

**ECONOMIC ANALYSIS FOR CREATING PETROLAB SERVICE UNITED
TRACTORS TO IMPROVED LEADTIME PETROLAB LABORATORY**

By

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22252042

MASTER'S DEGREE
in

MECHANICAL ENGINEERING – ENGINEERING MANAGEMENT
FACULTY OF ENGINEERING AND INFORMATION OF TECHNOLOGY



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Revision after the Thesis Defense on 24 January 2024

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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ABSTRACT

ECONOMIC ANALYSIS FOR CREATING PETROLAB SERVICE UNITED TRACTORS TO IMPROVED LEADTIME PETROLAB LABORATORY

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Each company has its own vision. To achieve this vision, Companies must be able to measure current performance so that future performance can be determined and measured in accordance with the established vision. PT. United Tractors is one of the leading heavy equipment companies in Indonesia. Currently, PT. United Tractors is developing and building a petrol lab service laboratory for the United Tractors Tanjung Enim site for building a laboratory requires teamwork between the site and the head office in Jakarta. To serve customers in the Sumatra area, PT United Tractors needs to have a petrol lab service laboratory which can be used to see the condition of heavy equipment that has been sold to customers using laboratory oil tests and control the health of heavy equipment by customers from the top-level management, Engineering starting from the Head Office Manager and Branch and Site Manager. This research aims to develop a feasibility study for building a petrol lab service laboratory. The methodology used to develop the application this is the DMAIC methodology. This methodology consists of five sequential phases for supports research consisting of Define, Measure, Analyze, Improve and Control. The results of this research are related to the acceleration of lead time from entering the laboratory until the report results come out and the construction of the petrolab service laboratory

has run smoothly, covering all requirements. Study This recommends companies and customers to use this laboratory to simplify, help, control companies and customers evaluate the health of heavy equipment at the Tanjung Enim site and support the achievement of the vision. the results of the construction of the petrolab service laboratory were declared feasible to be built and successfully used by customers at UT Tanjung Enim and customer satisfaction with laboratory services at UT Tanjung Enim

Keywords: Feasibility Study, Health of Heavy Equipment, Customer Satisfaction, Lead Time, DMAIC Methodology

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DEDICATION

I dedicate this work to my family, friends, lecturers and other people who will benefit from this research in the future. Special dedication to my father, Tri Harsono, my mother, Sugiyarni, and my younger brother, Chr. Mei Dwi Nur Ari Wibowo and my younger sister Latifa Nur Hafizh. and my wife Wahyuning Dwi Nastiti and my children M. Desnavie Al Jazary and Fatimah Shaquena Shabira, We wish you faith, blessings and health always with us all.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the presence of Allah SWT for the blessings of faith, opportunities, favors, mercy and His endless strength that has been given to me so that I can finish it well. This thesis. I want to say Thank you always to my family pray and supported me all the time for my thesis writing. Their love and support has given me the strength and motivation to complete it This job.

I would also like to thank my advisor, Mr. Dena Hendriana, B.Sc., S.M., Sc.D., Mr. Dr. Dwityapoetra S. Besar, Co-advisor for your patience, support and very useful input and very useful for developing my thesis work. Even though I have limited time limited, in fact he always makes time for it guide students and support solutions thesis. Thank you so much for the cooperation from employees at PT. United Tractors Tbk. Most importantly, I am grateful Thank you to the president director of the company, Mr Frans Kesuma and his staff Director, Mr. Edhie Sarwono, Mr. Idot Supriadi, Mr. Iwan Hadianoro, Mr.Loudy Irwanto Ellias, Mr. Iman Nurwahyu, Mr.Widjaja Kartika, along with general manager service Mr Roedy Poerwanto for allowing me to get information about company. Lastly, I would like to thank my friends who also supports me in ups and downs and also reminds me of resolutions this thesis. During this time I have had useful and meaningful learning experiences through the quality curriculum and programs presented. This provides provisions to continue exploring ideas and problems in the past and future.

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