

ABSTRACT

Kopi Warga is a specialty coffee brand founded in early 2019 in the city of Bandung, West Java. To date, Kopi Warga is known for selling coffee beans produced from their own plantation located at Mount Wayang, Pangalengan. To process the roasting of their coffee beans, however, Kopi Warga continues to use the services of third parties. The issue with this is that the costs are quite high, and the production time from delivery to becoming a product is quite time-consuming. Therefore, in 2021, the brand owner intends to increase investment in roasting machines in order to reduce costs and shorten the production time. As part of the plan, a feasibility analysis study was carried out, which included an examination of market aspects, technical aspects, management aspects, and financial aspects. The NPV, IRR, and PBP methods were used to determine feasibility. Also included were the calculations for the incremental analysis and the sensitivity analysis. The results of the present feasibility analysis for each method are (1) NPV with a value of Rp. 17,439,765.- (2) PBP with a value of 3.9006, and (3) IRR with a value of 27%. Meanwhile, the results of the feasibility analysis of the proposed addition of a roasting machine for each method are (1) NPV of Rp.29,539.074, (2) PBP of 3,8805 and (3) IRR of 24%. Both options are feasible to implement. The incremental analysis discovered that the proposed alternative to adding a roasting machine remains the best option with a ROR value of 21 percent, with the result of the incremental cost being that if the value of $\Delta ROR > MARR$, then the chosen alternative is the one with the highest investment value. The resulting sensitivity analysis indicates that an increase in the value of material costs will be sensitive at 11,9%, with a positive upper limit of 11% and a negative limit of 12%.

Keywords: Feasibility analysis, NPV, IRR, PBP, Sensitivity Analysis, Incremental Cost.