

Executive Summary

The project “Productivity enhancement for a metal enclosure manufacturing plant: A start up SBU for KIK Lanka (PVT) Ltd” addresses a key business objective of the organisation which requires increasing the sheet metal utilisation from 9 to 40 sheets per day that goes into the production process of manufacturing modular enclosure components called “KIKBLOX”. The authors carried out the protagonist role of “Project Leader” and formed a project team to address the components of the project. The project successfully completed within the time span of July 2015 to December 2015.

The project addressed vital components i.e. current situation analysis, product mix planning, process optimisation, process standardisation and training and development activities. The genre of this project was a combination of general skills project and entrepreneurial skills project as it was conducted on a start-up.

A meticulous current situation analysis was conducted utilising techniques such as the Ishikawa diagram, process mapping and work-studies. To justify the components manufactured when increasing the sheet metal utilisation, an analysis was conducted on the product components to be selected for the project that ranges from 700-800 items. During process optimisation stage, value stream maps were drafted for both current and ideal future state. Kaizen activities were conducted in the form of muda elimination and layout planning for the constraint identified in the manufacturing process utilising the theory of constraint. Post process optimisation, process standardisation was conducted to ensure sustainability of the improved processes and aid continuous improvements. Considering the significance of engaging employees for this initiative, trainings were conducted to ensure employee commitment and the successful implementation of the proposed changes.

The project helped the organisation with a 344% productivity improvement by increasing the sheet metal utilisation from 9 to 40 sheets per day. The project also enabled a 25% downtime reduction of the constraint and lead-time reduction of the processes. The authors have utilised this project to comprehend the MBA knowledge further, reflect and apply the learnings to put to practice, whilst sharing this knowledge with the project team and propagating it to the organisation. This has enabled the authors to attain the business objective successfully and sustainably within the given time duration at a cost slightly exceeding the budgeted to enable exceeding the budgeted revenue by USD 70,079.