

ABSTRACT

A distribution activity in a company will related the problem of vehicle routing. There are several of Vehicle Routing Problem variants and one of them is Heterogeneous Fixed Fleet Vehicle Routing Problem. The problem has several main characteristic which are there is several different type of vehicles with limited number in a fleet which has also different capacity and also cost. The objective is to design the vehicle routes that minimize the total relevant cost with satisfying all customers demand, visiting each customer exactly once, and originating and terminating at a depot. In this research a classical heuristic Holmes and Parker algorithm used to solve cost minimization of Heterogeneous Fixed Fleet Vehicle Routing Problem. The proposed algorithm is easy to implement and understand and also can provide a good solution. The solution generated by proposed algorithm shown the better than the current route in the total relevant cost that implemented by the company.

Keywords: distribution, vehicle routing problem, heterogeneous fixed fleet, Holmes and Parker algorithm

