

**OPTIMIZING THE CUSTOMER COORDINATION PROCESS
USING BUSINESS PROCESS MODELING TO REDUCE
SERVICE TIME
(STUDY CASE: PERIODIC MAINTENANCE PACKAGE
PROGRAM AT PT UNITED TRACTORS TBK SITE SEPARI)**

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BACHELOR'S DEGREE
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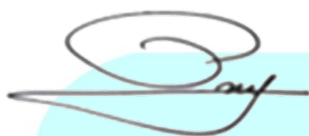
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STATEMENT BY THE AUTHOR

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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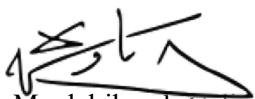


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ABSTRAK

OPTIMIZING THE CUSTOMER COORDINATION PROCESS USING BUSINESS PROCESS MODELING TO REDUCE SERVICE TIME (STUDY CASE: PERIODIC MAINTENANCE PACKAGE PROGRAM AT PT UNITED TRACTORS TBK SITE SEPARI)

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Penelitian ini bertujuan untuk mengatasi permasalahan koordinasi antara PT United Tractors dan pelanggan dalam pelaksanaan *Periodic Maintenance Package* (PMP) di Site Separi yang menyebabkan keterlambatan servis, tingginya unit *not ready*, serta pemborosan waktu operasional. Permasalahan utama yang diidentifikasi adalah komunikasi jadwal yang tidak terstruktur (sering disampaikan H-1), tidak adanya sistem konfirmasi kesiapan unit, serta belum tersedianya SOP koordinasi yang terstandarisasi. Penelitian ini menggunakan pendekatan *Business Process Modeling* (BPM) dan metodologi DMAIC (Define–Measure–Analyze–Improve–Control) dengan metode campuran melalui analisis data historis servis, pengukuran durasi pekerjaan, kuesioner tim, serta *focus group discussion*. Hasil implementasi menunjukkan perbaikan yang signifikan, di mana rata-rata keterlambatan servis menurun dari 180 menit menjadi 10 menit (penurunan 85%), persentase unit *not ready* turun dari 45% menjadi 6% (penurunan relatif 86,7%), insiden *unit not found* berkurang dari 10 menjadi 1 kejadian per bulan (penurunan 90%), serta durasi servis aktual berkurang dari 6 jam menjadi 5 jam sesuai standar operasional. Kesimpulannya, integrasi BPM dan DMAIC terbukti efektif dalam mengurangi variabilitas proses, meningkatkan kesiapan unit, dan mengoptimalkan efisiensi operasional PMP secara berkelanjutan.

Kata kunci: PMP program, just in time, cost, Mechanical scheduling, DMAIC methodology.

ABSTRACT

OPTIMIZING THE CUSTOMER COORDINATION PROCESS USING BUSINESS PROCESS MODELING TO REDUCE SERVICE TIME (Study Case: Periodic Maintenance Package Program at PT United Tractors Tbk Site Separi)

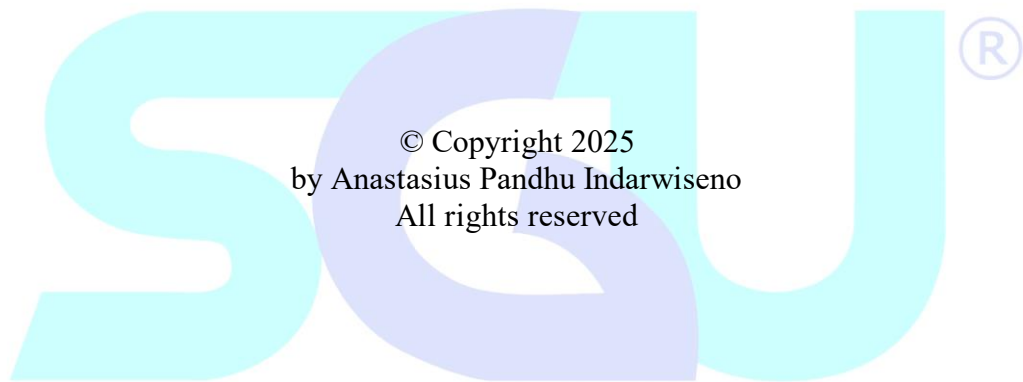
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This study aims to address coordination issues between PT United Tractors and customers in the implementation of the Periodic Maintenance Package (PMP) at Site Separi, which resulted in service delays, high rates of unit unpreparedness, and operational inefficiencies. The primary research problem identified includes unstructured scheduling communication (often delivered one day prior), the absence of a unit readiness confirmation system, and the lack of standardized coordination procedures. The study applies Business Process Modeling (BPM) integrated with the DMAIC (Define–Measure–Analyze–Improve–Control) methodology using a mixed-method approach involving historical service data analysis, duration measurements, team questionnaires, and focus group discussions. The implementation results demonstrate significant improvements: average service delays decreased from 180 minutes to 10 minutes (85% reduction), the percentage of unready units declined from 45% to 6% (86.7% relative reduction), unit not found incidents dropped from 10 to 1 case per month (90% reduction), and actual service duration was reduced from 6 hours to 5 hours in accordance with operational standards. In conclusion, the integration of BPM and DMAIC effectively reduces process variability, improves unit readiness, and enhances the operational efficiency of PMP activities in a sustainable manner.

Keywords: PMP program, just in time, cost, Mechanical scheduling, DMAIC methodology.



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DEDICATION

I dedicate this thesis to my beloved family and as my contribution to the advancement of PT United Tractors.



ACKNOWLEDGEMENT

With deep gratitude to God Almighty for always giving me the strength to complete this thesis. Thank you to my beloved family who always encouraged me to complete this thesis. Thank you to Ivan as my advisor and Maula as my co-advisor for their guidance so that I could complete this thesis. Thank you to my professors for providing additional knowledge and insights, enabling me to complete this thesis.



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