

**IMPACT OF OPTIMIZING WARRANTY OPPORTUNITY COST
THROUGH DATA DRIVEN POLICY TO ENHANCE FINANCIAL
PERFORMANCE IN LEADING HEAVY EQUIPMENT COMPANY**

By

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2-2252-024

MASTER'S DEGREE

in

MECHANICAL ENGINEERING – ENGINEERING MANAGEMENT
FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



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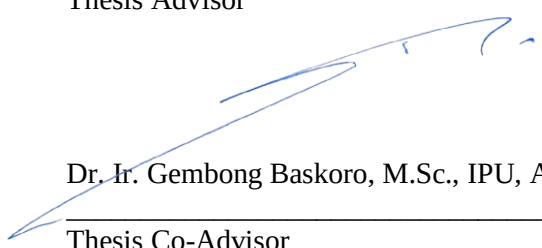


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ABSTRACT

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This thesis aims to optimize the warranty opportunity cost and enhance the financial performance of a leading heavy equipment company in Indonesia by developing an out-of-warranty policy and a data-driven approach. The thesis uses the DMAIC methodology, which consists of five phases: Define, Measure, Analyze, Improve, and Control. The thesis also employs various tools and techniques, such as focus group discussions, fishbone diagrams, analytical hierarchy process, and design thinking. The thesis proposes a new out-of-warranty policy that provides goodwill service for products that are less than 36 months old and have medium utilization and charges the pro-rate costs. The thesis also develops a prototype of a dashboard that displays the key performance indicators of the warranty process. The thesis concludes that the proposed solution can reduce the warranty costs, increase customer satisfaction, and improve the company's financial performance.

Keywords: Goodwill Services, Out-Warranty Claim, Warranty Policy, Data Drive Approach, Warranty Opportunity Cost.

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DEDICATION

I dedicated this work for my beloved wife Aisah, my daughters: Hafshah, Asma', and Kultsum, and my son Abdullah, who always support me to complete this study. And the brightest future for the company I loved with my full experiences: United Tractors.

ACKNOWLEDGEMENTS

Alhamdulillah, thank you God that I finished this research. Special thanks to Mr. Dena Hendriana, B.Sc., S.M., Sc.D., who always provide a direction to do great practical research, and give a high inspiration and motivation, and also, especially his approval on topics that relevant to the organization and very important to others professional organization.

Also special thanks to Mr. Dr. Ir. Gembong Baskoro, M.Sc., IPU, APEC Eng., who always inspires me to think beyond the ordinary and challenge to freely explore various concept and knowledge to write the research by the standard.

I also would like to thank all lecturers who have very helpful in teaching and guiding me while studying in Swiss German University. I have understood my coursework throughout the curriculum and syllabus program to be stimulating and thoughtful, providing me with the tools with which to explore both past and present ideas and issues.

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