

APPROVAL PAGE

Approval of the School of Computing Telkom University

Date (DD/MM/YY) _____

(Dr. Maman Abdurohman S.T., M.T.)

Dean of the School of Computing Telkom University

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

Date (DD/MM/YY) _____

(Dana S. Kusumo, Ph.D)

Head of Informatics Engineering

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Informatics Engineering. Date (DD/MM/YY)

(Shaufiah, MT)

Co-Supervisor

(Prof. Dr. The Houw Liong)

Supervisor

Examining Committee Members (first name belongs to the 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) _____

(Dana S. Kusumo, Ph.D) (Chairperson of the jury) _____

(Agung Trisetyarso, Ph.D) (jury's member) _____

(Dr. Marisa Paryasto) (jury's member) _____