PREFACE

Alhamdulillah, all praise and gratitude be to Allah SWT for His mercy and guidance that enabled the author to complete this mini thesis entitled **"Optimizing Risk Management and Operational Efficiency in Self-Propelled Oil Barge Operations at PT. Faher Hayat Bersatu: An Analytic Hierarchy Process (AHP) and Failure Mode and Effects Analysis (FMEA) Framework."**

This mini thesis is written to fulfill one of the requirements for the completion of the undergraduate program in ICT Business, Faculty of Economics and Business, Telkom University Bandung.

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The author hopes that this mini thesis provides meaningful insights and contributes to the academic discourse in the field of operational risk management and logistics optimization, especially in the maritime oil distribution industry. This research seeks to provide practical value to companies facing complex operational decisions, and theoretical relevance for future studies utilizing hybrid decision-making models such as AHP and FMEA.

Despite the best efforts made, the author acknowledges the presence of limitations within this study due to constraints in time, data, and resources. Therefore, constructive criticism and suggestions are most welcome for the development of future research.

Bandung, 9 June 2025.

Who make the statement,

Nofrizal bondatama

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