ABSTRAK

Perkembangan teknologi dalam bidang jaringan telekomunikasi khususnya di Indonesia saat ini semakin berkembang pesat seiring dengan permintaan konsumen akan jasa layanan yang semakin beragam. Tuntutan kebutuhan akan jasa layanan akses data informasi yang semakin bertambah ini dapat dipenuhi oleh teknologi telekomunikasi yang menawarkan bandwidth yang besar, tidak adanya interferensi, kualitas yang terjamin dan fleksibel serta tingkat keamanan data yang terlindungi. Keunggulan tersebut dapat disajikan dengan teknologi jaringan *Hybrid Fiber Coaxial.* Penerapan jaringan *Hybrid Fiber Coaxial* ini agar memiliki nilai efisiensi dan kehandalan yang maksimum adalah melalui proses migrasi jaringan *Hybrid Fiber Coaxial* dari sistem analog ke sistem digital.

Dalam proyek akhir ini akan dilakukan analisa proses migrasi sistem analog ke sistem digital pada jaringan *Hybrid Fiber Coaxial* di PT.First Media,Tbk. dengan mengambil contoh daerah Pluit-Jakarta Utara.

Analisa proses migrasi jaringan *Hybrid Fiber Coaxial* ini terdiri dari prosedur migrasi yaitu pemilihan jaringan, survei area migrasi, *broadband construction*, upgrade jaringan hingga aktifasi jaringan**.** Untuk mengetahui kehandalan perubahan sistem jaringan *Hybrid Fiber Coaxial* maka juga dilakukan analisa keunggulan serta kendala sistem akhir jaringan yang dipakai, yaitu sistem digital. Hasil proses migrasi jaringan *Hybrid Fiber Coaxial* ini diharapkan memberi perluasan jaringan sehingga dapat memenuhi muatan *bandwidth* dengan banyak aplikasi informasi serta kualitas sinyal lebih baik dari saat jaringan memakai sistem analog.

Kata kunci ; *Hybrid Fiber Coaxial,* migrasi, sistem analog dan sistem digital

ABSTRACT

The development of technology in the network field of the telecommunications especially in Indonesia at this time was increasingly developing fast together with the consumer's request would the increasingly heterogeneous service. The demand of the requirement would the services of access of the information data that increased this could be filled by telecommunication technology that offered bandwidth that was big, the nonexistence of the interference, the quality that was guaranteed and flexible as well as the level of the security of the protected data. This superiority could be presented with network technology of *Hybrid Fiber Coaxial*. In order to be able to make the value and the superiority of maximum efficiency in the application of the network of *Hybrid Fiber Coaxial* this was carried out by the process of the migration of the network of *Hybrid Fiber Coaxial* from the analogous system to the digital system.

In this final project, will analyze migration processes of the analogous system to the digital system in the network *Hybrid Fiber Coaxial* in PT. First Media,Tbk. by taking the example of Pluit the area, North Jakarta.

The analysis of the migration process of the network of this *Hybrid Fiber Coaxial* consisted of the migration procedure that is the network election, the survey of the migration area, broadband construction, upgraded the network until the network activation. To know about the change reliability in the network system of *Hybrid Fiber Coaxial* we should carry out the analysis of the superiority as well as the hindrance of the system of the network end that were used, that is the digital system. Results of the process of the migration of the network of *Hybrid Fiber Coaxial* this was expected to give the expansion of the network so as to be able to fill cargo bandwidth with many applications of information as well as the quality of the signal better than when the network used the analogous system.

Keyword ; *Hybrid Fiber Coaxial,* migration, analogous system and digital system