ABSTRACT

Using new product launches and complexity promotions as a competitive advantage to be the market leader in the Middle Range Ice Cream industry, Nestle Ice Cream inadvertently caused incorrect batch shipments. This incorrect batch shipments caused consequential problems for the company as it created customer dissatisfaction when customers did not receive the promotion product as the company had promised. In addition, since Ice Cream is a short shelf life product, shipping incorrect batches also caused a high level of perished goods since the product was not shipped out according to the FIFO system.

To solve the problem, this graduate project applied the lean concept. Activities and actual time spent in each activity were collected by using observation participation. The information was entered into the iGrafx program in order to create current process activity mapping or a “TO BE” map. The current process was analyzed in order to find non value added activities or waste, and came up with a new process or an “AS IS” map. The new process was simulated by iGrafx until it proved that the new process is better than the current process. The proved new process would be recommended to the company.

From the study, two non value added activities or waste were found in the process. First, non value added activity was found in the forklift department, namely transportation waste. Second, non value activity was found in picker and check & load department, namely over-processing waste. In order to eliminate these wastes, the popularity storage concept was applied and a movable cart introduced. After running simulation by using iGrafx, it was found that by applying these two concepts, total cycle time reduce by 13.21%. In addition, total cost saving for not using plastic wrap is approximately 1.5 million baht per year. Since the long cycle time is one of the reasons
that caused incorrect batch shipments, in order to solve the problem, the application of the popularity storage concept and movable carts was recommended to Nestle Ice Cream.