

## **ABSTRACT**

*In doing a network investment phone, PT. Telkom need the knowledge about the subscribers telephone pulse usage. To do telephone pulse usage forecasting in PT. Telkom, in this final duty a backpropagation ANN (Artificial Neural Network) is used to do the forecasting. The main advantage of ANN is the parallel computation ability by learning from the patterns that had been taught.*

*After getting the result of the telephone pulse usage forecasting, an investment analysis will be conducted. NPV, IRR, and PBP are the methods used to do investment assessment.*

*From the research that has been done, ANN forecasting reached 88,20%. Measurement process of investment eligibility analysis is very dependent to the ANN forecasting accuracy.*

***Keyword : forecasting pulse, artificial neural network backpropagation, NPV, IRR, PBP.***