# EVALUATION OF INFORMATION SECURITY ON NETWORK DATA CENTER UNIVERSITAS MUHAMMADIYAH KALIMANTAN TIMUR (UMKT) USING INDEKS KEAMANAN INFORMASI (KAMI)

### **THESIS**

Submitted for fulfil part condition reach title Bachelor Computer

ARRANGED BY:
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INFORMATION ENGINEERING S1 STUDY PROGRAM

FACULTY OF SCIENCE AND TECHNOLOGY

UNIVERSITAS MUHAMMADIYAH KALIMANTAN TIMUR

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#### **APPROVAL SHEET**

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Supervisor

: Faldi, S.Kom., M.TI

- 1. This paper is completely ORIGINAL and has NEVER been submitted for a Bachelor's Degree in Computer Science, either at the Universitas Muhammadiyah Kalimantan Timur(UMKT) or at any other tertiary institution.
- 2. This paper is my own ideas, formulations and research, without any help from other parties except the direction of the Advisory Lecturer
- 3. In this paper there are no works or opinions of others, except in writing that is clearly stated as a reference in the manuscript with the author's name mentioned and mentioned in the Bibliography of this paper.
- 4. The software used in this study is entirely my responsibility, not the responsibility of the Universitas Muhammadiyah Kalimantan Timur(UMKT)
- 5. I make this statement in truth, if in the future there are irregularities and untruths in this statement, then I am willing to accept ACADEMIC SANCTIONS with the revocation of the degree that has been obtained, as well as other sanctions in accordance with the norms that apply at Muhammadiyah Higher Education.

Samarinda, October 26, 2022 Which States,

> Wiliam Aryanda 1811102441122

### INTRODUCTION

Alhamdulillah, by giving thanks to Allah SWT, because with His guidance this thesis with the title "Evaluation Of Information Security On Network Data Center Universitas Muhammadiyah Kalimantan Timur (UMKT) Using Indeks Keamanan Informasi (KAMI)" was able to be completed on time, as one of the requirements to complete lecture assignments and to achieve University graduation requirements Universitas Muhammadiyah Kalimantan Timur.

The writer is very aware of all the shortcomings in writing this thesis, but with the moral and material assistance from various parties, all the completeness in writing it can be fulfilled. For this reason, on this occasion the author should express his gratitude and highest appreciation to various parties who directly or indirectly have provided assistance.

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Samarinda,1 Juli 2022

Writer

### **ABSTRACT**

Information management is an aspect of Good University Governance, including the quality and security of information management. To raise awareness of the importance of information security, since 2008, the Ministry of Communication and Information Technology has conducted outreach to public service providers on methods or methods of assessing the information security status of institutions that provide equity services. The tools provided by the Ministry of Communication and Information Technology as a form of how important information security is, namely the Indeks Keamanan Informasi (KAMI).

The Indeks Keamanan Informasi (KAMI) is an evaluation tool created by the Ministry of Communication and Information to help analyze the level of readiness and maturity of information security in agencies/companies, both government and non-government, which has been adapted to international standards, namely ISO 27001:2013. This evaluation tool will also be used as a tool to provide an overview of the condition of readiness (completeness and maturity) of the information security framework at Universitas Muhammadiyah Kalimantan Timur.

The results of the assessment of the the Electrical System Category dependence are 26 out of a total of 50, and are included in the high category. The results of the assessment of the five areas that have been carried out are 279 out of a total of 645. With the high dependence on the Electrical System Category, the assessment of the five areas is still included in the category of Fulfillment of the Basic Framework and gets the status of security level II. While the minimum limit that must be achieved to be able to carry out ISO certification is security level III+. For this reason, a recommendation for improvement will be made in the parts that are still lacking from the results of the Indeks KAMI assessment which have been done.

Then the recommendations from this study can be used as material for consideration and evaluation for the Universitas Muhammadiyah Kalimantan Timur in making improvements related to mitigating or preventing information security vulnerabilities, as well as ensuring that regulations can be achieved properly and institutional security policies in the future.

Keywords: Evaluation, Indeks Keamanan Informasi (KAMI), Information Security, ISO 27001, Manage Security

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