

ABSTRACT

PT. Amandari Prakarsa Nimada (PT. APN) is a private company that is engaged in the coal mining facility rental services sector in East Borneo province. One of the products that is currently offered by PT. APN is double cabin trucks rental to support coal mining activities. To support the implementation of the company's business processes, especially in the double cabin truck rental sector, maintenance plays an important role because the maintenance of the rented trucks is fully covered by PT. APN. The opening of a workshop at PT. APN to conduct maintenance on the rented vehicles becomes an alternative to reduce maintenance costs.

To plan the opening of PT. APN's workshop, an analysis of facilities and infrastructure, as well as the business feasibility of PT. APN's workshop, is required. In this design, market estimation for PT. APN's workshop is obtained from the maintenance needs of 9 units of double cabin trucks rented already by PT. APN. The facilities for PT. APN's workshop consist of Diagnostic Tool Sets and Repair Tool Sets, while the infrastructure of PT. APN's workshop utilizes the garage area at PT. APN's office which has an area of 170 square meters.

The business feasibility of PT. APN's workshop is projected for five years. The feasibility calculation results include an NPV value of Rp 114.913.503, a PP value for 1,89 years, an IRR value of 66,74%, and an MARR value of 10%. Because the value of $NPV > 0$, $IRR > MARR$, and PP is not more than the shortest economic life of the facilities, the opening of PT. APN's workshop is considered feasible. Based on sensitivity analysis results, the sensitivity value of the workshop towards an increase in raw material prices is 16,54%, the sensitivity value of the workshop towards an increase in labor costs is 29,4%, and the sensitivity value of the workshop towards a decrease in price is 8,41%.

Keywords — *PT.APN, Workshop, Feasibility Analysis, NPV, IRR, PP.*