

ABSTRACT

Newspapers are media that can be found every day as a place to get the latest information or news. One of the newspapers in Indonesia is the Pikiran Rakyat newspaper which is produced by the company PT. Pikiran Rakyat Bandung which focuses on newspaper marketing in West Java, DKI Jakarta and Banten. In newspaper marketing, a good distribution channel is needed so that newspapers that have been produced can be sent to the hands of customers in order to minimize travel costs. The number of routes in the delivery of the Pikiran Rakyat newspaper causes the vehicle mileage and total travel costs to be high, while the potential vehicle capacity is not maximized. Therefore, it is necessary to design vehicle routes to minimize travel costs. The vehicle routing problem (VRP) is the determination of a series of routes, each of which is carried out by a vehicle that starts the journey from the depot and returns to the depot to meet consumer demand without violating established boundaries and minimizing transportation costs. This method will be used in this final project using the Simulated Annealing (SA) algorithm as a search method. SA can provide the advantage of efficiently obtaining global minimum returns from objective functions in complex search spaces. In determining the route, we will use the CVRP module from Google OR-Tools in Python. From the results of this final project will get the vehicle project and the cost of the resulting vehicle.

Keywords— [Newspaper, Vehicle Routing Problem, Simulated Annealing, Homogenous Fleet Size, Google OR-Tools]