

FEASIBILITY ANALYSIS OF MOBILE TOWER USING INCREMENTAL COST AND RELEVANT COST METHOD

(CASE STUDY: PT. DAYAMITRA TELEKOMUNIKASI)

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Abstract - In 2013 PT Dayamitra Telekomunikasi (Mitratel) got a request of construction of as many as 2109 units of tower from PT. Telekomunikasi Selular (Telkomsel) which will be performed a leasing of tower by PT. Telkomsel. Thus PT. Mitratel planned the making of tower in 2014. However, in its implementation on the first year of 2014 out of 856 towers planned to be built, it only realized 242 sites. This may cause a potential of retrieval of request of tower construction and a fine by PT. Telkomsel. Related to this matter, the management of PT. Mitratel tried to fasten the process of tower building by procuring mobile tower as a temporary replacement tower before conventional tower can be established. This it needs the presence of analysis calculation of feasibility to procure the mobile tower.

The research method used was by interviewing employees of PT. Mitratel and obtained historical data of the company. From the data obtained then calculated 2 alternatives of decision-making namely alternative without the procurement of mobile tower and alternative with the procurement of mobile tower. The calculation was done by using net present value (NPV) method, internal rate of return (IRR) and profitability index (PI) by using incremental cost and relevant cost as the supporting data. Of these two alternatives obtained the best NPV namely an alternative to the procurement of mobile tower worth Rp 1,435,444,455,170. From the best scenario then analyze the risk using

sensitivity analysis method for the possibility of increase in the cost of construction of the tower, the decline in revenue from leasing tower and tower operational costs by 10%. The analysis of the three obtained the most likely affect the NPV is a decline in revenue from leasing tower with a decrease of Rp 1,092,277,634,156, -. Then performed an analysis of Monte Carlo for the three risk analysis simultaneously. Of the 10,000 attempts which have a probability value obtained ineligibility for 8:59%.

Based on the results of the study, later on will result in a description of mobile tower investment feasibility to PT. Mitratel. The results of this study could also become a recommendation to other tower provider companies and further research if there will be a procurement of mobile tower.