

Approval of the Graduate School of IT Telkom

July 2012

Ir. Ari Moesriami Barmawi, M.Sc., Ph.D.  
Dean of Graduate School of IT Telkom

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

July 2012

Arie Ardiyanti Suryani, S.T., M.T.  
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.

July 2012

Shaufiah, S.T., M.T.  
Co-Supervisor

Dr. Deni Saepudin, S.Si, M.Si  
Supervisor

Examining Committee Members

Date of examination : July 17<sup>th</sup> 2012

Prof. Thee Hiouw Liong (Chairperson of The Jury) \_\_\_\_\_

Arie Ardiyanti Suryani, S.T.,M.T. (Jury's Member) \_\_\_\_\_

Kusuma Ayu Laksitowening, S.T.,M.T. (Jury's Member)\_\_\_\_\_