

ABSTRACT

This case study is about a made to order product supply for project of a trading company located in Thailand. The core products are regularly imported from around the globe. The lead time delivery along the supply chain process from upstream to downstream are critical and have to be accurately and precisely planned.

The company incurred significant amount of expenses, reaching over a million baht, due to delayed deliveries and as a result it suffered losses. The framework of this research is to systematically identify, analyze, measure, and find the appropriate solution to solve the problem.

The method used in this research is DMAIC which consist of five phases. They are defining the problem, measuring the current performance, analyzing the root cause of the problem by using cause and effect diagram (Fishbone Diagram) and Pareto analysis to address the major root causes, and taking the major causes to figure out the improvement areas. Improvement phase is recommended by improving the submission and approval process and using Gantt chart systems. The control phase is monitoring the process to ensure improvement.

The results indicated that DMAIC methodology supports the solution to the delayed delivery problem. The delivery improvement towards quality management works professionally and cost effective. The control phase was conducted continuously using Gantt chart systems. It monitored the project delivery status from receiving the customer purchase order until delivery to customer place in Thailand. The result is a long term and sustainable improvement.