

## **ABSTRACT**

*Umami Embroidery is a private owned enterprise owned by Dedi Darmawan, which is engaged in the fashion industry, particularly on production of embroidery. At the end of 2014, the company was offered a contract to produce 10,000 piece of embroidery every month. This contract is continuous up to 5 years. Now, it has a production capacity of 4000 pieces per month. With the number of machines currently owned, the company's production capacity cannot fulfill existing demand. Therefore, the company plans to increase the capacity of the machine in order to meet the existing demand.*

*In this study will be conducted two tests. The first test is evaluating the feasibility of alternative that exist using NPV, IRR, and PBP. The output of the first test will be used in the second test. The second test is evaluating the best alternative using Incremental Analysis method.*

*The results of the feasibility analysis obtained for alternative 1 NPV = Rp. 114.574.422, IRR = 27%, and PBP = 2 year and 5 months, the second alternate NPV = Rp. 91.030.062, IRR = 20%, and PBP = 2 year and 6 month, and the third alternate NPV = Rp. 91.760.270, IRR = 18%, and PBP = 2 years and 7 month. These alternatives are feasible because the value of IRR is greater than the value of MARR and the NPV is positive.*

*After testing the feasibility, the next step will be selecting the best alternative using Incremental Analysis. The results of the Incremental Analysis showed that the first alternative is the best alternative.*

*Keywords: Feasibility Analysis, NPV, IRR, PBP, Incremental Analysis, Umami Embroidery Firm*