DEDICATION

All praise to Allah SWT for giving me the blessing, strength, chance, and endurance to complete this study. This thesis is completed with the endless support of my family. I dedicate this thesis for my beloved parents, Amir Syarifudin and Azizah Mariana, who give me boundless love, support, and encouragement throughout this academic journey. This accomplishment is a tribute to the values you instilled in me to reach this milestone. Finally, this thesis is dedicated to the pioneers in Computer Science, whose innovative breakthroughs in modern technology. Their works have not only been the foundation of my research but also the source of inspiration. I express my sincere appreciation for their ongoing contributions. Hopefully, this research may provide a valuable contribution in Computer Science.

ACKNOWLEDGMENTS

This thesis has complied with the effort, support, and help from lecturers, family, colleagues, and friends who have encouraged me to keep my eyes on this research. I express my deepest gratitude to the following people and organizations who have been crucial in completing this research:

1. My Thesis Supervisors and Co-supervisors: Mr. Prof. Dr Adiwijaya and Mrs. Angelina Prima Kurniati, S.T., M.T., Ph. D

for the continuous support of my master's study and related research, for the patience, motivation, and immense knowledge. The guidance helped me throughout the research and writing of this thesis. I could not have imagined having a better advisor and mentor for my master's study.

2. My Thesis Reviewers: Isman Kurniawan, Ph.D., Mr. Kemas Rahmat Saleh, Ph.D., and Mr. Dr. Tjokorda Agung Budi Wirayuda, S.T., M.T.

for the insightful comments, encouragement, and valuable questions that inspire me to widen my research from various perspectives.

3. Head of Master of Informatics: Mrs. Dr. Setyorini, S.T., M.T.

which gave access to the research facilities. I would also like to thank the entire faculty and employees of the Master of Computing, Telkom University, for the author's knowledge, guidance, and assistance in composing this thesis.

4. Research Collaborator: Mr. Eric Rojas, Ph. D

I am thankful for my research collaborators, whose collaboration and dedication have enriched this study for Process Mining in Healthcare and led to innovative discoveries.

5. Supportive Family: my beloved father, Mr. Amir Syarifudin, S.T., my lovely mother, Mrs. Azizah Mariana, S.E., my sweety sisters, Ms. Hanna Syafira M, and Ms. Alisha Khairani M

for the unconditional love, endless support, constant prayers, and always believe in my abilities motivated me during the demanding research and writing process.

6. Peers and Colleagues:

Besides, I thank my friends and colleagues in the Master of Computing: Arbie Nabilasalsa, Fitri Eka, Riska Chairunisa, Riris Matua Lubis, Rani Sari Murti, and all the people who have contributed directly or indirectly to this thesis. I am grateful for supporting me mentally and physically through prayer. With their precious support, it is possible to conduct this research.