

TABLE OF CONTENTS

COVER PAGE

NASKAH SOAL TUGAS AKHIR	ii
HALAMAN PENGESAHAN	iii
LETTER OF APPROVAL	iv
ANTI-PLAGIARISM STATEMENT	v
FOREWORD	vi
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	ix
LIST OF FIGURES	xii
LIST OF TABLES	xiii
LIST OF APPENDICES	xiv
LIST OF NOTATIONS AND ABBREVIATIONS	xv
ABSTRACT	xvi
CHAPTER I INTRODUCTION	1
1.1. Problem Description	1
1.2. Problem Formulation	3
1.3. Limitation and Assumption	3
1.4. Objective of Research	3
1.5. Benefit of Research	4
CHAPTER II LITERATURE REVIEW	5
CHAPTER III THEORETICAL BACKGROUND	20
3.1. Bayesian Network	20
3.1.1. Definition and Objectives of Bayesian Network	20
3.1.2. Bayesian Network Modelling	21
3.2. Text Mining	23
3.2.1. Text Preprocessing	24
3.2.2. Features Extraction	24
3.2.3. Document Representation	25

3.2.4. Feature Selection	26
3.2.5. Document Clustering	27
3.2.6. Document Classification	29
3.2.7. Classifier Performance Evaluation	30
CHAPTER IV RESEARCH METHOD	20
4.1. Research Object	20
4.2. Data Collecting Method	20
4.3. Research Design	21
CHAPTER V RESULTS AND DISCUSSION	25
5.1. Conventional Forecasting Techniques	25
5.1.1. Single Exponential Smoothing	25
5.1.2. Autoregressive Integrated Moving Average (ARIMA)	27
5.2. Causal Relationship	28
5.3. Text Mining	31
5.3.1. Manual News Labelling	32
5.3.2. Text Preprocessing	32
5.3.3. Feature Extraction	32
5.3.4. Attribute Elimination	33
5.3.5. Document Representation	33
5.3.6. Feature Selection	33
5.3.7. Document Clustering	34
5.3.8. Document Classification	35
5.3.9. Classifier Performance Evaluation	35
5.4. Local Probability Distribution	36
5.4.1. BI Rate	37
5.4.2. OPEC Basket Price	37
5.4.3. Exchange Rate	37
5.4.4. Premium Price	40
5.4.5. Inflation Rate	40
5.4.5. News Articles	43
5.4.6. Jakarta Composite Index (JCI)	44

5.5. Bayesian Network Model Testing.....	45
5.6. Bayesian Network Validation	48
CHAPTER VI CONCLUSION AND RECOMMENDATION	50
6.1. Conclusion.....	50
6.2. Recommendation	50
REFERENCES	52
APPENDICES.....	54