

Chapter 7

Summary and Evaluation

7.1 Research Summary

This thesis develops a model to use for a machinery company. It covers three areas. They are Job Allocation Plan, Inventory Control, Reporting and Monitoring System. The first part is designed to manage job operation by applying scheduling and defining status of job and facilities. Output in the form of Gantt chart are shown in the first part and in the form of text reporting are shown in the third part. The second part is designed to control the appropriate inventory level at head office main stock and each service center.

The model is developed based on computer software program-Microsoft Access Version 2.0. The program is divided into five parts. They are Master File, Preventive Maintenance, Job Allocation Plan, Reporting and Monitoring, Inventory Control.. The first part is initial data to use in the second, the third, and the fifth part. The fourth part is to show output of the operation of the second and the third part.

The second part of the program shows records of the past and future preventive maintenance activity. If any planned preventive maintenance activities were planned to operated but they are still be not operated, the program will show warning record and allow the operator to input the record of acted preventive maintenance operation.

The third part of the program manages job operation of multiple service centers. It is used to assign, control, monitor, report job and facilities operated by each service center. The status and scheduling of job and facilities in the form of Gantt chart are shown in this part. Summary of details of each job is also shown in

this part. However, this part is developed based on on-line communication among service centers which is not the current batch processing pattern. So, this part can not be implemented at this moment.

The fourth part of the program is output of the operation of the second and the third part. So, it has also no the result of implementation. Nevertheless, its expected benefits of this part are to report the data to management to make decision more easily. The management can change or adjust the existing plan or facilities based on these data.

The last part of the program is designed to serve existing inventory activities. They are spare parts sales to the customer, transfer spare parts from head office to each service center, and re-order imported spare parts from supplier. This part was implemented for a short period. The result is satisfied. The inventory level of each service center is rather suitable to its usage rate. Transaction is more convenient to do. The program has suggested the quantity and time to take action. It reduces decision-making of management and operator.

7.2 Suggestion

For the sub menu **Standard Job and Details** of the first part of the program, data of employee used and operation time of standard job pattern is collected for only installation pattern. The data of preventive maintenance and break down maintenance pattern are not collected. In case of these two functions are operated at service center, they should be collected data to define to be standard job pattern. If it is possible, it will reduce decision of foreman when he assigns job to employees.

This software program has to be mainly used by the operator such as foreman, store controller. So, this people should be trained before start using the

program by staff of engineering or logistics department who has more computer and job allocation plan background.

The last suggestion is communication system. At present time, number of job operated by each service center is not much. Job allocation plan, the third part of the program **may** be operated hinged on the current batch processing system. But if the number of job operated by each service center is increased, it is more suitable to change to on-line communication system. Data recorded by a service center can be immediately investigated by staff at head office or staff at other service centers.