

Table of Contents

Optimizing Risk Management and Operational Efficiency in Self-Propelled Oil Barge Operations at PT. Faher Hayat Bersatu: An AHP (Analytical Hierarchy Process) and FMEA (Failure mode and effects analysis) Framework	i
VALIDITY SHEET	ii
STATEMENT SHEET	iii
PREFACE	iv
ABSTRAK	vi
ABSTRACT	viii
LIST OF TABLES.....	xii
LIST OF FIGURES.....	xiii
CHAPTER 1 INTRODUCTION	1
1.1 Overview Description of Research Objects	1
1.2 Background Research.....	2
1.3 Problem Formulation	8
1.4 Research Objective.....	9
1.5 Research Benefit	10
1.5.1 Theoretical Aspect.....	10
1.5.2 Practical Aspect.....	10
1.6 Systematics of Mini Thesis Writing Mechanism	11
CHAPTER 2 LITERATURE REVIEW.....	13
2.1 Operation Management.....	13
2.1.1 Quality Management.....	13
2.1.2 Lean Six Sigma	14
2.1.3 Failure Mode and Effect Analysis (FMEA)	15
2.1.4 Risk Management.....	17

2.2	Previous Research	18
2.3	Research Framework.....	23
CHAPTER III RESEARCH METHODOLOGY		25
3.1	Research design.....	25
3.2	Operational Variables	27
3.3	Scale	28
3.4	Population	29
3.5	Data collection techniques	29
3.5.1	Data Type and Source	29
3.5.2	Data Collection Techniques	30
3.6	Analysis Technique	30
3.6.1	Analytic Hierarchy Process (AHP)	30
3.6.2	Failure mode and effects analysis (FMEA)	32
CHAPTER IV RESEARCH AND RESULT		35
4.1	Respondent Characteristic.....	35
4.2	Research And Result	36
4.2.1	Analytical Hierarchy Process (AHP)	36
4.2.2	Failure Mode Effect Analysis (FMEA).....	45
4.2.3	Integration of AHP and FMEA	52
CHAPTER V CONCLUSION AND RECOMMENDATION.....		55
5.1	Answer To the Research Question	55
5.2	Recommendation.....	57
5.2.1	Practical Recommendations	57
5.2.2	Theoretical Recommendations.....	58
References		59

AUTHOR BIODATA.....	65
APPENDIX.....	66