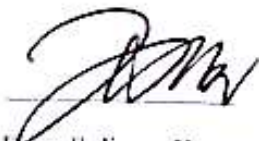


## APPROVAL

Approval of the School of Computing of Telkom University

I Certify that this thesis satisfies all the requirements as a thesis for the degree of Master Informatics

Date 20 July 2017

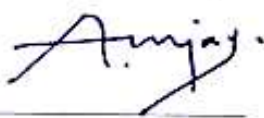


Dana Sulistyoko Kusumo, Ph.D

Head of Master Informatics

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.

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