## **ABSTRACT**

CV. Era Printing Indonesia is one of the t-shirt screen printing convection companies in the West Jakarta area. CV. Era Printing Indonesia gets plain shirts for production materials from third parties since 2012. Expenditures for t-shirt more than 80% from total direct material costs. In addition, the procurement of shirts also depends on these third parties. Besides that, another problem was found from the number of rejected or defective t-shirts received from vendors. From purchasing local t-shirts data by CV. Era Printing Indonesia, the average of defect product obtained every year is 7%. In 2018, the company owner plans to make a sewing production line on CV. Era Printing Indonesia to develop the company and so that they can make their own t-shirts. Therefore, a feasibility analysis research was conducted by analyzing market aspects, technical aspects, management aspects, and financial aspects using three feasibility methods, NPV, IRR, and PBP. After the calculation, the feasibility analysis value for each method is obtained with Rp. 703.968.911 for NPV, 58% for IRR, and 2,735 years for PBP. Then, the decision to add sewing production lines on CV. Era Printing Indonesia is said to be feasible. After the decision to add a sewing production line was said to be feasible was known, then an incremental cost analysis was conducted to compare between existing business alternatives and business alternatives with the addition of sewing production line. After the calculation is done, it gets 24% \( \Delta ROR \) with 6% MARR value. Therefore, it can be concluded that the chosen alternative is addition of a sewing production line. The sensitivity value for the increase in direct material costs is 24.39% and the sensitivity value for the decline in product selling prices is 10.04%.

Keyword: Feasibility Analysis, NPV, IRR, PBP, Sensitivity Analysis, Incremental Cost