CHAPTER I INTRODUCTION

This chapter contains research background, problem formulation, research objectives, research scopes, and outline of research reports.

1.1 Background

Indonesia is an agricultural country, that plays an important role in the national economy. Livestock is one of the agricultural sub-sectors that plays an important role in economic development (Taufiq, 2018). Livestock can provide an animal protein which is very important for the growth and development of the human body. Improving the quality of human resources can be achieved with adequate nutrition, especially from animal protein such as meat, milk, and eggs. One of the livestock products that has good nutritional value is chicken.

Purebred chicken is another name for native chicken whose meat and eggs has good nutrition for consumption. It makes many food businesses use chicken as their main ingredient. Chickens known to has good market prospects because it supported by the characteristics of poultry products that are acceptable to the public (Pertiwi, 2020). Chicken has a relatively cheap price with easy access because it is the main sector of the national animal protein source. Chicken eggs is also the priority of the most feasible choice as a source of animal protein.

Based on Indonesia Central Agency on Statistics, the number of chicken eggs production keep increasing every year in **Figure 1.1** below. This production chicken eggs increases along with the high demand for chicken eggs. Layer poultry as the main commodity has a very fast growth that can provide great benefits for layer poultry farming business actors. So, layer poultry farm has a good prospect for development, besides its own challenges to run this business.





Along with the rapid development of the layer poultry farm and the newcomer in this business, the competition also increasing. Company needs to has a strategy to get and keep their customers. To maintain customers relationship and build loyalty can be done by meeting customer expectations, maintaining product quality, prices, speed and accuracy in delivery. In meeting customer needs, it is necessary to manage the flow of goods, information and resources, which includes information integration, transportation, inventory, warehousing, material handling, and packaging. This activity is related to logistics that manage the flows within the company to be effective. (Zeplin & Kristiawan, 2014).

Anugrah Farm is a layer poultry farm located in Taram, 50 Kota, West Sumatra. This company distributes chicken eggs to various regions, such as West Sumatra, Jambi, Pekanbaru, and other regular customers. Anugrah Farm provide the eggs for customer by produce it in their own farm and by supply it from supplier. The employees that related to logistics activity are administration staff, logistic manager, and director. They have a different role to manage the logistics activity in Anugrah Farm. The farm inventory will be managed by logistic manager. The data recorded is the date of production, the type of eggs, and the amounts of eggs. Logistic manager will record the eggs production on a paper receipt and then recap the data to be process in the Microsoft Excel. The data input process is done manually, that makes the recap process takes a long time.

The transaction of eggs purchasing will be managed by administration staff. The transaction will be for purchasing order by customer and supplier. The data recorded for customer order are the transaction date, the customer's name, the type of eggs order, the egg price, and the amounts of eggs order. The data recorded for supplier order are the transaction date, the supplier's name, the type of eggs supply, the egg price, and the amounts of eggs supply. Administration staff will record the transactions on a paper payment receipt and then recap the data to be process in the Microsoft Excel. The data input process is done manually, that makes the recap process takes a long time and prone to missing the paper payment receipt.

The eggs inventory and eggs transactions will be recapped in the eggs in and eggs out report. This report will be reported to the director. This report contains of the transaction date, the name of the client (supplier/customer/farm), the amounts of eggs, the price per egg, the amounts of eggs by egg type, the amounts of eggs left stock, the total supply transactions, and the demand transactions. With the wide scope of the report, it's hard to know the inventory status update at a certain time, know the client information, and oversee the transactions.

Based on Anugrah Farm condition, the logistics activity need to be improved by designing an information system for logistics managerial of eggs to overcome the problems that occurred in the current system, where the data recapping process is quite long and disorganized report. The logistics information system can assist company to have a clear logistics administrative report, a transparent good flow, and a high information data security. So, this logistics management information system will be the technology that supports the company to making a faster decision-making and data control related to their logistic activity.

1.2 Problem Formulation

The problem formulation in this research is how to design a logistics information system. Based on the background described previously, the logistics data recap process in Anugrah Farm is still done manually. It takes a long time to processing the data and controlling the inventory status. For this research, the logistic information system will be developed by using Design Thinking method.

1.3 Research Objectives

The research objective is to design an information system for logistics. This information system is capable to processing the logistics administrative, maintain the good flow, and give a detail information about the eggs.

1.4 Research Scopes

The research scopes for solving the problem as follows:

- 1. The result of this research is a logistics information system of Anugrah Farm.
- 2. The information system is managed by administrations staff, logistic manager, and director.
- The design of this information system is only for the process of recording egg inventory, eggs transaction, egg location, and information collection of supplier and customer.
- 4. The information system is designed for the desktop version only.

1.5 Outline of Report

The outline is a sequence of procedures for completing this final research report. The outline of the report as follows:

CHAPTER I INTRODUCTION

This chapter contains of the research background, the problem formulation, the objectives of research, the scopes of the research, and the outline of research reports.

CHAPTER II LITERATURE REVIEW

This chapter contains of the theory of subject for solving the research problems. The basis theory in literature review is taken to compile the problems that occurred. The theory is from various sources such as books, journals, and previous research.

CHAPTER III

RESEARCH METHODOLOGY

This chapter contains of the method in solving the problems that occurred. The research methodology consisted of a preliminary study, method selection, design stages, and discussions.

CHAPTER IV DATA COLLECTING AND PROCESSING

This chapter contains of the data collection from current conditions and data processing based on the design thinking method.

CHAPTER V DISCUSSIONS

This chapter contains of the application of working principles in an operational context, advantages and limitations system, and managerial implications.

CHAPTER VI CONCLUSIONS

This chapter contains conclusions and suggestions for the research. The conclusions are the result of research that has been done to be taken into consideration for corrective action. The suggestions are given to improve further report.

