

CHAPTER I PRELIMINARY

I.1 Background

Every organization or company today requires a standardization to carry out the management process that runs at the company. There is no exception for a hospital that provides services to the community. Hospitals themselves need good management, so that all processes that run can be fast and precise. Currently, we realize that with Information Systems, we can design using architectural frameworks related to Information Technology-based services (Haghighathoseini, et al, 2018). A hospital requires the development of fast and appropriate services so that the health services provided can run safely. Therefore, an Enterprise Architecture (EA) is needed which can become a standard for a hospital in providing services. Enterprise Architecture can be defined as the organizational basis for standardizing systems and the principles that govern their design and evolution (IEEE 2000).

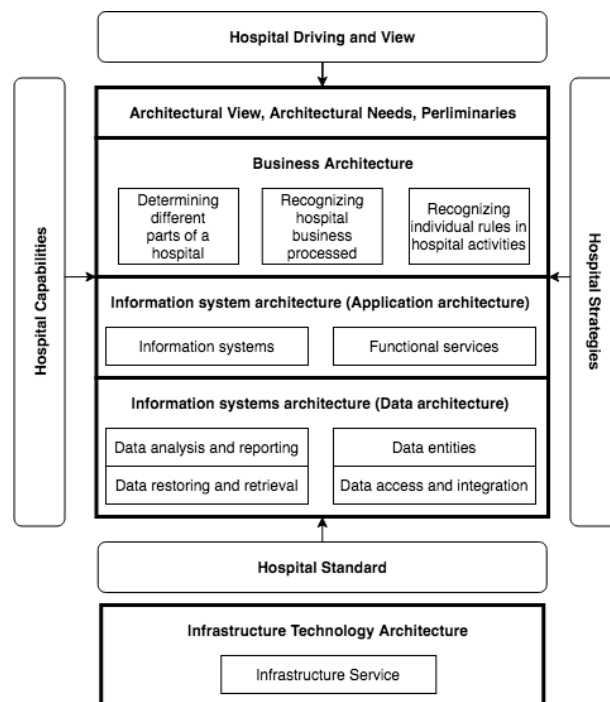


Figure I.1 Conceptual Model of TOGAF for Hospital

In Figure 1, the concepts applied to hospitals related to the implementation of TOGAF are described. Where there are several layers with each function used in its implementation. The layers are as follows :

1. Business Architecture Layer.
This Layer Covers the business strategy and the main business processes of an organization.
2. Application Architecture Layer.
This Layer is a blueprint for individual applications to be implemented, their interactions and relationships with the main business processes of an organization.
3. Data Architecture.
This Layer showing the structure of the physical and logical data storage of an organization and data management resources (Data Management Resources)
4. Technology Architecture Layer.
This layer showing the software and hardware capabilities needed to support the proper implementation of business processes, data and applications. This includes IT infrastructure, middleware, networks, communications, processes and standardization.

Implementing Enterprise Architecture using TOGAF in organizations such as hospitals, starts with conducting research related to the existing conditions of the hospital, and can be continued by doing designs related to long-term planning to achieve the goals or vision and mission of a hospital (Haghighathoseini, et al, 2018).

By utilizing the implementation of EA using the TOGAF framework, it is expected to be able to optimize the performance of the Hospital as a public agency that can serve the needs of the community in the health sector.

I.2 Problem Formulation

The formulation of the problem to be studied in this study is as follows :

1. How to design Enterprise Architecture using TOGAF ADM in the medical service function at Sariningsih Hospital?
2. How is the IT Roadmap designed for the medical service function at Sariningsih Hospital in the development of information technology?

I.3 Research Objectives

This research aims to:

1. Generate an Enterprise Architecture blueprint using TOGAF ADM which is needed for the medical service function at Sariningsih Hospital
2. Produce an IT Roadmap design as a reference for the function of medical services at Sariningsih Hospital in technology development.

I.4 Research Limits

The limitation of this final project is focusing on object research, namely Sariningsih Hospital. The following are the limitations of the research made for this study:

1. This research focuses on the Enterprise Architecture (EA) design stage using the TOGAF framework and does not to the implementation stage.
2. This research focuses on Sariningsih Hospital, especially in the Medical Services unit.
3. Analysis and design of Enterprise Architecture consists of design existing (as is) and target design (to be).
4. This study uses the TOGAF ADM 9.2 method starting from the Preliminary Phase, Phase A: Architecture Vision, Phase B: Business Architecture, Phase C: Information Architecture, Phase D: Technology Architecture, Phase E: Opportunities, and Solutions, and Phase F: Migration Planning.

I.5 Benefits of research

1. With the proposed enterprise architecture design using the TOGAF ADM approach in the medical service function of the Sariningsih Hospital, it can help produce more efficient hospital business operations.
2. The IT Roadmap, helps the hospital in determining the information system design project for the operational activities of the Sariningsih Hospital.

I.6 Systematic research

This research is described by systematic writing as follows:

Bab I Preliminary

This chapter contains a description of the context of the problem, research background, problem formulation, research objectives, research limitations, research benefits, and writing systematics.

Bab II **References**

This chapter contains literature that is relevant to the problems studied as well as discussions of previous studies.

Bab III **Research methodology**

This chapter contains the methods used in conducting the research. On the other hand, this chapter describes Research Systematics.

Bab IV **Analysis and Design**

This chapter describes the results of the analysis and design carried out in carrying out the implementation related to the research topic.

Bab V **Result and Evaluation**

Overall, this chapter discusses in detail the results of the analysis result and assessment carried out related to the research topic.

Bab VI **Conclusions and suggestions**

This chapter describes the conclusions of the research conducted and the answers to the research questions presented in the introduction. Research suggestions are presented in this chapter for further research.

Bab VII **References**

This chapter presents the entire bibliography that is used as the basis for conducting research