CHAPTER 6
SUMMARY, DISCUSSION, AND RECOMENDATIONS

This chapter is about the conclusion of the customer order process modeling and redesign, discussion, and recommend in further study related to the new customer order process.

6.1 Summary

Business Process Redesign is an aggressive ways of improving the company's business process, and there are many methodologies for one company to trade off their benefits and use the one that fits with their business.

The objective of this study ' The Customer Order Process Modeling, and Redesign ' is to model the better Customer Order Process to provide the better services to customers. Methodology selected for this study starts by doing a lots of survey by using questionnaire, and interviewing to gather information from customers, employees, competitors, non-competitors, and technology. Next the vision, value and objective is created. After that the new model of customer order process is created. Finally model is analyzed and compared on how the new customer order process is better that the existing one.

The new customer order process model has been created by using a FirstSTEP software, which is a tool, selected by the case company to help in any business process improvement project. The existing process is previously prepared by the case company. Since, the activity flow of both process as well as their reports created by FirstSTEP consists of many pages, and inconvenient to use. Therefore, the functional flow chart has then been used as another easier tool to graphically view the process / activity flow of the two model.

The concept used to create the new customer order process model is focusing on the customer satisfaction, and using technology that can reduce cost and satisfies customers. What customers require are convenience when order, truck status checking, and quickly inform the customer if the order can not be completed while they are waiting for the products, the right type of product, and product on specification when they receive the product. What organization requires is

cost reduction, focusing on customer satisfaction, using technology that can support cost reduction and customer satisfaction. Hence, to meet the organization's needs, the processing time must be reduced which means reducing costs; and to make customers happy, the cycle time must be reduced.

To create the new customer order process model, the high-level flow diagram of the process should be firstly identified. Secondly, the organization structure and resources will be model. Then, process's activity flow will be diagramed. After that, each activity is modified in details by identifying resources used to perform an activity, material input/output, duration (length of time it takes to perform the activity), and fixed cost. Finally, the model is simulated.

The result of this analysis shows that the new customer order process is better than the existing customer process in many aspects: number of activities to be performed, processing cost, processing time, elapsed time, and resources utilization.

The number of activities to be performed in the new customer order process is 18 activities, while the number of activities to be performed in the existing customer order process is 35 activities. Especially, the new process has also been designed to treat the cause of problems faced in the existing process that is: no-value-added activities of existing process are eliminated, several jobs in the existing process are combined into one, and are performed by one person or empowered person, decision points in the new process are installed up front so that work can be sent along the process.

In addition, the processes simulation results show that the average processing cost incur in the new process is about 1055.65 Baht while the average processing cost incur in the existing customer order process is about 1548.03 Baht. The average processing time spent in the new customer order is 4 hours, 33 minutes, 59 seconds, while the average processing time spent in the existing customer order process is 6 hours, 17 minutes, 55 seconds. The average elapsed time spent in the new process is 33 days, 19 hours, 48 minutes, 13 seconds, while the average elapsed time spent in existing customer order process is 35 days, 1 hour, 7 minutes, 22 seconds.

The percentage of busy and idle of resources used in the new customer order process shows that most percentage of idle (more than 70%) occur in security contract, and security staff resources, while ordering clerk and depot operator is very busy, while in the existing customer order process most percentage of idle occur in many resources: terminal contractor, terminal clerk, some ordering clerk, security contract, security staff, operator, treasury clerk, scheduling staff, depot operator, and credit officer, while depot supervisor and loading contractor are very busy.

In other word, following the new customer order process can:

- reduce cost by 492.38 Baht per occurrence, or 31.81 percent
- reduce average processing time by 6,236 seconds (1 hour, 43 minutes, 56 seconds) or 27.50%
- reduce average elapsed time by 105,549 seconds (1 day, 5 hours, 19 minutes, 9 seconds), or by 3.49%

In conclusion, the new customer order process can satisfy both organization and customer. It is better than the existing one because the new one can reduce cause of the existing problem found in the existing process. Otherwise, it can reduce average processing cost, average processing time, and average elapsed time that directly concerns with the customer.

6.2 Discussion

6.2.1 Classification of the Industrial Customers

In this study, the Pareto Analysis based on 80/20 rules is selected to help in classifying the industrial customers, while the case company classify the customer according to the volume they purchase. When this technique was applied, there was some noticeable response that is the technique is probably well known in the manufacturing industry, but not well known enough to convince the case company to use it. Hence, the target customer that the case company would like

to study is a little bit different from the target customer studied in this study. That is some customers that the case company would like to studied are not included in this case, and some customers that the case company would not like to study are included. So, when the new customer is redesigned, the question of who are your target customers would be ask, and if it is the case this study may be reviewed, and may delay the implementation.

6.2.2 Commitment from the Top Management, and Team Based Reengineering

Reengineering the case company's customer order process will be completely successful if the top management who are directly in charge of has the foresight to see trouble coming, and are more ambitious and aggressive, and it is performed in team base. The case company's customer order process has been continuously improved for many years, but what the case company has received from such improvement is not enough to compete with the competitors who are more flexible to operate its business. The problems are realized among the employees who are directly in charge of this process, but they lack of authorized to solve the problem.

6.2.3 Reengineering Results in a Big Change in Resources Utilization

From this study, there is a big change in resources utilization. For example, many jobs have been combined into one, resulting in the reduction of resource utilization. In other word, there must be more idle of resources. So, if the case company decided to implement the new customer order process it has to prepare the resource utilization plan also, particularly in case that the company can not lay off the employee that can not contribute any value to the customer and business. For example, the company may spend more budgets or more attractive payment or any other benefits for the employees in the early-retirement project.

6.2.4 Using the FirstSTEP Software

There are some limitation in using the FirstSTEP software. First, the researcher is working full time for the division that is not directly responsible for the business process improvement. The research of this study can not join in all training program related to FirstSTEP

software, including modeling and analyzing the result of business model. This is because leaving the full time job for some period of time directly effecting the performance evaluation of the researcher, at the end of the year.

What the researcher can do is just learning from the staff who is working in the Business Process Development division and trained to use the software. In addition, if that staff can not explain in some point, the researcher must contact the FirstSTEP team of analysts who works in the United State of America, via e-mail. This is a bit inconvenient and delays processing time of the study.

6.2.5 Drastically Improvement Can Be Made on Technology Base

The major information technology used in the case study includes customer and accounting database management, and terminal automation system. The process can be implemented successfully to the automation depot only. This means that if the case company wants to implement the new customer order process, it has to invest in additional information technology in the manual depot. In economic crisis, the company insists that it would only invest in very important projects. So, implementing the new process has barrier in financial aspects.

6.3 Recommendations

Further studies recommended are listed as follows:

6.3.1 Measuring Performance

Before the new will be implemented, a successful performance measurement should be developed. According to Brain Maskell study, the performance measures used by world class manufacturing company and can also be used by services industries are: directly related to the company's manufacturing strategy, incorporated non financial measures, use different measurements for different areas of the company, changed over time to reflect changes in strategy and operation, simple and easy to use, give fast feedback to operators and managers, and intend

to teach rather than monitor and control. In addition, he also study on 5 areas for performance measurement: quality, delivery performance, process times, flexibility and costs: (Chulalongkorn University and the University of Warwick, Manufacturing Strategy and Its Implementation, 1995).

An example of quality measures is internal and external (supplier/customer) measures. Supplier measures could include the number of certified suppliers. Customer measures could include warranty claims, reported complaints, or surveys of customer satisfaction. An example of delivery performance is customer requested delivery date that gives an indication not only of delivery performance but likely customer satisfaction. An example of process times measures is process time per lead time. An example of flexibility measure is number of new products per year as the world class needs to launch new products more quickly, or time from initial design to first customer sale. An example of cost measure is waste rates, and non-value adding activities.

6.3.2 Understanding Customer Needs

Understanding customer needs doesn't mean asking customers what those needs are. This is because they will say only what they think they want. Understanding means considering the customer's underlying goals and problems, not just the mechanics of the process that links the two organizations together. Furthermore, the company must understand customers better than they understand themselves. The company might move in and observe and / or actually work with customers in their own environments. In traditional analysis, people collect information through interviews that take place in offices or conference rooms. They do not interview at real work sites, as it is considered much too noisy and distracting there. The point is not to learn how to do the customer's work but to understand their business, and to gather ideas. Idea will bring about the understanding of how the customer uses the output of the company's process. (Hammer and Champy, 1994: 130-132)

6.3.3 Product Costing

Management accounting uses the product cost for a wide range of decision making assessments, for example, product profitability, make/buy decision, customer profitability, transfer pricing, cost reduction priority, and etc. One way to identify product cost more accurately is to use Activity Based Costing concept. With the ABC concept costs are charged to the activity and the cost per transaction is calculated. The product is charged with the use of the activity based on the number of transactions incurred.