

APPROVAL PAGE

Approval of the Graduate School of Telkom University

Date (07/07/2015) _____

(Dr. Maman Abdurrohman 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 (07/07/2015) _____

(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 Engineering.

Date (07/07/2015) _____

Jimmy Tirtawangsa, PhD

Supervisor

Thomas Anung Basuki, PhD

Co-Supervisor

Examining Committee Members :

Date of examination (07/07/2015) _____

(Hertog Nugroho, Ph.D) (Chairperson of the jury) _____

(Dr. Arief Fatchul Huda) (jury's member) _____

(Tjokorda Agung Budi, ST.,MT) (jury's member) _____