

## APPROVAL PAGE

Approval of the Graduate School of IT Telkom

Date (DD/MM/YY) \_\_\_\_\_

\_\_\_\_\_

(Ari Moesriami Barmawi, PhD)

Dean of Graduate School of IT Telkom

I certify that this thesis satisfies all the requirement as a thesis for the degree of Master Informatics Engineering

Date (DD/MM/YY) \_\_\_\_\_

\_\_\_\_\_

(Arie Ardiyanti Suryani, MT)

Head of Informatics Engineering

This is to certify that we have read this thesis and that our opinion it is fully adequate, in scope and quality, as a thesis for degree of Mater of Informatics Engineering

Date (DD/MM/YY) \_\_\_\_\_

\_\_\_\_\_

(Arie Ardiyanti Suryani, MT)

Co-Supervisor

\_\_\_\_\_

(Dr. Bambang Hariyanto)

Supervisor

Examining Committee Members (first name belongs to chairperson of the jury and the second name belongs to supervisor, the rest is in alphabetical order of first name) Date of examination (DD/MM/YY) \_\_\_\_\_

(Ari M. Barmawi, Ph.D)      (Chairperson of the jury) \_\_\_\_\_

(Warih Maharani, MT)      (Jury's member) \_\_\_\_\_

(Shaufiah, MT)      (Jury's member) \_\_\_\_\_