

UNIVERSITI TEKNOLOGI MARA

**PRIORITIZATION FACTORS OF
ENTERPRISE APPLICATION
INTEGRATION (EAI) ADOPTION IN
MALAYSIAN e-GOVERNMENT**

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ABSTRACT

This dissertation examines the prioritization factors that can influence Enterprise Application Integration (EAI) adoption in Malaysian Government. This research focuses on Human Resource Management Information System (HRMIS) application which has been selected as the case study for this research. The analysis is divided into two parts. The first part is by analyzing the prioritization factors by using Analytic Hierarchy Process (AHP) technique while the second part is through multiple case study and document analysis. The study of these factors in these two parts is based on EAI adoption model that proposed by Kamal *et al.* (2009) and being compared to get the outcome. The results are comprised through a series of tables and one propose framework. Based on the outcomes, it illustrate that ten factors can be classified as most priority factors which must be considered when adopting EAI. Therefore, resulting in this research will guide Malaysian public sector to make a decision before proceeding with EAI adoption in e-Government project.

Keywords: EAI Adoption, e-Government, Local Government Authority (LGA), Human Resource Management Information System (HRMIS)

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Chapter 1

Introduction

1.1 Introduction

Recently, the business process in private and public organization is getting complicated and continuously improving. This phenomenon has led to the creation of numerous information systems which specifically to support these particular business processes and functions. At the first stage, many of these systems were dedicated to specific tasks, such as human resource management, accounting management, finance and others. Due to this dedication, these systems evolve, as new applications are introduced and old ones are enhanced. As a result, large companies typically manage and maintain hundreds and sometimes even thousands, of different applications (Lam, 2005; Riempp & Gieffers, 2007). Thus, many organizations have realized that the systems required variety of technologies and hardware to handle many different functional areas.

Then, years go by and the power and capacity of computers increased. These situations help organization to reduce the need for separate information systems. However, organizations found that many of their systems were incompatible with each other and would not seamlessly interact (Brown, 2006). These applications were not designed to collaborate with other systems, as partners have developed their applications and without any co-ordination (Kalakota & Robinson, 1999). Hence, applications that originally have been developed independently are required to be integrated to support new and different functions of the enterprise. As it became increasingly important for organization to consolidate and integrate their applications,