

ABSTRACT

This paper brings a solution approach to the vehicle scheduling problem and investigates the solution using the linear programming (LP) to overcome bottleneck in transportation. Maximizing the efficiency of the outbound logistic section of Lion Brewery Ceylon PLC by optimizing the transportation of finished goods and develop a systematic way of allocating trucks is the main objective of this study. The secondary data obtained from the company's data base has been used to develop the application called Intelligence Vehicle Fleet Scheduling System (VISS) with simplex method of the linear programming model. According to the feasibility study for implementing the VISS application revealed that the profitability could gain through using the application rather practicing conventional manual way of vehicle allocation and scheduling.

Key Words: vehicle scheduling, linear programming, simplex method, maximize the efficiency, Minimize transportation cost

