ABSTRACT

The better development of Infrastructure, politics and world social because of information technology makes BUMN establishes applied information technology for supporting business competitive advantages and transformation. PT. Kereta Api Indonesia (Persero) as a BUMN implements SAP for enterprise business transformation. SAP will be a challenge for PT Kereta Api Indonesia (Persero) in its implementation in alignment of business and information technology.

One of the purposes of applying enterprise architecture is creating an alignment for both business and information technology in need of organization. Enterprise Architecture Implementation will success according how good organization planning and designing enterprise architecture. Designing enterprise architecture needs a complete and understandable methodology.

TOGAF ADM gives a detailed method on how to build, manage and also implement enterprise architecture and information system. The designing architecture in TOGAF ADM has a complete cycle containing Preliminary, Architecture Vision, Business Architecture, Information System Architecture, **Opportunities** and Solution, Technology Architecture, *Implementation* Governance and Architecture Change Management Phase. Mega Suite is an application for designing architecture blueprint. Mega Suite will create catalogs, matrices, and diagrams for each of architecture planning phase. The Design is performed continuously from preliminary, architecture vision and requirement identification phase. After that, continued with designing business architecture and data architecture. The output from both of architectures is a blueprint that used for foundation to develop SAP implementation at PT. Kereta Api Indonesia (Persero).

Key words: Enterprise Architecture, SAP, TOGAF ADM, Business Architecture, Data Architecture, PT. Kereta Api Indonesia (Persero)