ABSTRACT

The Surabaya City Fire and Rescue Service is a government agency tasked with handling fire disasters and rescue. This agency consists of two fields, namely the Firefighting Field and the Prevention Field. In its operations, both fields face obstacles in system integration and alignment of business strategies with information systems and information technology (IS/IT) strategies. Problems were identified in the business processes in the Firefighting Field and the Prevention Field which run separately without integration and automation. As a result, the scope of socialization is uneven and less targeted. Socialization should be carried out routinely and on schedule, especially in areas with high fire incident rates, by utilizing fire data obtained from the Firefighting Field. This problem is supported by the existence of a suboptimal information system, where the lack of automation and integration between applications causes data inconsistencies and hinders the effectiveness of fire prevention socialization. To overcome these problems, a solution is needed in the form of designing an enterprise architecture that is able to integrate the business processes of both fields and optimize the information system used. Therefore, this study aims to design an enterprise architecture using The Open Group Architecture Framework (TOGAF) and the Architecture Development Method (ADM) version 9.2. This research covers the preliminary phase, architecture vision, business architecture, information system architecture, and technology architecture. The results of this research are in the form of an IT blueprint covering business architecture, application architecture, data architecture, technology architecture, and gap analysis which are used as guidelines and references for the development of information systems and information technology in the future.

Keywords – TOGAF, ADM, Enterprise Architecture, Surabaya City Fire and Rescue Service