Executive Summary

The project "Improving operational efficiencies through process improvement in Eswaran Brothers Tea bag packing factory" addressed two main areas Operational Equipment Efficiency (OEE) through machine down time management and production related data management. The authors of the project played the "Project Leader" role and were responsible to identify the problem, analyze the root causes, generate ideas to resolve the problem, implement the ideas to resolve the issue and evaluate the output. The project kick started during mid-November 2014 and was completed by end of March 2015.

Further to the insights from the management on the critical issues pertaining to EBE factory, the authors carried out an "As-is" study to identify the real problems that existed. In addition, through multiple observations on the processes and root cause analysis, the authors agreed on the problems to address through this project: data inaccuracy, lack of standard reports to management, frequent machine stoppages and therefore low machine availability and OEE. The value stream map further highlighted non value adding processes leading to waste. Thus the objectives of the project were to reduce machine down time by 25% from existing levels, improve OEE to 60% and improve lead time through process improvement initiatives.

Machine down time was broken down to planned and unplanned down times and initiatives were identified to improve each of these components. In addition, overall preventive maintenance schedule was implemented to sustain better machine down times. Non Value adding activity analysis through a value stream map enabled identification of Kaizen burst for authors to generate ideas to resolve the identified inefficiencies. Streamlining data was done as the preliminary work in order to ensure the correct information is recorded, tracked and reported to management through performance dashboard created and published by authors in excel.

The authors suggested quite a few recommendations to the management in terms of automating their processes in the tea bagging factory, moving to well-integrated information systems and also establish strict control process to sustain the improvements achieved through this project. For maintenance related activities, the control processes were already established as part of the project scope itself.

This project was not only successful; the authors were also able to gain broad practical knowledge on the concepts that were mastered only as theory in their MBA curriculum and also improve their soft skills.