APPROVAL

Approval of the Graduate School of Telkom University

Date: July 10, 2017

(Dade Nurjanah, Ph.D)

Director of Graduate School of Telkom University

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

Date: July 10, 2017

(Dana Sulistyo Kusumo, Ph.D)

Head of Graduate School 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: July 10, 2017

(Dade Nurjanah, Ph.D)

Supervisor

Examining Committee Members:

Date: July 10, 2017

(Jimmy Tirtawangsa, Ph.D)

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(Yanti Rusmawati, Ph.D)

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