

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

In any country can not be separated from trade activities with other countries, along with its development each country has a mainstay commodity to be traded with other countries. Therefore exporters calculate their merchandise to other countries. Because every exporter does not necessarily take the same amount of merchandise to each country. Therefore, exporters must take into account the amount of goods exported to each country to be fulfilled.

The number of requests for each country, the difficulty of exporters providing the amount of goods exported to customers every month. Because of the lack of inventory which resulted in a decline in the level of exports to several countries, and made an unfavorable reputation for exporters and the difficulty of finding new exporters.

Linear regression method is used for modeling the relationship between one dependent variable and one independent variable, in the relationship between variables is linear, where changes to the causal factor variable X will be followed by changes in the variable Y results permanently. And use Statistics to analyze export sales seen from monthly sales, average sales, sales of goods often bought by consumers, and the highest sales for 1 year.

Based on the above problems, this project uses a linear regression method. Linear regression is used to predict the number of items needed in each country with a method that suits the customer's needs. Statistics is used to analyze sales of goods needed in each country and customer needs. Which can be used to process the data provided from the results of input into the application.

## 1.2 Scope

The data used is export sales data in January to December 2017 at PT. Asia Synergy Partner. In carrying out a study a systematic boundary is needed so that it is more focused and does not deviate from what has been planned, while the boundaries include:

1. What is the linear regression algorithm in predicting using the following parameters: number of transactions and number of items. To find out the accuracy of the inventory in the following month?
2. Can the statistical method be used for decision support systems for the management of goods production at PT. Asia Synergy Partner?

## 1.3 Objective

The purpose of this final project is to create a system that can provide information and predictions on the sale of export goods that are seen based on the export sales diagram data in the previous month.

