A STUDY ON THE FACTORS INFLUENCING EMPLOYEES INTENTION TO USE E- LICENSING

BY

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Research report in partial fulfillment of the requirement for the degree of Master of Business Administration

Universiti Sains Malaysia

JUNE 2006

DEDICATION

This thesis is dedicated to my beloved parents, my wife, my two children and family members who have supported me all the way in my completion of this thesis.

ACKNOWLEDGEMENTS

I would like to express my heartfelt thanks and appreciation to my project supervisor, Associate Professor Mr. T. Ramayah, for his invaluable guidance and advice throughout this project.

My gratitude and thanks also goes to the lecturers and staff of the School of Management.

I would also like to express my appreciation to my friends and fellow students who have given me due cooperation and assistance throughout the study.

Last but not least, I would like to thank all the respondents who have cooperated with me in completing the questionnaires promptly for this study.

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ABSTRAK

Teknologi telah mengubah cara penyampaian perkhidmatan kerajaan kepada orang ramai dan perniagaan. E- Lesen telah diperkenalkan untuk mengatasi cabaran yang dihadapi oleh jabatan pelesenan untuk menyediakan perkhidmatan yang cekap dan berkesan. Kajian ini berusaha untuk meneliti faktor - faktor yang mempengaruhi keinginan kakitangan untuk menggunakan sistem E-Lesen. Model penyelidikan Moore dan Benbasat (1991) yang telah diubahsuai digunakan dalam kajian ini. Enam hipotesis telah diungkapkan untuk menguji hubungan di antara pembolehubah tidak bersandar seperti tanggapan berguna,keputusan yang dipantau, imej, tanggapan mudah untuk digunakan, mudah lihat (visibiliti), dan kompatabiliti dengan pembolehubah bersandar iaitu keinginan untuk menggunakan E-Lesen. Maklumat yang dikumpul daripada 90 orang responden digunakan untuk menganalisis hipotesis - hipotesis. Hasil daripada analisis hipotesis - hipotesis menunjukkan bahawa i) tanggapan berguna mempunyai hubungan yang positif dengan keinginan untuk menggunakan E- Lesen.,ii) Keputusan yang dipantau dan tanggapan mudah untuk digunakan mempunyai hubungan yang positif dengan keinginan untuk menggunakan E- Lesen serta iii) Mudah lihat (visibiliti) mempunyai hubungan yang positif dengan keinginan untuk menggunakan E- Lesen.

ABSTRACT

Technology has changed the delivery of government services to the public and businesses. E- Licensing was introduced to meet the challenges faced by the licensing department and to provide better services. The number of employees using E-Licensing has been found to be very low. This study attempts to study the factors influencing employees' intention to use E-Licensing system. The research model by Moore and Benbasat (1991) was adapted and used in this study. Six hypotheses were formulated to test the relationship proposed. The data collected from a sample of 90 respondents was used in analysis of the hypothesis. The findings from this study show that i) Perceived Usefulness /Relative Advantage is positively related to intention to use E- Licensing. ii) Perceived Ease of Use and Result Demonstrability is positively related to intention to use E-Licensing. iii) Visibility / Observability is positively related to intention to use E-Licensing. The results of this study will be useful to the licensing department to enhance E-Licensing usage by employees.

Chapter 1

INTRODUCTION

1.0 Introduction

The advancement of technology has revolutionized the way businesses and services are conducted for the benefit of customers and organizations at large. Technology usage to enable or facilitate the delivery of services has the potential to benefit customers and service providers (Walker, Margaret, Hecker, & Francis, 2002). Technology can be used by the organization to permit faster response to customer enquiries and problems, to reduce labor costs, to improve internal efficiency and productivity, and to gain distinctive and differentiating competitive advantages (Walker et al., 2002). The advancement of computers and information technology (IT) has been the single biggest drive affecting organizations in recent years (Said, 2004). The advancement in technologies has changed the way services are delivered (Dalbholkar, 2000).

According to Parasuraman (2000), development of technology has benefited customers but increasing customer frustration in dealing with technology based systems is also evident. E-Government involves the use of information technology especially telecommunications to enable and improve the efficiency of government services and information provided to citizens, businesses, employees, and government agencies (Carter & Belanger, 2003).

1.1 Background

Malaysia's E-Government initiative began in 1997 with the launching of the Multimedia Super Corridor's E-Government Flagship Application. The electronic government

initiative was launched to lead Malaysia into the Information age to improve the government operations internally and to deliver services to the people. E- Government is introduced to improve the convenience, accessibility and quality of services rendered to the public and businesses. The vision of E- Government focuses on effectively and efficiently delivering services from the government to the people through value added online services to enhance service delivery to the people.

The licensing department of the local authority in Penang is the major department involved in the processing and issuance of various types of licenses. The traditional method of processing of licenses manually has been a subject of criticism by license applicants and the public due to the delay in processing and the inefficient feedback mechanism. Internally, the licensing department has problems related to updating of licensees records, circulation of applications for technical comments and approval, collection of license fees, monitoring of applications, updating of records pertaining to vacant stalls in food complexes, markets etc. Processing of licenses takes an average of 3 to 6 months and businesses had to suffer. In an attempt to improve the services pertaining to licensing and in line with the government's e-government initiative E- Licensing was introduced.

1.1.1 E-Licensing

E-Licensing is a system which is used to process license application online and information pertaining to licenses can be obtained online. When an application for license is received by the licensing department, the details are keyed into the E- Licensing system and immediately routed online to the respective officers for their comments,

recommendations and approval. This process is carried out online with the use of E-Licensing computerized system in contrary to the traditional manual processing of licenses whereby the details of license applications and routing to respective officers are done manually. Figure 1.1 indicates an example of processing of license application using the E-Licensing system.

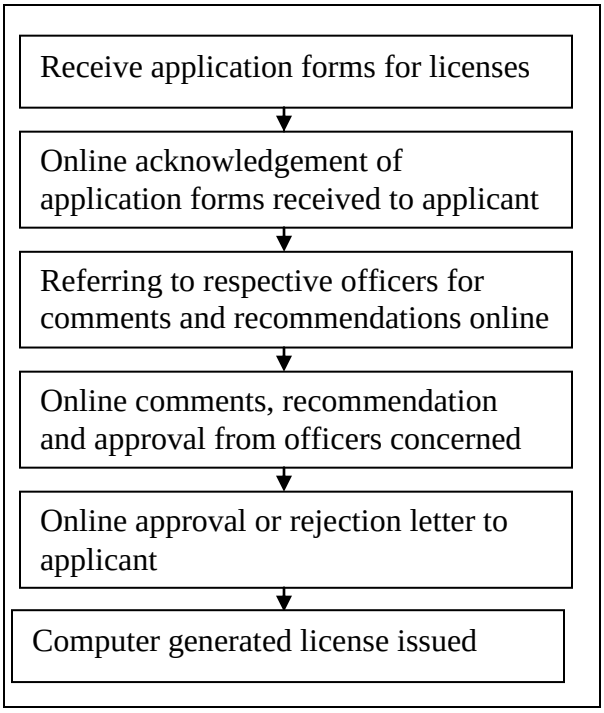

Figure1.1.Flow of E-Licensing procedure

E-Licensing can be defined as a system that allows licensees to execute some or all of the stages of licensing process electronically. E- Licensing is a system designed to be fast, easy to use, reliable, and easily accessible. The concept of E- Licensing (Licensing Management Information System) is the using of a computerized network to simplify and expedite all stages of processing of licenses, from acceptance of application forms, approval, reply, renewal, and collection of payment. It is also implemented in line with

the Malaysian government's vision of E- Government to increase efficiency in the public sector.

Introduction of E- Licensing (Licensing Management Information System) by the Licensing Department enables the customer to have easy access to information pertaining to licenses and their status of application. E- Licensing is able to provide a speedier service and efficient processing and approval of licenses. The implementation of E-Licensing (Licensing Management Information System) is a transformation from the traditional method of manual processing of licenses to a more technologically enabled computerized system.

E-licensing (Licensing Management Information System) is specifically designed and developed to suit the licensing department's needs and requirements. It is a centralized licensing system that transcribes the current manual process into a fully computerized and improved system. It is browser-based and web-enabled to increase efficiency, accountability, convenience and overall responsiveness in the management of licenses. It produces composite licenses whereby a single application form allows one to apply for multiple licenses. Licenses Application Forms are downloadable and web-submission is included. All existing vacant sites (stalls) will be published interactively on the Web so that aspiring applicants would have access to this information.

1.1.2 Licensing Information System

All successful applicants' data will be picked up by the License Management Information System for the purposes of issuance of Licenses, payment of fees, and collection of

deposits. On-line enquiry, reporting, payment update, billing, deletion and other system features are also built-in so as to make it a truly user-friendly system.

1.1.3 On-line Workflow Based Approval System

In this approval system, documents and application forms will be routed to the officers concerned for action. This system will also be able to aid by short-listing applicants for purposes of interview, meetings, printing of reports, acknowledgment letters and etc. All successful and unsuccessful applicants will be notified via e-mail, and letters.

The proposed system includes eight types of licenses that have their respective functionalities and features to ease and speed up licensing application and approval process. The licenses are Composite Licenses, Market Licenses, Dog Licenses, Seasonal Stall License, Hawkers License, Stall Licenses, Non Motorized Vehicle Licenses and Places of Public Entertainment Licenses.

1.1.4 E-Submission

E- Submission allows the licensing department to provide e-services to the customer such as Electronic submission for licenses application, downloadable license application forms, enquiry, feedback and disclosure of vacant stalls and the location.

1.1.5 Payment collection system

Payment collection system allows enquiry and payment of license to be made at the licensing departments' license application counter or shopping complexes via transaction kiosks. It supports off-line and on-line. It bundles with bar code scanners, which provides

automatic on-line data retrieval with one time scanning. It also handles various payment modes. The information of the licenses issued from the E-Licensing system will enable the licensing departments' employees to retrieve information on-line through Payment Collection System when the licensees made their payment.

1.2 Problem statement

The introduction of E-Licensing (License Management Information System) is not well received by employees of the licensing department. Since E-Licensing was introduced on a trial basis, employees were required to use the system before usage is made mandatory. It was found through department records and observation that only about 30% of the employees were using the E-Licensing system. The usage of E- Licensing was very low during the trial period. Since the introduction of E-licensing, there are factors that impede its effective implementation namely 'intention to use' by employees. This has resulted in employees still using the old method of manual processing and issuance of licenses and matters related to licensing. Usage of E- Licensing has been a problem faced by the licensing department.

The licensing department had spent a substantial amount of RM 700,000 to introduce the E- Licensing system. The designers of the system took about two years to develop the system. Over a period of two years, the licensing department has been working closely with the system designers by providing input on the construction of the E- Licensing system. All the time spent and the investment would go to waste if the employees do not intent to use the system. The shortcomings in the intention to use of E- licensing by employees can be understood by measuring perceptions namely relative advantage,

compatibility, complexity, visibility / observability, image and result demonstrability. Many researches have carried out numerous studies to determine the factors affecting usage of technology enabled service delivery by consumers. This study is focused on factors affecting intention to use of technology enabled service delivery (E- licensing) by employees.

1.3 Research objective

Since the introduction of E-Licensing the level of usage by the employees has been very low. Only about 30% of employees were found to be using E-Licensing. The objective of this study is to identify the factors affecting the intention to use E-Licensing (LMIS) by employees of the licensing department.

1.4 Research Questions

The research objective above raises the following question:

(1) Is there a relationship between perceived ease of use and intention to use E-Licensing?

(2) Is there a relationship between perceived result demonstrability, and intention to use E- Licensing?

(3) Is there a relationship between perceived relative advantage, and intention to use E- Licensing?

(4) Is there a relationship between perceived compatibility and intention to use E-Licensing?

(5) Is there a relationship between perceived image and intention to use E- Licensing?

(6) Is there a relationship between perceived visibility / observability and intention to use E- Licensing?

1.5 Significance of study

This study is expected to be useful to the licensing department to understand factors affecting employees' intention to use of E- licensing. The findings by investigating the relationship between relative advantage, compatibility, complexity, visibility / observability, image , result demonstrability and intention to use E- licensing will enable the licensing department to formulate, design and introduce measures to encourage usage of E-licensing. Once the employees use E- licensing, the licensing departments image can be further enhanced among the public via efficient and effective service. This study can also provide useful information for the licensing department to understand the needs and requirements of the employees.

1.6 Definition of variables

1.6.1 Relative Advantage/Perceived Usefulness

Relative Advantage/Perceived Usefulness is defined as the degree to which an innovation is perceived to produce significant benefits to the user (Moore & Benbasat ,1991).

1.6.2 Compatibility

Compatibility is defined as the degree to which an innovation is perceived to be consistent with existing norms and values, past experiences, and needs (Moore and Benbasat ,1991).

1.6.3 Ease of Use

Ease of Use is defined as the degree to which using an innovation is perceived to be easy and free of effort (Moore & Benbasat ,1991).

1.6.4 Visibility / Observability

Visibility / Observability is defined as the degree to which using an innovation is perceived to be readily visible to others (Moore & Benbasat ,1991).

1.6.5 Image

Image is defined as the degree to which an innovation is perceived to enhance one's image or status in one's social system (Moore & Benbasat ,1991).

1.6.6 Result Demonstrability

Result Demonstrability is defined as the degree to which the results of adopting an innovation are observable and communicable to others (Moore & Benbasat ,1991).

1.6.7 Intention

Intention is defined as the perception of an individual that a particular behavior will be performed (Fishbein & Ajzen,1975).

1.7 Organization of Chapters

This study comprises of five (5) chapters. Chapter 1 is on Introduction whereby the concept of E- Licensing is discussed. Chapter 2 presents the literature review whereby the theoretical model used and variables involved are examined. Chapter 3 covers the Methodology of Research undertaken while Chapter 4 presents the results of the statistical data analysis. Finally, Chapter 5 presents the findings of the study, limitation and implications of the study, and suggestions for future research.

Chapter 2

LITERATURE REVIEW

2.0 Introduction

This chapter begins with the review of literature from other researchers which examines empirically the variables such as relative advantage, compatibility, complexity, visibility / observability, image, result demonstrability and intention to use E- licensing. Using the literature review, a theoretical framework and hypotheses is developed.

The underlying theory used in this research is the Innovation Diffusion Theory. Rogers (1983) innovation of diffusion theory identified relative advantage, compatibility, complexity, trialability, and observability as characteristics that influence the decision to accept or reject an innovation. According to the innovation diffusion theory, a significant outcome is the individual's decision to either accept or reject an innovation. The theoretical model that is used in this research is the Technology Acceptance Model (TAM) (Davis et al., 1989), the Extended Technology Acceptance Model (TAM2) (Venkatesh & Davis, 2000) and the integrated model of Perceived Attributes of Innovation by Rogers (1983) and Perceived characteristics of innovating by Moore and Benbasat (1991).This study is conducted to establish the factors affecting intention to use E-Licensing by employees of the licensing department.

With the growth of the economy and the focus on small and medium size industries and businesses, the number of application for licenses has been gradually increasing. This phenomenon calls for an effective and efficient system for the processing and approval of licenses and other services pertaining to licensing. Since E- licensing is relatively new in Malaysia, research in this area is very limited. Many researchers have

focused on the customer adoption of technology based on the factors such as ease of use, security and risk. Therefore this study will focus on the employee intention to use E – licensing (Licensing management information system).

2.1 Technology Acceptance Model

Technology Acceptance Model (TAM) by Davis (1986) is an adapted model from Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) with two main constructs namely Perceived Usefulness and Perceived Ease of Use. TAM has been found to be a robust and powerful model predicting intention to use (Taylor & Todd, 1995; Venkatesh & Davis, 2000). Figure 2.1 shows the Technology Acceptance Model (TAM).

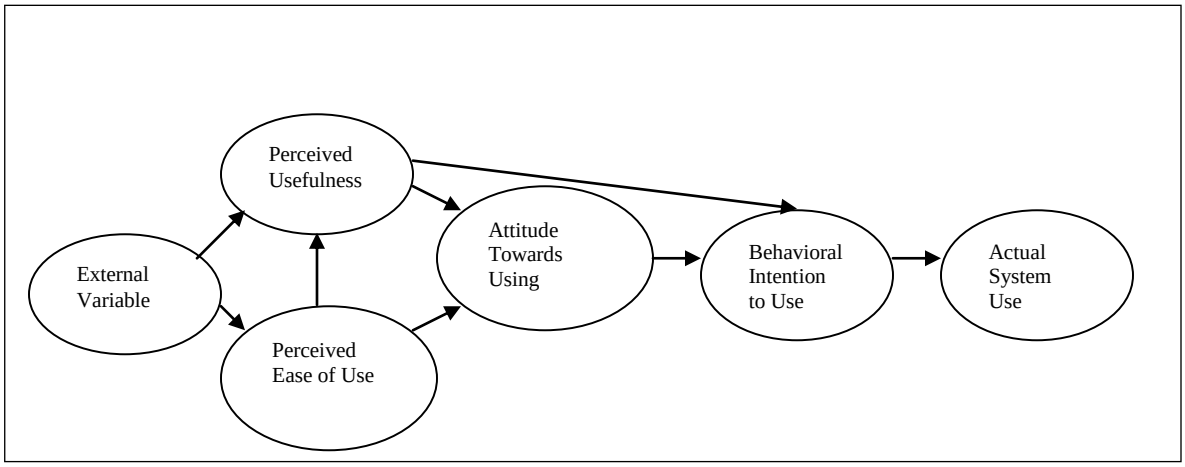

Figure 2.1: Technology Acceptance Model (source: Davis et al., 1989)

2.2 Extended Technology Acceptance Model

The Extended Technology Acceptance Model (TAM2) (Venkatesh & Davis, 2000), incorporates additional theoretical constructs spanning social influence processes and cognitive instrumental processes.

The extended Technology Acceptance Model (TAM2) is a model developed by Venkatesh and Davis (2000) to explain perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes. Social influence processes includes subjective norm, voluntariness, and image. Cognitive instrumental processes include job relevance, output quality, result demonstrability, and perceived ease of use (Venkatesh & Davis, 2000).

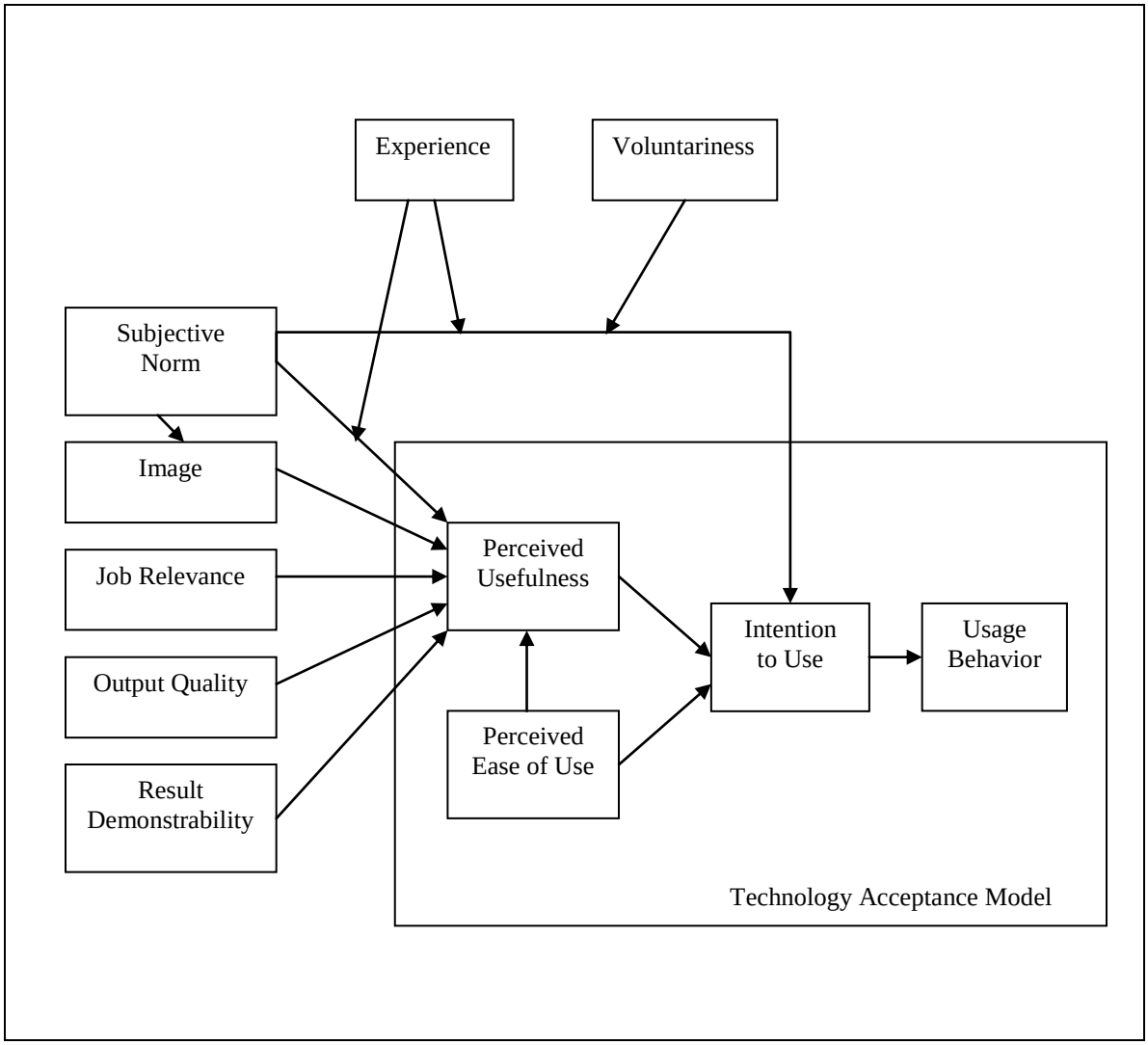

Figure 2.2 The extended Technology Acceptance Model (TAM2)
(Source: Venkatesh & Davis, 2000)

2.3 Perceived Attributes of Innovation

The perceived innovation characteristics proposed by Rogers (1983) in the innovation diffusion theory consists of five (5) constructs namely relative advantage (perceived usefulness), compatibility, complexity (perceived ease of use), trialability, and observability.

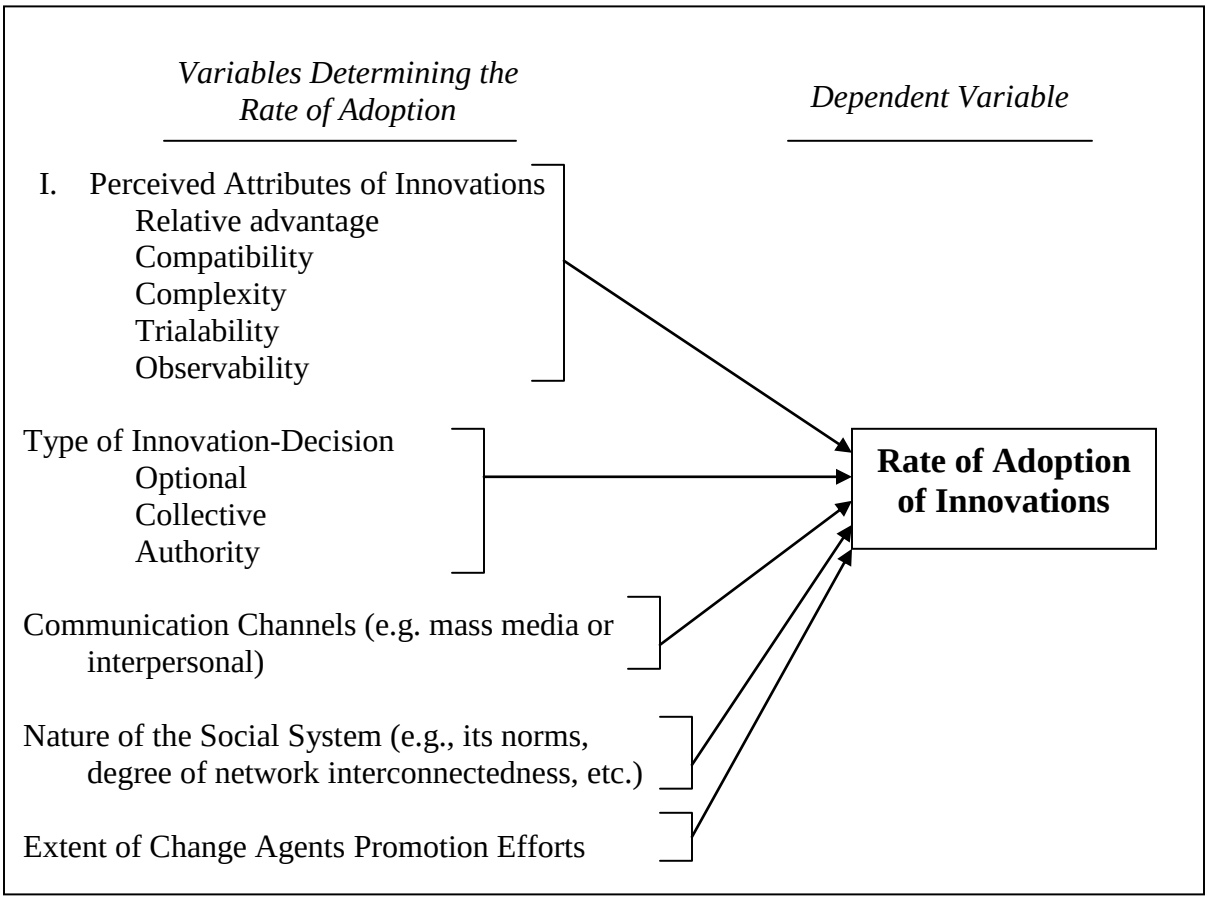

Figure 2.3 Variables Determining the Rate of Adoption of Innovation
(Source: Rogers, 1995)

2.4 Perceived Characteristics of Innovating (PCI)

Moore and Benbasat (1991) integrated the intentions and innovation literature. The innovation diffusion research (Rogers, 1983) identified five characteristics of innovation namely relative advantage, compatibility, complexity, trialability, and observability. Moore and Benbasat (1991) further expanded on the five attributes of innovation and introduced eight antecedent constructs called Perceived Characteristics of Innovating (PCI) to study initial adoption and diffusion of innovations. The eight perceived characteristics of innovation presented by Moore and Benbasat (1991) are relative advantage, compatibility, complexity, trialability, observability, voluntariness, image and result demonstrability.

Table2.1
Definition of Perceived Characteristics of Innovations

Perceived Characteristics of Innovations	**Definition from Moore and Benbasat (1991)**
Relative Advantage/Perceived Usefulness	The degree to which an innovation is perceived to produce significant benefits to the user
Compatibility	The degree to which an innovation is perceived to be consistent with existing norms and values, past experiences, and needs
Ease of Use/Complexity	The degree to which using an innovation is perceived to be easy and free of effort
Visibility / Observability	The degree to which using an innovation is perceived to be readily visible to others
Image	The degree to which an innovation is perceived to enhance one's image or status in one's social system
Result Demonstrability	The degree to which the results of adopting an innovation is observable and communicable to others

Source: Moore and Benbasat (1991)

2.5 Theoretical framework and Hypotheses

The main objective of this research is to study the impact of relative advantage, compatibility, complexity, observability, image and result demonstrability on employees' intention to use E- Licensing. For the purpose of this study, only these six variables from Moore and Benbasat (1991) are used. The theoretical model that is used in this research is the adapted model of Perceived attributes of Innovation by Rogers, 1983 and Perceived characteristics of innovating by Moore and Benbasat (1991).According to Taylor and Todd (1995), perceived usefulness is a similar construct to relative advantage and the same is conceptualized between the similarity of perceived ease of use and complexity.

The main constructs of the adapted model are relative advantage, compatibility, complexity, observability, image and result demonstrability as independent variables, and intention to use as the dependent variable as shown in Figure 2.

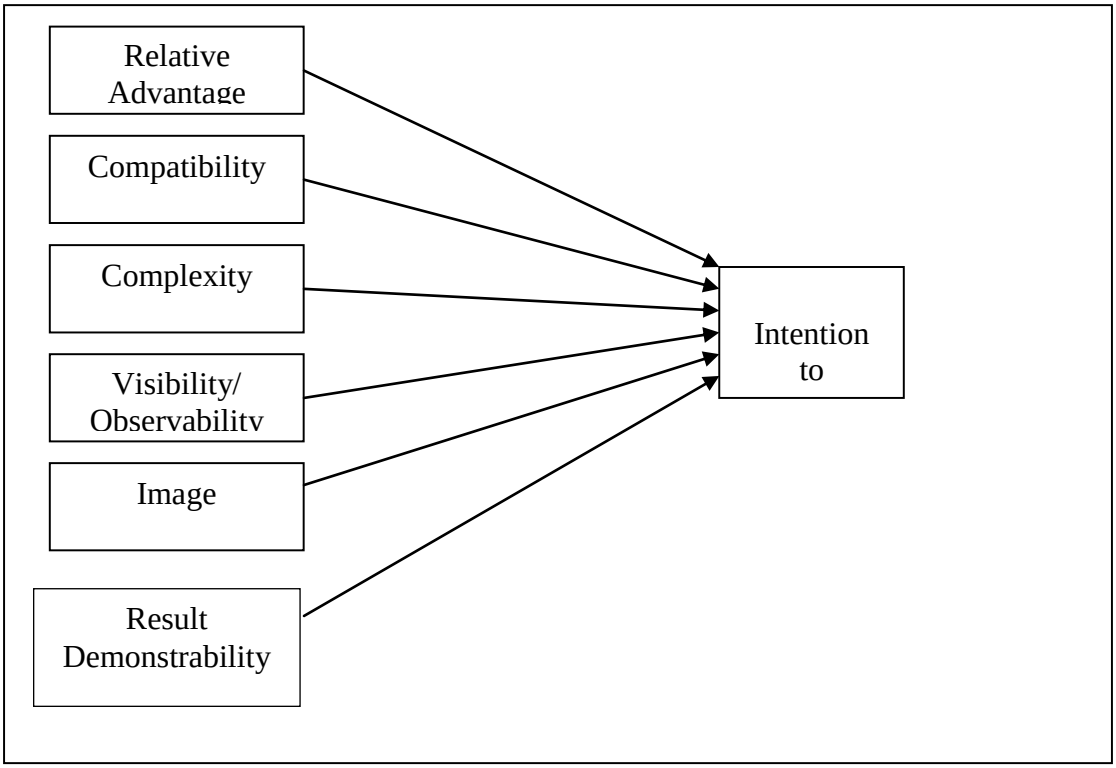

Figure 2.4: Research framework (adapted from Moore and Benbasat, 1991)

2.6 Review of literature

2.6.1 Perceived Usefulness/Relative Advantage

In the Technology Acceptance Model, relative advantage is referred to as perceived usefulness (Davis, 1989). According to Davis, (1986) perceived usefulness is the degree to which an individual believe that using a particular system would enhance the individuals performance. Relative Advantage/Perceived Usefulness is the degree to which an innovation is perceived to produce significant benefits to the user (Moore & Benbasat, 1991). Previous research (Adams et al., 1992; Thompson, 2001; Ndubisi & Jantan, 2003) has indicated that perceived usefulness is positively related to system usage.

Curren and Mueter (2005) found that self service technologies must be useful to achieve widespread usage. E-licensing enables an employee to perform his/her duties effectively and efficiently. Speed and convenience are two main elements that contribute to the relative advantage of a system or innovation. Perceived usefulness can also be measured in term of time saving, cost saving, improved efficiency, increase in productivity and other benefits. According to Tornatzky and Klien (1982), relative advantage is an important factor in determining adoption of a new innovation. Perceived usefulness is significant and positively influences intention to use (Mathieson, 1991; Igbaria ,1993 **;** Davis,et al.,1989; Igbaria et al.,1995; Agarwal & Prasad ,1999; Venkatesh & Davis, 2000; Basyir, 2000 ; Leong, 2001; Mathieson et al., 2001; Ling, 2002; Ramayah et al., 2002; Ramayah et al.,2003; Han, 2003; May, 2005). A study by Kolodinsky et al. (2004), on E- Banking cited savings of time, money and convenience as relative

advantage. Hence, an employee who acknowledges the relative advantage of E-licensing will develop the intention to use it.

To test the relationship of perceived usefulness on the intention to use E- Licensing, the hypothesis to be tested is:

H1 : Perceived Usefulness /Relative Advantage is positively related to intention to use E- Licensing.

2.6.2 Perceived Ease of use / Complexity

Perceived complexity refers to the ease of use of a service (Moore & Benbasat, 1991; Rugimbana, 1995; Karahana et al., 1999). Ease of Use is the degree to which using an innovation is perceived to be easy and free of effort (Moore & Benbasat, 1991). In the TAM model, Complexity is referred to as Perceived Ease of Use. Perceived ease of use refers to the degree to which the system is user friendly and when less effort is needed, the chance of usage is increased (Thompson, 2001). Perceived ease of use is a fundamental determinant of user acceptance of information technology and can influence computer usage directly (Davis 1986, 1989; Davis et al., 1989; Venkatesh & Davis, 1996).

There is extensive empirical evidence that perceived ease of use is significant and positively related to usage intentions (Davis et al., 1989; Venkatesh, 1999; Ramayah et al., 2003; Ramayah & Ignatius, 2005; May, 2005; Ling, 2002; Eri, 2004). Individuals without previous computer experience or those who believe that an innovation is difficult, the usage of the innovation may be thwarted (Kolodinsky et al., 2004).

Said (2004) concludes that complexity inhibits computer acceptance while favorable organization support and training promotes user computer acceptance

(intention to use). In order to achieve widespread usage, self service technique should be easy to use (Pikkarainen et al., 2004; Curran & Mueter, 2005).

Ease of use or user friendliness should be promoted if the user is likely to be low in self-efficacy (Dabholkar & Bagozzi., 2002). Research by Cooper and Zmud (1990) indicated that innovation with substantial complexity requires more technical skills and greater effort is needed to increase usage. In the context of E- Licensing the system should be easy to use to cater for the majority of employees who are not formally trained in using computers. Hence, E- Licensing would be acceptable to the employees if the element of ease of use is incorporated in the system.

To test the relationship of perceived ease of use on the intention to use E-Licensing, the hypothesis to be tested is:

H2 :Perceived Ease of Use is positively related to intention to use E- Licensing.

2.6.3 Compatibility

Compatibility is the degree to which an innovation is perceived to be consistent with existing norms and values, past experiences, and needs of potential adopters (Moore & Benbasat, 1991). An innovation that is compatible with the values and norms of a social system will be adopted rapidly compared to an innovation that is compatible (Rogers, 1995).

Compatibility of an innovation with existing norms and values, past experiences, and needs of potential adopters has been found to be positively related to intention to use.

According to Tornatzky and Klien (1982), an innovation is more likely to be used when it is compatible with individual's job responsibilities and value system. Previous empirical studies found positive relationship between compatibility and intention to use (Tan & Teo, 2001; Karahana et al., 1999; Tornatzky & Klien, 1982; Han, 2003). Higher levels of perceived compatibility are associated with increased intentions to use.

To test the relationship of compatibility on the intention to use E- Licensing, the hypothesis to be tested is:

H3 : *Compatibility is positively related to intention to use E- Licensing.*

2.6.4 Visibility/Observability

Visibility/Observability is the degree to which using an innovation is perceived to be readily visible to others (Moore & Benbasat, 1991). The easier it is for individuals to see the results of an innovation, the more likely that they are to adopt it (Rogers, 1995). Visibility/Observability of an innovation has been found to be positively related to intention to use (Karahana et al., 1999; Venkatesh, 2001; Han, 2003). If a positive result of an innovation can be observed and is likely to be communicated by others, the intention to use will be greater (Karahana et al., 1999; Xia & Lee, 2000; Kolodinsky et al., 2004).

To test the relationship of the Visibility / Observability on the intention to use E-Licensing, the hypothesis to be tested is:

H4: Visibility / Observability is positively related to intention to use E- Licensing.

2.6.5 Image

Image is the degree to which an innovation is perceived to enhance one's image or status in one's social system (Moore & Benbasat ,1991).Previous empirical studies found positive relationship between image and intention to use (Karahana et al., 1999; Choi et al., 2002). If using an innovation enhances one's image, then the intention to use the innovation will be positive (Karahana et al., 1999; Choi et al., 2002). Higher levels of perceived image enhancing value of an innovation increases employees' intention to use (Carter & Belanger, 2003).

An individual may perceive that using a system will lead to improvement in job performance indirectly due to image enhancement (Venkatesh & Davis, 2000; Chan & Lu, 2004). According to Venkatesh and Davis (2000), image was found to be significant in influencing user acceptance of technology. Employees who regard the use of E-services as prestigious will have higher intention to use E-services compared to those who do not (Carter & Belanger, 2003). A study by Carter and Belanger (2003) found image to be significant in predicting intention to use e-government services.

To test the relationship of image on the intention to use E- Licensing, the hypothesis to be tested is:

H5: *Image is positively related to intention to use E- Licensing.*

2.6.6 Result Demonstrability

Result Demonstrability is the degree to which the results of adopting an innovation are observable and communicable to others (Moore & Benbasat, 1991). Result Demonstrability refers to the tangibility of results in using an innovation (Venkatesh & Davis, 2000). Effective systems can also fail to gain user acceptance if individuals have

difficulty attributing gains in their job performance specifically to their use of the system (Venkatesh & Davis, 2000). An empirical study by Agarwal and Prasad (1997), found a significant and positive relationship between usage intentions and result demonstrability. Previous empirical studies found positive relationship between result demonstrability and intention to use (Karahana et al., 1999; Venkatesh, 2001; Razmah, 2004; Eri, 2004). According to Venkatesh and Davis (2000), result demonstrability was found to be significant in influencing user acceptance of technology. Employees who are able to observe and communicate the results of using an innovation will develop positive usage intentions.

To test the relationship of result demonstrability on the intention to use E-Licensing, the hypothesis to be tested is:

H6: *Results Demonstrability is positively related to intention to use E- Licensing.*

2.6.7 Intention to use

Intention is defined as the perception of an individual that a particular behavior will be performed (Fishbein & Ajzen,1975).The TAM model is more useful in predicting user intention to use and intention to use can be explained by perceived usefulness, and perceived ease of use (Ramayah et al., 2002). A system that is perceived to be facilitating a process and easy to use is likely to influence intention to use (Pavlou, .2003). A study by Ndubisi et al., (2003) indicates that usage is influenced directly by usefulness and indirectly by ease of use.

2.7 Summary of literature review

From the literature review discussed above in Chapter 2, it is found that majority of the research is focused on the individual intention to use of technology. This research is based on factors influencing employee intention to use E-licensing with the variables such as relative advantage, compatibility, ease of use , observability, image and result demonstrability as independent variables, and intention to use as the dependent variable as shown in Figure 2.

CHAPTER 3

METHODOLOGY

3.0 Introduction

This chapter focuses on the Methodology which covers research design, questionnaire development, population and sample, data collection and data analysis. An empirical study was carried out among employees of the licensing department, in a local authority. This research is carried out to study the interrelationship between relative advantage, compatibility, complexity, visibility/observability, image, result demonstrability and intention to use E- licensing.

3.1 Research design and procedures

3.1.1 Type of study

This is a correlation study which is based on examining the factors influencing the employees intention to use E- Licensing. There are seven independent variables in this research comprising of relative advantage, compatibility, complexity, observability, image, result demonstrability and intention to use E- licensing.

3.1.2 Nature of study

This study is carried out under the non-contrived setting (natural environment).Data were collected from employees of the licensing department.

3.1.3 Unit of analysis

The unit of analysis is the individuals. Individuals concerned are the employees of the licensing department.

3.1.4 Research site

The research site is the licensing department of the local authority.

3.2 Population , Sample size and Sampling technique

The unit of analysis in this study is the employees of the licensing department. Based on the general rule, the minimum number of respondents or sample size is five-to-one ratio of the number of independent variables to be tested. However, Hair et al. (1998) proposed that the acceptable ratio is ten-to-one. A total of 110 employees were identified for this study. The sample size is adequate and primary data was obtained through distribution of the specified questionnaires as in Appendix "A". Non-probability purposive sampling was used in this study.

3.3 Questionnaire Development

3.3.1 Variables and Measurement

This section will discuss the measurement of independent variable and the dependent variable. Questionnaires using 7-point Likert type scale was used to gather data for each construct of the research model. All instruments were adapted from previous literatures and were modified to measure the intention to use E- Licensing.

Questionnaires were designed based on a multiple item measurement scale adapted from previous research namely Moore and Benbasat, (1991). The questionnaires are divided into 2 sections. Section A comprising of 7 parts based on the theoretical framework and Section B on demographic profile of respondents (Appendix A).