

INDUSTRIAL TRAINING REPORT
AT
MALAYSIAN PINEAPPLE INDUSTRY BOARD (MPIB)
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ABSTRACT

The purpose of this study is to determine a suitable method comparing between Univariate Modelling Technique and Box-Jenkins Methodology to forecast the export demand of canned pineapple from Malaysian Pineapple Industry Board (MPIB) using monthly data from January 2005 to October 2012. There are six models in Univariate Modelling Technique include Naïve with Trend, Single Exponential Smoothing, Double Exponential Smoothing, Holt's Method, Adaptive Response Rate Exponential Smoothing Model (ARRES) and Holt's Winter Model. While for the Box-Jenkins methodology, there are four models which are SARIMA(4,1,1)(1,1,1)₁₂, SARIMA(3,1,0)(1,1,1)₁₂, SARIMA(2,1,1)(1,1,1)₁₂, SARIMA(1,1,1)(1,1,1)₁₂. By comparing the value of Mean Squared Error (MSE) and Mean Absolute Percentage Error (MAPE), Holt's Winter give the best model for Univariate Modelling Technique while SARIMA(3,1,0)(1,1,1)₁₂ give the best model for Box-Jenkins Methodology. By comparing the both best model, SARIMA(3,1,0)(1,1,1)₁₂ give the best model. In addition it is shown that SARIMA(3,1,0)(1,1,1)₁₂ fits the data well and they have correctly predicted the future trend of export canned pineapple within the sample period of study.

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“In the name of ALLAH the Most Gracious, the Most Merciful”

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TABLE OF CONTENT

	PAGES
ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENT	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
LIST OF ABBREVIATION	vi
CHAPTER 1 ORGANIZATION BACKGROUND	
1.1 BACKGRIUND OF INDUSTRIAL TRAINING	1
1.2 OBJECTIVE OF INDUSTRIAL TRAINING	2
1.3 BACKGROUND OF ORGANIZATION	3
1.3.1 Vision and Mission	4
1.3.2 Objective of Organization	4
1.3.3 Vision and Mission	5
1.3.4 Organization Structure	5
1.3.6 Logo	6
1.4 BACKGROUND OF DEPARTMENT	
1.4.1 Planning and Corporate Affairs Division	6
1.4.2 Vision	6

	1.4.3 Mission	6
	1.4.4 Objective	7
	1.4.5 Function of department	7
	1.4.6 Organization Structure	9
CHAPTER 2	RESEARCH PROJECT	
	2.1 INTRODUCTION	10
	2.2 PROBLEM STATEMENT	12
	2.3 RESEARCH OBJECTIVE	13
	2.4 SIGNIFICANCE OF THE STUDY	13
	2.5 SCOPE OF STUDY	14
	2.6 LIMITATION OF STUDY	14
CHAPTER 3	LITERATURE REVIEW	
	3.1 LITERATURE REVIEW	15
CHAPTER 4	RESEARCH METHODOLOGY	
	4.1 METHOD OF DATA COLLECTION	28
	4.2 METHOD OF ANALYSIS	28
	4.2.1 The Trend of Component	28
	4.2.2 The Cyclical Component	29
	4.2.3 The Seasonal Component	29
	4.2.4 The Irregular Component	30