

ABSTRACT

One of the activity in transportation is distribution a product from a place to other place or from a source of to one or some target. In distributing product, factor of expense, travelled distance and time went through to become matter which important enough to be paid attention because entangling many matter in its operation. For example, amount of required armada, armada capacities (amount of product capable to be transported), material cost burn, and others, is so that required by a matured calculation so that to be existing distribution process become more optimal, either from band facet passed by, expense of, and also the amount of used armada. Matter that's which finally push writer to do/conduct research concerning distribution band optimasi delivery of product at PT Nippon Indosari Corpindo, with aim to to know distribution band or route capable to give the expense of minimum and also armada quantities which is optimal to be used in distributing product.

This research use method of Travelling Salesman Problem (TSP) with aim to to know particular agent which must visit beforehand so that yield travelled distance which is minimum. Before process TSP, beforehand to process cluster with transportation method to divide delivery region become sub regional. To process cluster, writer use data apart from one agent to other agent and also data of demand to every agent. Entire/All data of writer get by doing survey to field and also use secondary data got of company.

Result of research indicate that there are two proposal route able to be used by company, that is proposal route with three cluster and four cluster. Both of the proposal route have insufficiency and excess, that is route useful life and also the amount of saving of which can done. If the company use three cluster, total saving of which can done by company is equal to Rp 2.935.200,- / months.

the condition of above, can be concluded that the company should use the proposal distribution route with three cluster, in order to the company can saving expenditure of expense of its product distribution because its only use three armadas and this proposal route can be used forever because the data trend shows that the trend is linear.