UNIVERSITI TEKNOLOGI MARA

DOCUMENT IMAGING SYSTEMS: FACTORS INFLUENCING USAGE AND EFFECTIVENESS IN MALAYSIAN PUBLIC ORGANIZATIONS

SAIFUL FARIK BIN MAT YATIN

Thesis submitted in fulfillment of the requirements
for the degree of
Doctor of Philosophy

Faculty of Information Management

December 2010

ABSTRACT

Besides the implementation of Multimedia Super Corridor, Vision 2020 and Electronic government, Malaysia is still lagging behind developed countries, in 11th place in the implementation of an e-government, since it was launched in 1996, according to a survey by the Brookings Institution in the United States (NSTP, 2009). Vision 2020 focuses on effectively and efficiently delivering services from the government to the people of Malaysia, enabling the government to become more responsive to the needs of its citizens based on the seven e-government flagships. One of the seven flagships that focuses on the area of record keeping and document management is Generic Office Environment-Electronic Government Document Management System (GOE-EGDMS). This study is designed to investigate the implementation of GOE-EGDMS or document imaging that provides a good impact in terms of storing, controlling, searching, accessing, ease of sending and receiving documents, and improve sharing and disseminating of information to the government and also the public. This study adopted the IS Effectiveness Model from DeLone and McLean (1992) with an addition of Service Quality (Pitt and Watson, 1997) as another antecedent of IS Effectiveness besides System Usage, User Satisfaction, System Quality, Information Quality, Individual Impact and Organizational Impact. 82 items were determined to measure the seven constructs. 556 questionnaires were collected through web-survey and only 374 fully completed questionnaires were analyzed using exploratory factor analysis, confirmatory factor analysis and Structural Equation Modeling (SEM). Based on the analysis, six hypotheses were significant and supported. Results show that Service Quality had a positive effect on User Satisfaction, while Information Quality has a positive effect on Individual Impact and User Satisfaction. Another supported hypothesis is that Individual Impact has a positive effect on Organizational Impact. The major contribution of the study is the developed research instruments which can be further tested in other research settings. This study has successfully tested empirically the IS effectiveness model for investigating the effectiveness of the GOE-EGDMS system implementation in Malaysia. Based on the results, Service Quality and System Usage is still low and were not satisfactory but there is an increased effect on Individual Impact such as job importance, skill needed, responsibility for results of work, knowledge of performance on the job and personal effectiveness.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

CHAPTER 1:   INTRODUCTION

CHAPTER ONE

INTRODUCTION

1.1 Introduction to the Study

As a storage medium for information, paper records consume substantial space in desks, filing cabinets, offices, file rooms, and libraries. As a distribution medium for information, paper records are cumbersome to transmit, difficult to protect from loss or theft, and subject to deterioration over time. Duplication of paper documents as a means of protection can be costly and consumes the same amount of storage space as the original documents.

Intra and inter-organizational pressures to create, acquire, distribute, organize, store, and retrieve yet more information compel organizations to investigate alternative information storage and retrieval systems. One of the most promising alternatives is document imaging systems (DIS), in which paper records are entered into the system via digital scanners, are indexed, and are stored on optical disks. Commercial business applications of optical disk technology appeared in the marketplace in the early 1980's. Although the lack of standardization in the imaging industry and questions about the legal admissibility of image-based documents in courts of law initially slowed the acceptance of optical media, recent sizeable investments by major computer manufacturers allowed imaging technology to gain increasing credibility in the public and private sectors.

People create and print countless letters, memos, reports, spreadsheets, and electronic mail messages. Database management systems and decision support systems