Preface

Assalamu'alaikum warahmatullahi wabarakatuh.

Praise to God, the author dedicates this study to ALLAH Subhanahu wata'ala for His grace and His blessings, this thesis had been completed. This thesis is in partial fulfillment of the requirements for the degree of magister of informatics in the Informatics Post graduate Study Program in Telkom University. I acknowledge that this thesis is still far from being perfect due to the various limitations that I should encounter. All device and constructive criticism from everyone is highly expected for better achievements in the future. However I expect that this research is useful for all readers.

Wassalamu'alaikum warahmatullahi wabarakatuh.

Bandung, August , 2017
The Author,

Adhi Widyanto