
2.11 Conclusion.	2-24
Chapter 3 Research Objectives and Outcomes	3-1
3.1 Research Objectives	3-1
3.2 Conceptual Framework	3-2
3.3 User Awareness and Knowledge	3-3
3.4 Perceived Risk and Threat Sensitivity	3-3
3.5 User's Beliefs about the Importance of Cybersecurity	3-3
3.6 Contextual Factors	3-4
3.7 User Characteristics	3-4
3.8 Hypotheses	3-5
3.9 Research Questions	3-5
3.10 Evaluating the IoT Security Awareness Framework	3-6
3.11 Presenting the IoT Security Awareness Framework to Users	3-8

3.12 Expected Outcomes: IoT Security Awareness Framework	3-10
Chapter 4 Research Design and Methodology	4-1
4.1 Overview of the Design IoT Security Awareness Framework	4-1
4.2 Research Design	4-1
4.3 Ethics Clearance	4-2
4.4 Sampling Strategy	4-2
4.5 Methodology	4-3
4.6 Data Collection Methods	4-4
4.7 Data Analysis	4-5
4.8 Framework Development Based on Research Findings	4-5
4.9 Anticipated Framework Components	4-5
Chapter 5 Results and Analysis	5-1
5.1 Introduction	5-1
5.2 Descriptive Statistics	5-1
5.3 Analysis of Survey Responses	5-55
5.4 Discussion of Findings	5-55
Chapter 6 Hypothesis Analysis and Discussion	
6.1 purpose	6-1
6.2 Hypothesis Testing Methodology	6-1
6.3 Summary of Hypothesis Analysis	6-9
6.4 Summary of Findings	6-10
6.5 Overall Summary	6-11
Chapter 7 IoT Security Awareness Framework Development	7-1
7.1 Introduction	7-1
7.2 Framework Design	7-1
7.3 Framework Development Process	7-3
7.4 Proposed Framework Model	7-3
7.5 Practical Implications	7-6
7.6 Conclusion	7-6
Chapter 8 Conclusions and Recommendations	8-1
8.1 Conclusion of the Research	8-1
8.2 Contributions to the Study	8-1
8.3 Recommendations for Future Research	8-1
8.4 Practical Recommendations	8-2
8.5 Final Thoughts	8-3

Chapter 9 References	9-1
Chapter 10 Appendix	. 10-1
Appendix 1: Survey Questions	. 10-1
Appendix 2: Hypothetical User Responses during the interview	. 10-1

List of Figures

Figure 1.1 Global IoT Connection Forecast 2022-2032	02-02
Figure 1.2 IoT Attack Landscape	02-03
Figure: 3.1 Conceptual Framework Diagram	03-02
Figure: 7.1 IoT Security Awareness Framework	07-04

List of Tables

Table 6.1 variable	6-2
Table 6.2 Awareness Level	6-3
Table 6.3 variable	6-3
Table 6.4 Risk level	6-4
Table 6.5 variable	6-5
Table 6.6 Importance of Cybersecurity	6-6
Table 6.7 variable	6-6
Table 6.8 Workplace Policy	6-7
Table 6.9 variable	6-8
Table 6.20 Technical Expertise	6-9
Table 6.31 Summarizes the results of all the hypothesis tests	6- ⁹