ACKNOWLEDGEMENTS

This thesis is the result of the effort, assistance, and support from all involved parties. The author would like to express sincere gratitude and appreciation to:

- 1. Allah SWT, for all the grace, blessings, and forgiveness and Rasulullah SAW, whose example serves as an inspiration for the author to live life with purpose and continually strive for self-improvement.
- 2. My beloved wife, Endah Setyowati, M.T., and my beloved children, Daffa, Hamizan, and Adzkia, for their prayers, positive vibes, and utmost support.
- 3. My beloved parents, S. Weka Purwatno, S.E., and Lian Andayani, and my beloved sisters, Bella Almira and Tiara Alzena, for all their prayers and advices in preparing this thesis.
- 4. Dr. Eng. Khoirul Anwar, S. T., M. Eng., as my supervisor, and Dr. Nachwan Mufti A, S.T.,M.T., as my co-supervisor, for guiding the author in writing and finishing the research and for always teaching the author regarding the importance of prioritizing quality over quantity. Thanks for all the excellent advice, experience, support and valuable input.
- 5. The entire family of the University Center of Excellence for Advanced Intelligent Communications (AICOMS), who made my research journey enjoyable and filled with cheer.
- 6. My colleagues at Telkomsel Regional Sumbagsel, who offered valuable insights and assistance in completing this research.
- 7. All of my friends, Ahmad Saifioskandar, Fikri Nizar, Dhimas Prasetya, Fadhlil Hamdi, Rizki Hidayati, Khanaya, and Rara for the presence, time, help, and supports that always accompany the author's steps in completing this thesis.