THE SOLUTION OF VEHICLE ROUTING PROBLEM BY USING NEAREST NEIGHBOR AND TABU SEARCH ALGORITHMS
(Case Study in PT Nippon Indosari Corpindo)

ABSTRACT

VRP or can be called Vehicle Routing Problem is goods distribution problem. In VRP, the company as depot which orders its vehicle to serve many spread customer. The purpose of VRP is to determine a number of routes for sending goods to every customer . By using the nearest neighbor algorithm, can be found the number of vehicles which are needed and feasible routes as initial solution. Next, The initial solution is calculated by using tabu search algorithm, so that the optimal solution which is the minimum distance route is got. By inputing the the number of every customer's demand, capacity of the vehicle, customer and depot distance matrix which are calculated by Delphi software and Netbeans software, so it gets total routes, the routes which are served by the vehicles, and the passed distance.

Keywords*: VRP* (*Vehicle Routing Problem*), *nearest neighbor, feasible, tabu search.*