ABSTRACT

PT XYZ is a State-Owned Enterprise (SOE) engaged in information and communication technology (ICT) services and telecommunications networks in Indonesia. Projections of increasing internet needs make the need for internet bandwidth increasingly large. The currently available sea cable communication system (SKKL) is predicted to no longer be able to accommodate bandwidth needs, especially the internet for the next few years. In addition, PT XYZ must also be able to anticipate to serve Metaverse. This study aims to determine alternative scenarios and the feasibility of the construction of Indonesia's submarine cable communication system (SKKL) in the metaverse era. This research discusses the selection of the best scenario from 4 scenarios with the discounted cash flow method and considers the EUAC of each scenario. The aspects to be studied are market aspects, technical aspects, and financial aspects. Market aspect data is obtained from the company's historical data and demand forecasting is carried out using the linear regression method. The technical aspect is done by determining the business process, scenarios to be used, labor, and details of investment costs. The financial aspect is done by calculating the estimated revenue, profit and loss statement, and cash flow. Based on the results of the feasibility calculation, the NPV value of Rp.32.337.102.145.226, PBP of 3,2 years, and IRR of 44,43% with MARR of 14.8% were obtained. The results of this study indicate that the selected scenario is feasible to run.

Keyword — SKKL, Metaverse, Discounted Cash Flow, NPV, PBP, IRR