

CHAPTER VI

CLOSING

This chapter describes the conclusions obtained from the results of the research that has been carried out and suggestions for further research.

6.1 Conclusions

Based on the research that has been done, the following conclusions can be drawn:

1. The route visited by the Driver on the proposed route is different from the actual route because the proposed route considers distance, working hours, service time, loading time, and vehicle capacity.
2. The results of savings in distribution time using the proposed route obtained a total savings of up to 23.78 hours with an average savings of 19% distribution time compared to the actual route
3. The results of the distance savings with the proposed route, the distance savings were obtained up to 575.04 km or an average savings of up to 27% shorter than the actual route.
4. Transportation costs get a total cost savings up to Rp. 592,291 using the proposed route.
5. Using the Nearest Neighbor Algorithm as a population initialization for Genetic Algorithm is up to 84% shorter distance with the same iteration as the initialization of the Random population

6.2 Suggestions

The suggestions given for further research are :

1. Calculate the actual distance in the distribution process using GPS in the field.
2. Coding R that has been designed still needs to be improved, such as using the Google Maps API and other VRP variants.