

# Assessment of 5S as a Tool to Reduce Non-value Adding Operational Time: A Case Study.

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## Abstract

‘Waiting’ and ‘Motion’ are two wastes of the seven wastes considered in the lean manufacturing concept. They both consume valuable operating time and slow down the production cycle. The main goal of this paper is to incorporate 5S, a lean manufacturing method with a view to reducing these two wastes. 5S was implemented to develop a system of organization for blowing Sizers and printing blocks in the work area. 5S derived from five Japanese words, when translated, mean sort, set in order, shine, standardize, and sustain. Research has been carried out in a poly bag manufacturing industry in Bangladesh with the goal of increasing productivity by minimizing non-value - added operational time. The manufacturing of poly bags consists mainly of 3 operations; blowing, printing and sealing. Following the implementation of 5S in these areas, the lead time for blowing operation decreased by 8% and the lead time for printing operation decreased by 18%. The assessment was successfully conducted and established in this study. A scope for improvement has been opened through this research, which may inspire other researchers to consider implementing the 5S tool in their respective research areas as a tool to reduce non-value - added operational time.

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