

## **ABSTRACT**

*PT. XYZ is a garment industry engaged in the CMT (Cut, Make, Trim) sector, providing sewing services for ready-made garments such as dresses, t-shirts, pants, shirts, and more. Starting as a medium-sized garment industry, CV. XYZ has now expanded into a large-scale garment industry and transformed into a Limited Liability Company (PT) as a closed corporation. The chosen location for opening the factory is in Tangerang Regency. The industrial area in Tangerang Regency is considered suitable due to its integration with adequate infrastructure, including transportation facilities for the mobility of people and goods. Considering the workforce indicator, according to the 2020 population census, Tangerang Regency has the highest population in Banten Province, and 57.56% of the population work as permanent workers or employees, which undoubtedly contributes to the demand for clothing. This research is conducted to evaluate the factory expansion from the perspectives of the market, technical, and financial aspects, as well as to identify sensitivity levels and risks. The market aspect begins with forecasting demand based on historical sales data. The technical aspect involves identifying operational expenditures and revenues of the company. The final stage is the financial aspect, projecting profit and loss, cash flow, and balance sheet. From the results, a feasibility analysis is conducted, revealing an NPV of Rp1.994.845.035, an IRR of 27.75%, and a PBP of 4.19 years. Furthermore, sensitivity measurements are performed on three factors: direct labor cost increase with a sensitivity of 7.06%, decrease in selling price with a sensitivity of 4.32%, and decrease in demand with a sensitivity of 4.63%. The potential risk calculation results in an NPV > 0, MARR risk value of 23.93%, and PBP of 4.73 years.*

**Keywords:** *Business Feasibility Study, NPV, PBP, IRR, Sensitivity Analysis.*