# Application of Assignment Problem for Absenteeism Management in an Apparel Industry

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Absenteeism management is a big challenge to run the industries, private sectors and the governmental organization in this current world. The study was conducted in a randomly selected cell of MAS Kreeda Vaanavil, Kilinochi for 40 days to overcome the interruptions caused by the absentees during the active time of apparel industries. The selected cell consisted of 6 modules and each module consisted of 7 to 10 team members including a team leader. An operation research technique named assignment problem was used in this study to handle the good quality and finalized data from the selected cell. A package named Solver Add-ins of MS Excel was used to solve the assignment problem. Initially, the skill matrix was prepared for a selected cell by direct observation and one-on-one interview method. In a module, 7 different tasks with 7 work stations were allocated for 7 team members to share the work load. If there were one, two or three absentees in a module at a time then it was possible to assign the task optimally for each employee without any mismatch by using the assignment problem. Apparel industries were the most time based competitive industries and manual assigning of the task for the employees in an optimal way was not practically feasible. Thus, this study has come up with an idea to solve the absenteeism in which every single task was assigned for a specific employee at an expected level so as to ensure the good flow of production.

**Key words:** *Absenteeism, assignment problem, cell, module, skill matrix*

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