

**ENHANCING OTIF SOLUTION PERFORMANCE BY ANALYZING
MECHANIC ASSIGNMENT BASED ON SPECIALIZATION**

By

Riki Rinaldo
22452024

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SWISS GERMAN UNIVERSITY
The Prominence Tower
Jalan Jalur Sutera Barat No. 15, Alam Sutera
Tangerang, Banten 15143 – Indonesia

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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.


Riki Rinaldo

Student
21/08/2025

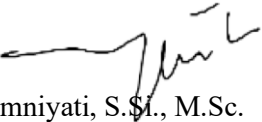
Date

Approved by:

Dr. Eng. Aditya Tirta Pratama, S.Si., M.T.

Thesis Advisor
22/8/2025

Date


Dr. Yunita Umniyati, S.Si., M.Sc.

Thesis Co-Advisor
22 Aug 2025

Date

Dr. Ir. Maulahikmah Galinium, S.Kom., M.Sc.

Dean

Date

ABSTRACT

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By

Riki Rinaldo

Dr.Eng. Aditya Tirta Pratama, S.Si., M.T., Advisor

Dr. Yunita Umniyati, S.Si., M.Sc, Co-Advisor

SWISS GERMAN UNIVERSITY

This study focuses on the impact of assigning mechanics to tasks that align with their specific specializations, aiming to improve work efficiency and reduce unit breakdown time, using the DMAIC methodology to see the root cause and solutions that can be done to make improvements, supported by SAP as ERP application and Salesforce as ERM application. The problem addressed in this research is the significant decline in the On Time In Full (OTIF) Solution achievement rate at ABCD Company's AIUEO support point, which dropped from 98.36% in 2023 to 77.92% in 2024, falling short of the company's 90% target. To analyse this issue, the study utilizes operational data collected over a 12-month period (January to December 2024), focusing on mechanic availability relative to the number of units maintained, and examining differences in growth rates that affect the efficiency of repair and maintenance activities. The proposed solution involves optimizing task assignments based on each mechanic's area of specialization. The results show that aligning assignments with mechanic specializations significantly enhances maintenance performance and contributes directly to improving OTIF Solution achievements.

Keywords: OTIF, Maintenance, Operational, Mechanic, Availability.



DEDICATION

For all those who believed in me, whether family, friends, or mentors, your faith in my abilities has been my greatest motivation



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