

## **ABSTRACT**

*Information Technology (IT) is a technology that is useful for processing data, including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information. This information is then used by the company in decision making and other business processes. In the development of IT, IT implementation is not uncommon to experience obstacles experienced by companies. At PT XYZ, which is engaged in telecommunications, it is found that the implementation of Enterprise Architecture is currently not effective. Especially in the Infrastructure Development Unit, one of the problems faced is the unsynchronization between the needs of IT architecture and the available budget. Complex business needs often require IT solutions that require large costs, while the allocated budget is limited. In aligning strategies from both business and information technology aspects at PT XYZ, architecture design is needed using the TOGAF ADM 10 framework. TOGAF is an architectural framework developed by The Open Group, TOGAF ADM helps companies achieve alignment between business needs and IT strategies. Several phases are used as architectural design guidelines in this research, namely, preliminary phase, architecture vision, business architecture, information system architecture, technology architecture, and opportunities and solutions, which results in business needs, data and information, infrastructure, applications, technology standards, and opportunities and solutions for the company. This research resulted in the design of a corporate architecture and IT roadmap that can be used as a reference for improving business processes so as to increase the effectiveness and efficiency of infrastructure development and business activities in the company. The results of the study propose the development of an architecture that is in accordance with the goals and needs of the Infrastructure Development Unit.*

**Keywords:** *Enterprise Architecture, TOGAF ADM, Information Technology, Infrastructure Development Unit*