## ABSTRACT

This study is a case study of an FMCG manufacturer. The company is facing the problem of high excess stock and writes off costs in 2013. Speeding up to find the root causes of the problem can reduce the expenditure and increase the profitability of ABC Company. By applying the DMAIC concept, defining, measuring, analyzing, improving and controlling, the problem can be made apparent to all related parties in company based on reviewing the historical data and brainstorming with the cross-functional departments to understand the current process and situation. This tool helped the Company to identify the scope problem and the root causes of the problem.

The DMAIC concept consists of defining, measuring, analyzing, improving and controlling. The front label is selected because it holds the highest write off of the packaging material, about 5.7 million baht in 2013. The data is collected from the write off report from January to December 2013. The major cause of the front label write off cost, about 57.64 %, was from the phase in and phase out process. The fishbone analysis indicated that the root cause of this problem was in the policy of the sourcing department that placed the order quantity based on the traditional order quantity. As such, the flexible order quantity was proposed. The improved processes could ensure that accumulative excess stock and write off costs do not occur in the future. The control process is also recommended to sustain the improvement and minimize the excess stock and the write off costs are also recommended. The 33 percent of the purchasing cost in the last lot order before changing to the new package design can be saved from the proposed strategy.