Acknowledgements

I would like express my thankfulness to advisor Dr. Metta Kuning and my co-advisor Dr. Nittaya McNeil for their invaluable assistance encouragement and helpful guidance.

My special thanks are Professor Don McNeil for his great guidance and encouragement. Also thanks to Greig Rundle for editing my English. I gratefully thank all teachers in Research Methodology program and in department of mathematics and computer science. I would like to thanks my staff and my friends for their helpful.

Finally, I would like to thank my parents and my brothers for their support and encouragement throughout my study.

<div style="text-align: right">Varoonwan Silamas</div>