

ABSTRACT

The development of optical fiber technology had affected information and communication systems in the world, especially with the development of Fiber To The Home (FTTH) that can deliver broadband services using fiber-optic network in houses or apartments. This technology will make customers easy to access information with fast and very high bandwidth.

This paper discusses research related to the adoption of FTTH technology in ICT infrastructure development of apartments by using the Extended Technology Acceptance Model (TAM). The study involved 147 respondents consisting of apartment developers several area in Indonesia --Jakarta, Bogor, Depok, Tangerang and Bekasi. The collected data were analyzed by using Smart PLS 3.0 and the result shows that all factors in Extended TAM which significantly influence the intention to use in order to understand user acceptance of FTTH technology.

The direct influence factors are Perceived Ease of Use (0,566), Perceived Usefulness (0,289) and Subjective Norm (0,129), while indirect influence factors are Image (0,207), Job Relevance (0,183), Output Quality (0,086) and Result Demonstrability (0,078). The R^2 of Intention to Use is 0,701, therefore based from result, this study was expected to be useful for ICT infrastructure development in the property business and the development of technology based on fiber optic

Results of this study expected that further developer will implement FTTH technology in the development of ICT infrastructure in the apartment. FTTH technology provider must be able to change the perception that the previous developer FTTH technology is difficult to apply to conduct intensive socialization, development cooperation with mutual business scheme and put the engineer on site for post-development assistance FTTH in the apartment.

Keywords : *Technology Adoption, ICT, Broadband, FTTH, Extended TAM*