

**RESEARCH AND COMMUNITY SERVICE GRANTS AWARDEE  
DETERMINATION USING THE AHP-SAW METHOD  
(CASE STUDY: LPPM UMKT)**

**THESIS**

Submitted for fulfill part condition reach title Bachelor Computer

**ARRANGED BY :**

**AYU PUJIASTUTI**

**1811102441106**



**INFORMATION ENGINEERING S1 STUDY PROGRAM  
FACULTY OF SCIENCE AND TECHNOLOGY  
MUHAMMADIYAH UNIVERSITY EAST KALIMANTAN  
SAMARINDA**

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# APPROVAL SHEET

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# STATEMENT OF THESIS AUTHENTICITY PAGE

## STATEMENT OF THESIS AUTHENTICITY PAGE

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Declare that the thesis with the following title: **Research and Community Service Grants Awardee Determination Using the AHP-SAW Method (Case Study: LPPM UMKT)**

Supervisor: Asslia Johar Latipah, M.Cs

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 idea, formulation 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 by mentioning the name of the author and mentioned in the Bibliography of this paper.
4. The software used in this research 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 title that has been obtained, as well as other sanctions in accordance with the norms that apply at Muhammadiyah Higher Education.

Samarinda, 15 Juli 2022  
That state,



Ayu Pujiastuti  
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Alhamdulillahirabbila'lamiin. I express my gratitude to Allah SWT, the Almighty and the Almighty, for the abundance of His grace and gifts, so that I can complete the thesis entitled: DETERMINATION OF RESEARCH GRANTS AND COMMUNITY SERVICES USING THE AHP-SAW METHOD (case study: LPPM). This is to fulfill one of the requirements and complete the study in order to obtain a Bachelor of Computer degree at the Faculty of Science and Technology, *Universitas Muhammadiyah Kalimantan Timur*.

I would like to take this opportunity to thank my beloved people around me who support and help me. Sincere thanks to:

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9. And other parties who are not mentioned one by one.

I am fully aware that this thesis is still far from perfect. Therefore, I gladly accept criticism and suggestions to improve the writing of this thesis.

Samarinda, June 13, 2022

A handwritten signature in black ink, appearing to read 'Ayu Pujiastuti'. The signature is stylized with a large initial 'A' and a cursive 'Pujiastuti'.

Ayu Pujiastuti

## **ABSTRACT**

*LPPM is a research and community service institution that supports the achievement of the vision of the Muhammadiyah University of East Kalimantan. This study aims to determine the recipients of research grants awardee and community service using the AHP-SAW method and to determine the performance of AHP-SAW in determining the recipients of research and community service grants. This research uses AHP (Analytical Hierarchy Process) and SAW (Simple Additive Weighting) methods. The AHP method is used to determine the alternative weighting and the SAW method as an alternative ranking. The AHP-SAW method in the case of receiving LPPM granted from 2017 to 2021 obtained an average accuracy of 73.46% using 244 alternative data from lecturers who registered as grantees. The preference weight of the AHP method could provide better accuracy results, which was 73.46%, than using the preference weights from LPPM, which only obtained 68.5% accuracy results. Preference weights and cost and benefit attributes. Became the parameter that most influences the results of the AHP-SAW method' results.*

**Keywords:** LPPM, AHP, SAW, GRANTS AWARDEE

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