

ABSTRACT

In agreement for quickly evolution of information technology and communication with supporting fast growing economic condition better, human needs of internet service are increase. It's can visible from the increasing of distribution money expenditure the companies for internet in indonesia that the average level of 11% every year with the prediction expenditure of distribution money for internet in indonesia in the year 2008 equal to 22.186 US\$M (*IT Spending di indonesia terbitan IDC tahun 2006*). Not only the quantity, but also in segmen quality and kind of service, many application that required high bandwidth for faster data transfer and realtime application more and more used. The requirement can be loaded with broadband technology access. One of new broadband wireless access technology in this time is WiMAX (*Worldwide Interoperability for Microwave Access*). The technology of WiMAX could reach high data rate and wide service area. In many surplus of WiMAX technology in efficiency, kind of service that can given and fast growing, WiMAX is predicted can be replacing the other broadband technology seperti like DSL (*Digital Subscriber Line*) broadband technology in the future. The many surplus of WiMAX is motivated P.T Telkomsel, as a market leader telecommuication cellular operator in indonesia that also preparation internet service in Telkomsel Flash and 3G for mobile segmen, to be implemented the new technology as a way to get advatages from obtained a internet market via WiMAX access.

To apply the internet broadband service based on new wireless technology, previously required to do the feasibility study that comprehensive until it's throw to the market. Feasibility analysis investation is a way to determine how can the business is continued or not, that evaluated in market analisys, technical and technology, also in financial. Market analisys are collected by survey that the instrument is a kuisisioner for knowing profile and consumer interest to the broadband internet service thet given for residential segmen, and the secondary data is a tables of IT Spending in Indonesia derivative IDC (Information data consultant) in 2006 for knowing the corporate market. Feasibility invesment showing in financial aspect in planing invesment of WiMAX network on Palembang. Financial aspect is calculated the level of Net Present Value (NPV), Internal Rate of Return (IRR), dan Payback Period (PBP).

Based on result of procesing and calculating, in this final project get the value of NPV equal to Rp. 650.025.011, IRR equal to 26%, and PBP equal to 4,9 years. This showing that the commulatif value in present during the invesment period is equal to Rp. 650.025.011, it's mean the investment is feasible to realisation with the value of advatages every year is equal to 26% , so that the investment to performed WiMAX network for supply internet broadband wireless service in Palembang started to returned money back during 4,9 years invesment period. After doing sensitive analisys with the variables that determinated feasibility criteria, therefore we can know that feasibility analisys criteria is very sensitive to changing of demand in residential segmen. Deflation 4% of demand in residential segmen is changing the invesment criteria become not feasible to realize.