

EXECUTIVE SUMMARY

This report is based on the project carried out for reducing production/delivery delays occurring at City Engravers (Pvt) Ltd. (CE). CE is a family owned business engaged in the tool manufacturing industry. They specialize in manufacturing of mould tools for plastic and rubber processing industries. Apart from tool manufacturing, CE is engaged in plastic processing. Thus, the organization consists of two manufacturing units; Tool Room and Processing Unit. The project was carried out focusing on both these manufacturing units.

Through customer complaints and order delivery details, the broader business problem was established and it was revealed that approximately 64% of job delays were occurring at the Tool Room while 59% of job delays were occurring in the Processing Unit. Through the implementation of the project, these levels of delivery delays were expected to bring down to 30%.

An extensive cause and effect analysis revealed several causes for the business problem. Among them, seven of the most significant causes were selected through a Pareto analysis to address through the project. Theoretical framework of the project covered the areas of process management, production planning & control, inventory management, machinery maintenance and employee training. Implementation of the project was based on six main components covering the elements of the theoretical framework developed. These consisted of a current situation analysis, implementing a production planning and controlling system, restructuring inventory management system, introducing a preventive maintenance system, staff training and development and finally, development of a data recording and monitoring system and SOPs. Various techniques related to these areas were used to resolve the broad business problem and key issue areas connected to it. These techniques included brainstorming, cause and effect analysis, process maps, check sheets, check lists, Pareto analysis, capacity maps, Work Breakdown Structure (WBS), Gantt charts, priority rules, Kanban boards, ABC inventory management, 5S implementation, preventive maintenance, on the job and off the job training techniques.

Through implementation of these techniques, project team managed to bring down TR related delays to 30% by 29th February 2016 and PU related delays to 30% by 31st December 2015.