

ABSTRACT

This case study is about a textile weaving company whose warehouse is bulging with inventory, active as well as dead stock inventory. There is a tendency for these dead stocks of raw material to increase. Applying the DMAIC concept, based on data and facts for sustainable dead stock reduction, would be the ideal solution.

The DMAIC concept systematically helps to pinpoint the problem and the extent of the problem, and then to an understanding of the root cause of the problem. In this research, data used is from the year 2010. Initially it was known that there is high accumulation of raw material inventory of which 8 million THB was dead stock raw material inventory. To narrow the focus, a Pareto analysis is applied and the top 80% value of items is selected. The result is that 65 items lock up 6.75 million THB. To understand the root cause, a Fishbone analysis is applied and the result showed there are four reasons causing accumulation of dead stock. However, only the high impact reasons are selected by using the Pareto analysis, and the top two reasons selected were excess order of raw material and material leftover after production. After interviewing and observing, two separate as-is processes are drawn. These as-is processes identify the areas causing the flaws in each process which need to be corrected. Finally, improved processes are recommended which eliminate the flaws and correct each process, thereby ensuring that accumulation of dead stock does not occur. Measures to control the new system to sustain the improvement and reduce the dead stock are also recommended. Implementing the two new processes will reduce 76% of the dead stock, while the control measures will ensure there is a sustained improvement in those areas.