ABSTRACT

This research aims to determine the route order of customer visits, knowing the amount of route savings, distance and knowing the minimum distribution cost savings after repairss knowing the minimum distribution cost savings after a repair. In addition, the frequent occurrence of the delay in the delivery of products from the company to the customer. And object the research are a number of customer-customer of PT. Buana Distrindo Jakarta. The variables used are devided into five independent variables, such as the location of the customer, the capacity of the appliance is transported, the cost of distribution, products demand and route distribution. The variable dependent is minimizing distribution cost. Data collection is done by saving matrix, nearest insert and nearest neighbor method. From the results of data processing and processing of the company's initial distribution route which is equal to 407.5 l, and the total distance of distribution using the method of saving matrix, nearest insert and the nearest neighbor is 247.6 km with a distance savings of 159.9 km, with distribution costs issued in the amount of Rp. 32,911,776/year. Thus it can be concluded that the combined method of saving matrix, nearest insert and nearest neighbor is better than the initial method of the company with a distance saving of 159.9 km and cost savings of Rp.33,358,923/year.

Keywords: distribusi, *saving matrix, nearest insert,nearest neighbour*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui rute urutan kunjungan toko, mengetahui besarnya jumlah penghematan rute, jarak dan serta mengetahui penghematan biaya distribusi yang minimum setelah dilakukan perbaikan. Objek dalam penelitian ini adalah sejumlah pelanggan-pelanggan dari PT. Buana Distrindo Jakarta. Variabel-variabel yang digunakan terbagi menjadi lima variabel bebas, antara lain lokasi pelanggan, kapasitas alat angkut, biaya distribusi, permintaan pengiriman dan rute awal distribusi. Sedangkan variabel terikatnya adalah meminimumkan biaya distribusi. Pengumpulan data dilakukan dengan metode *saving matrix, nearest insert* dan *nearest neighbour*. Dari hasil pengolahan data dan pengolahan rute distribusi awal perusahaan yaitu sebesar 407,5 l, dan total jarak distribusi menggunakan metode *saving matrix, nearest insert* dan *nearest neighbour* sebesar 247,6 km dengan nilai penghematan jarak sebesar 159,9 km, dengan biaya distribusi yang dikeluarkan sebesar Rp.32,911,776 per tahun. Dengan demikian dapat disimpulkan bahwa metode gabungan *saving matrix, nearest insert* dan *nearest neighbour* lebih baik dari metode awal perusahaan dengan penghematan jarak sebesar 159,9 km dan penghematan biaya sebesar Rp.33,358,923 per tahun.

Kata kunci: distribusi, *saving matrix, nearest insert*,*nearest neighbour*