CHAPTER 1

INTRODUCTION

1.1 Background

CV. X is a company that acts as a distributor for various consumer products, such as candy, coffee, biscuits, beverages, snacks, and so on. CV. X distributes products from many renowned product brands in Indonesia such as ABC, Mayora, Orang Tua Group, and so forth. Furthermore, CV. X has one central distribution which is located in Pramuka Street, Purwokerto, Central Java. Besides Purwokerto, CV.X also distributes its products to several districts of Central Java, namely Banjarnegara, Banyumas, Cilacap, and Purbalingga.

At present, CV. X mainly performs its daily operational activities with paper based system, which makes the process of tracking, recording, and evaluating the data difficult. The current paper based system requires a lot of human efforts in which become less efficient and effective, considering the fact that CV. X keeps growing from time to time. Human errors often occur in CV. X, for example miscalculation of amount of product in warehouse, unorganized data record, missing data record, etc. Furthermore, the unorganized data record makes the decision making process difficult and inefficient. Even though CV. X has been using some computerized system, such as Microsoft Excel, the contribution is insignificant toward the effectiveness and efficiency of the company's daily operational activities.

The computerized system is considered as a good solution to replace the paper based system in CV. X. An integrated and computerized business system can answer the issues that occur in current paper based system. The new business system could also increase efficiency and effectiveness of CV. X business process.

1.2 Scope

The scope of this thesis is concerning about several things:

- Human resources subsystem. This subsystem will be used to manage all matters relating to the employees. The subsystem is designed to set the salary of employee, lunch money, overwork wage, and other benefits. Besides that, the attendance record, the calculation of salary, and lunch money reduction are also handled by this subsystem. The salary and lunch money reduction policy applies only when the attendance record is less than required within that month.
- Cost and Bonus subsystem. All of the company's expenses will be recorded by Cost subsystem. The company's expenses can be categorized into three types, which are:
  - Purchase cost: this cost could arise when the company purchases some products from the supplier. Some examples of purchase cost are: transportation cost, the workers' wage to load/unload products from truck, etc.
  - Delivery cost: this cost could arise when the customers' ordered products needs to be delivered. An example of delivery cost is the transportation cost needed to deliver those products.

- Operational cost: this cost is spent to support daily business activities in the company. For instance: paper cost for printing, electricity cost, building maintenance cost, and so on.

Moreover, the company's received bonuses will be recorded by Bonus subsystem.

- Utilities subsystem. There are several things that this subsystem handles: some of database manipulation, the system's authorization access, password modification, database backup/restore tools, and the practice mode for beginner users. The database manipulation would include several features to add or delete products, customers, employees, buildings, and so on. Authorization access will utilize the password protected (and encrypted) account to restrict the system from any illegitimate users. The feature to modify the password of an account is also included to give a secure feeling whenever that user feels that his/her current password has been breached. Database backup/restore tools could helps to create a backup of the database or to restore a previously stored database. Moreover, a practice mode will be included to give a chance for the beginner users to use the system without affecting any important data in the database.
- Report. The report will contain all important information regarding the employees' payroll, attendance record, received bonuses and the company's costs.

In designing the business system for CV. X, the author employs a model of System Development Life Cycle (SDLC), which is the Waterfall model. Waterfall model comprise several phases that must be followed, namely communication, planning, requirement analysis, design, construction, and testing. Moreover, in conformance to the Waterfall model, there are several documentations that need to be produced, such as project plan, schedule plan, testing document, and so on.

There are some assumptions needed in order to perform the new business system properly:

- The company provides all software and hardware needed to implement the new business system.
- The company provides any human resource required to operate the computerized business system. The human resource must have sufficient knowledge about computer and CV. X business process.

There are several constraints within this thesis:

- Limited schedule for the completion of this thesis, approximately three months from the beginning to the end, which includes the implementation phase.
- CV. X is located in Purwokerto, Central Java, thus the development process is done remotely.

1.3 Aims and Benefit

The aim of this thesis is to successfully transform the business system from paper based system into computer based, especially in the human resource, bonus, cost, and utilities area. By transforming its business system into computer based, CV. X can improve its efficiency in business process, thus reducing the human efforts needed, the time needed, and the human errors.

The benefits that CV. X could gain by implementing the proposed business systems are:

1. The idea of computer based system is to perform jobs automatically, hence less human efforts needed to perform the business process. In addition, computerized business systems can help to minimize the human errors that may occur.
2. Database management system will provide the convenience to record, track, and manage the business data. As a consequent, the database management system helps to achieve time efficiency.
3. The human resource subsystem could automate the calculation of payroll payment, thus neglecting unnecessary effort to calculate it manually. In addition, the report could give general information about the payroll payment and employees' attendance, which allows the owner to examine that information easily and quickly.
4. The database backup/restore tool could helps when undesired failure happens to the system and makes the database corrupt. This tool allows the database administrator to recover the database from previously saved state.
5. A beginner user could learn to use the system without affecting any important data in the database. It is possible because of the implementation of practice mode in the business system.

1.4 Structures

This thesis is structured as follows:

1. Chapter 1: Introduction

   This chapter discuss about the background of the thesis, the problems encountered in general, the proposed solution in general, the scope of the thesis, the aims and benefits of the proposed solution, and the thesis structure.

2. Chapter 2: Theoretical Foundation and Framework

   The second chapter covers the theoretical foundation and framework that are relevant in designing the solution for the problem encountered.

3. Chapter 3: Analysis On The Existing System

   The third chapter discusses about the analysis of the existing system, the problems faced in details, and alternative solutions to solve the problems.

4. Chapter 4: Design of The Proposed System

   This chapter mainly explains about the designed solution in details. Moreover, some design modeling scheme are used to ensure that the designed system records what it is supposed to do.

5. Chapter 5: Solution Design

   The discussion about the implementation and testing of the solution is covered in this chapter. The result of the testing phase will be documented for further analysis. In addition, the system requirements in order to run the proposed system will be specified.

6. Chapter 6: Evaluation

   The sixth chapter evaluates and discusses the result of the proposed solution.

7. Chapter 7: Conclusion and Recommendations

   This final chapter covers the general conclusion regarding implementation of the solution. Furthermore, this chapter also covers about the suggestion and recommendation that can improve the proposed solution.