ABSTRAK

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Judul Laporan Skripsi	: Analisis Dan Perancangan Infrastuktur Jaringan Internet Pada Proyek Apartemen Pik 2 Tokyo Riverside
Dosen Pembimbing	: Prastika Indriyanti, S.Kom, MCS

Dalam era kontemporer, permintaan akan fasilitas komunikasi, informasi, dan hiburan berperforma tinggi mendorong kebutuhan akan infrastruktur jaringan yang handal. Fiber To The Home (FTTH) menjadi solusi utama dengan pengembangan yang berkelanjutan di seluruh Indonesia. Proses desain jaringan melibatkan penciptaan jalur awal, penentuan perangkat, spesifikasi, perencanaan tata letak, dan alokasi volume, sebagaimana diuraikan oleh Tampubolon, Hambali, & Widodo (2015). Penanggulangan tantangan utama untuk menyatukan kesenjangan antara dunia fisik dan informasi dalam Internet of Things (IoT) menjadi hal krusial. IoT melibatkan pengolahan data real-time dari perangkat elektronik melalui antarmuka antara pengguna dan peralatan. Hubungan erat antara IoT dengan Internet, sebagai jaringan komputer internasional menurut Edi Nur Sasongko (2010), menandai fokus utama pengembangan teknologi informasi (Dobiyanto, 2019).

Apartemen PIK 2 Tokyo Riverside, proyek kolaborasi Agung Sedayu Group dan Salim Group di kawasan mega PIK 2, memperkenalkan konsep inspiratif kehidupan apartemen ala Jepang. untuk memastikan layanan Internet berintegritas tinggi di Apartemen PIK 2 Tokyo Riverside, diperlukan jaringan yang terstruktur dengan baik. Penelitian ini menyajikan solusi melalui analisis desain infrastruktur internet, mendukung implementasi jaringan berdasarkan layout/as-built drawing gedung apartemen baru di proyek Apartemen PIK 2 Tokyo Riverside.

Kata Kunci: Infrastruktur jaringan internet, Hirarki Desain Jaringan, Metode PPIDOO, Agile Networking, Manajemen proyek

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In the contemporary era, the increasing demand for high-performance communication, information, and entertainment facilities necessitates a reliable network infrastructure. Fiber To The Home (FTTH) emerges as a leading solution with sustainable development throughout Indonesia. The network design process involves the creation of initial pathways, device determination, specifications, layout planning, and volume allocation, as outlined by Tampubolon, Hambali, & Widodo (2015). Addressing the primary challenge of bridging the gap between the physical and information worlds in the Internet of Things (IoT) is crucial. IoT involves real-time data processing from electronic devices through interfaces between users and equipment. The close relationship between IoT and the Internet, defined as an international computer network by Edi Nur Sasongko (2010), marks a central focus in the development of information technology (Dobiyanto, 2019).

The PIK 2 Tokyo Riverside Apartment, a collaborative project by Agung Sedayu Group and Salim Group in the mega-project area of PIK 2, introduces an inspirational concept of apartment living inspired by Japan. To ensure high-integrity Internet services at the PIK 2 Tokyo Riverside Apartment, a well-structured network is essential. This research provides a solution through an analysis of internet infrastructure design supporting the implementation of network infrastructure based on the layout/as-built drawing of the new apartment building in the PIK 2 Tokyo Riverside Apartment project.

Keywords : Internet network infrastructure, Hierarchy of Network Design, PPIDOO Method, Agile Networking, Project Management