CHAPTER 1

INTRODUCTION

1.1 Background

Information technology (IT) has allowed individuals, groups, and organizations to manage information effectively and efficiently. An information system (IS) combines information technology with data, procedures for processing data, and people who collect and use the data. Individuals, organizations, and society need to use a variety of systems to organize the collection, storage, processing, retrieval and communication of information (Gordon, 2004). Organizations collect extensive amounts of information, and have a great need to share information among their members.

With the rapid development of information technology (IT) and information system (IS), particularly distributed processing and network computing, the concept of IT and IS use in public sector has been changed dramatically. It has been found that IT and IS enables completely new ways of doing the job, and sometimes it is essential factor in completely transforming a process. (http://www.harwaimun.com/hrd.html).

Understanding end-users' perception about their adopted Information Systems (IS) might assist operators and decision makers to understand the weaknesses and promises of IS. Therefore, examining organizations' IS in the light of several identified attributes may provide more and clearer tools to understand and assess its performance.

Because of the value of information to organizational performance, most organizations develop procedures to ensure that important information is collected, captured accurately, and organized effectively. Organizations that lack of quality IS may experience problems in accessing the data they need for decision making, lose important data during a relocation or power failure, perform redundant activities in dealing with customers or suppliers, or fail to respond quickly to changes in the marketplace or industry.

An information system is there to empower its users. A database simply provides data, but an IS is all about providing the best information the user needs to do their task more effectively. It is also takes into account that different users doing their own specific tasks may need to see their information presented in different ways. The benefits of an IS follow when the user can quickly access, understand and respond correctly to that information. It cannot be argued that IS has become the backbone in today's knowledge economy. Everyone in the organization needs information to fulfill their duties and make decisions that have become more complex than ever.

IT and IS have changing rapidly. Formerly end user interacted with systems via system analyst or programmer who translated the user requirements into system input in order to generate the output required for the end users' analysis and decision making process. Conversely, end-users are now more directly involved with the systems as they navigate themselves typically via an interactive user interface, thus assuming more responsibility for their own applications. As such, the ability to capture and measure end-user satisfaction serves as a tangible surrogate measure in determining the performance of the IS function, services and application deployed within an organization (Ives, Olson and Baroudi, 1983).

As IT spending grows and becomes commoditized and as essential as electricity and running water, many organizations continue to wonder if their IT spending is justified (Farbey, Land and Targett, 1992) and whether their IS functions are effective (DeLone and McLean, 1992).

It is crucial to evaluate IS performance and also to assess whether the IS in place within the organization meets the users' expectation. Therefore this study aims to measure the IS performance (end-user satisfaction) and its importance to the users in government sector particularly in Pahang State Education Department.

In the case of the Malaysian Public Service, its current and future roles in the administration and development of the nation are clearly defined by the various macro policies and development plans introduced at the various stages of the country's development. Vision 2020, the National Information Technology Agenda, the Third Outlined Perspective Plan (2001-2010) and the Ninth Malaysia Plan (2006-2010) have outlined the nation's vision and efforts to intensify the development of high technology and knowledge intensive industries as well as to make ICT the catalyst for growth in the 21st century.

It is a fact that the public service managers, either willingly or reluctantly, are riding the technology tiger. Massive financial resources have been allocated to use modern technology to improve customer service, to make work easier and more rewarding to employees. However, many have claimed that the benefits of technology have not matched the costs of investment in it. It is later learnt that technology per se is not productive and does not add value unless there are people who have the knowledge and expertise to use it productively. Therefore, this study aims to assess the overall effectiveness of the IS function using the end-user satisfaction level as a surrogate measure.

1.2 Objectives of the study

This study is an attempt to investigate the perceived performance of organizations by utilizing an extension of DeLone & McLean (1992) Success model, which incorporates performance as a function of end-user satisfaction and system usage. The specific objectives include:

1. To identify the IS attribute (amongst systems quality, information quality and service quality) which is perceived to be most significant relationship in determining end-user satisfaction.
2. To examine the relationship between the perceived importance and the actual performance of the individual IS attributes.
3. To analyze the association between the demographic factors of the end-users and their evaluation of the overall IS performance.
4. To carry out an importance-performance analysis on the identified IS attributes in order to identify the performance gaps requiring further action.

1.3 Scope of the study

The main purpose of this study is to investigate the perceived performance of an organization particularly in public sector, which incorporates performance as a function of end-user satisfaction amongst Pahang State Education Department

(PSED) staff. This involves gauging their current perception on the importance of the various IS attributes leading to an effective IS environment. Moreover, the study will also measure their evaluation of the actual performance of these IS attributes which should uncover the inherent strengths and weaknesses within the PSED IS function. Using the Importance-Performance (IP) analysis framework, this study aims to uncover performance gaps which are typically denoted by performance minus importance. Mapping the mean scores against the IP Map, we can easily visualize how these attributes are performing by comparing its position against the iso-rating line where importance equals performance.

More imperatively, the findings concluded from this study should form an initial baseline which can be used as a reference in measuring the performance of IS over a period of time. Such findings can generate significant changes in the IS operations to increase its relevance and overall effectiveness while ensuring that it is well-aligned to the PSED strategies.

This study will adopt the IS Success model developed by DeLone and McLean with specific focus on the relationship between end-user satisfaction levels and the impact on individual productivity. Focusing on PSED’s end-user, a convenience sampling approach will be utilized as the means of capturing the required research input.

1.4 Organization of the report

This study consists of five chapters. Chapter 1 comprises a brief introduction of the study, the research objectives, scope and organization of the present study. In Chapter 2, the relevant literature pertaining to the IS performance with specific focus on end-user computing and satisfaction studies and its impact on individual productivity is discussed. This includes a discussion of the end-user computing segment, its relevance in ensuring IS success or effectiveness as well related past studies in the form of literature and research compilation. Chapter 3 describes the research methodology of the study. This includes the research model and research hypotheses, selection of the measures, sampling design, data collection procedure and data analysis techniques. The findings of this study as well as the detailed analysis of statistical test conducted will be discussed in Chapter 4. Finally, Chapter 5 concludes this study with a brief summary together with its implication and suggestion for future research.