All of these chapters above are used to select a new layout design and make improvement of current condition in PerkinElmer Batam.

6.1 Conclusion

Fulfilling demand of IRT 4000 is caused by lack of capacity can be solved properly by adding new facility/machine. However, before adding new machine, management must release DA process from TPS Frontline first. Thus, this area is available to be enhanced by adding a new facility/machine.

In spite of TPS Frontline enable to add new machine, the requirement to relayout is needed to readjust existing facility layout, reducing backtracking, minimizing handling time and get good routing. Designing new layout must consider company’s condition to get advantages, solutions, even improvements. Group Technology approach is the one best option to conduct relayouting facilities in this case. By grouping similarity of facilities, covering routing and demand of all products, give an optimal output, effective layout, and an option to create improvement.

The selected new layout design have accommodated all requirement, such as achieving good routing, minimizing handling time, and reducing backtracking. This matter is proven by the distance that is thorough by Material Handler and new routing created. Implementing Group Technology will give advantage for Material Handler going through distance 31% shorter than other method.

Other possibilities of improvement areas are reducing number of operator based on their capacity planning and labor placement. By reducing number of operators, management have conducted cost saving. Besides, forming canal between either TPS Frontline to FTC and backline area will get an opportunity to reducing handling time. The canal between TPS Frontline to FTC area will reduce 73.6% time of existing system. While to the Backline area, Material Handler can transfer devices 86% faster than existing route.

In other words, Group Technology is an effective approach to conduct relayouting process in PerkinElmer Batam Corporation especially to TPS Frontline area. Selected
layout design has accommodated all requirements of management, customers, and the process itself. Implementing best layout design will attain advantages in long term.

6.2 Suggestion

Improvements, which have been recommended above, are supposed to be simulated first before applied in the real condition. Simulation is needed to ensure that there is no decreasing of capacities as effect of improvements.

Conducting relayout of facilities will stop process of production for a while that represent lost sales. A lost sale is a hidden cost beside the expense of relayout. The impact is possible decrease in IRR of the company. Therefore, relayout is supposed to be executee in the right time. The time to relayout facilities must be conducted as soon as possible to minimize this loss. Execution time is better be implemented in downtime schedule or when the machines do not operate on their highest performance (utility).

The advantages in the long term of this new layout design, shown by reducing time, are expected to remedy existing loss.