

AN ADOPTION MODEL TO ASSESS E-SERVICE TECHNOLOGY
ACCEPTANCE

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This thesis is dedicated to my beloved mother and father

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ABSTRACT

As the world today is witnessing the remarkable growth of information and communication technology development and the Internet popularity, the widespread use of the electronic service (e-service) is becoming inevitable. Many e-service projects have been developed but since they are not used by users, they cannot help to improve organizational performance. As the user adoption of an e-service is an essential key for a successful and an effective implementation of any e-service project, there is a need to assess the user acceptance of the system. This research developed the E-Service Technology Acceptance Model (ETAM) to assess the user acceptance of an e-service technology. According to the literature review in the field of e-service technology and the acceptance theories, this research identified the main factors influencing the acceptance of e-services, namely; satisfaction and quality where the dimensions of these factors were extracted from the previous studies. In order to categorise the dimensions, an exploratory survey was developed and conducted among the university students and then, the Exploratory Factor Analysis was applied using the SPSS Software. Then, a confirmatory survey was designed and tested to test the validity (content and construct) and the reliability of the instrument, before it was used to evaluate the ETAM. The survey was conducted among the e-service users in Malaysia and 426 questionnaires were collected. Finally, the Structural Equation Modelling using Lisrel was applied to validate the casual relations between the constructs and to assess the goodness-of-fit for the ETAM. The result of this study revealed that quality, security and satisfaction significantly influenced the intention to use an e-service and consequently the acceptance of the e-service technology. The ETAM model developed in this study can be used as a foundation for e-service providers to develop strategies to encourage people to use e-service and to increase the usage and the acceptance of e-services in Malaysia. Moreover, the ETAM which explains 71.8% of variance can help to evaluate and predict how users will respond to an e-service before starting to develop an e-service project. This model can also be applied it to improve the provided e-service to increase the usage rate.

ABSTRAK

Semasa dunia hari ini menyaksikan perkembangan maklumat dan pembangunan teknologi komunikasi yang menakjubkan dan populariti internet, penggunaan perkhidmatan elektronik (e-perkhidmatan) yang meluas tidak dapat dielakkan. Terdapat banyak projek e-perkhidmatan yang telah dibangunkan tetapi kerana kebanyakannya tidak digunakan oleh pengguna, teknologi ini tidak dapat membantu untuk memperbaiki prestasi organisasi. Sebagaimana penerimaan pengguna pada e-perkhidmatan adalah kunci utama bagi pelaksanaan yang berjaya dan efektif untuk sebarang projek e-perkhidmatan, terdapat keperluan untuk menilai penerimaan pengguna pada e-perkhidmatan. Kajian ini membangunkan model Penerimaan Teknologi E-perkhidmatan (ETAM) untuk menilai penerimaan pengguna terhadap teknologi e-perkhidmatan. Berdasarkan ulasan literatur di dalam bidang teknologi e-perkhidmatan dan teori penerimaan, kajian ini mengenalpasti faktor yang mempengaruhi penerimaan terhadap e-perkhidmatan, iaitu kepuasan dan keselamatan di mana dimensi dari faktor ini telah diekstrak dari kajian terdahulu. Bagi mengkategorikan dimensi itu, satu kaji selidik penerangan telah dibangunkan dan dijalankan di kalangan pelajar universiti dan kemudian, Analisis Faktor Penerangan telah digunapakai dengan menggunakan perisian SPSS. Kemudian, satu kaji selidik pengesahan telah direka bentuk dan diuji untuk menguji kesahihan (kandungan dan pembinaan) dan kebolehpercayaan instrumen, sebelum ia boleh digunakan untuk menilai ETAM. Kaji selidik ini telah dijalankan di kalangan pengguna e-perkhidmatan di Malaysia dan sebanyak 426 soal selidik telah dikumpulkan. Akhir sekali, Model Persamaan Struktur menggunakan Lisrel telah diaplikasikan untuk mengesahkan hubungan kesan antara konstruk dan untuk menilai kebagusan penyuaian untuk ETAM. Hasil kajian ini menunjukkan bahawa kualiti, keselamatan dan kepuasan mempengaruhi tujuan penggunaan e-perkhidmatan dan seterusnya penerimaan teknologi e-perkhidmatan. Model ETAM yang dibangunkan dalam kajian ini boleh digunakan sebagai asas kepada penyedia e-perkhidmatan untuk membangunkan strategi bagi menggalakkan orang ramai menggunakan e-perkhidmatan dan meningkatkan kadar penggunaan dan penerimaan e-perkhidmatan di Malaysia. Tambahan pula, model ETAM yang menerangkan 71.8% daripada varians boleh membantu untuk menilai dan meramal bagaimana pengguna akan bertindak balas terhadap e-perkhidmatan sebelum memulakan pembangunan projek e-perkhidmatan. Model ini juga boleh digunakan untuk meningkatkan e-perkhidmatan yang sedia untuk meningkatkan kadar penggunaan.

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LIST OF ABBREVIATIONS

ADP	-	Adoption
AGFI	-	Adjusted Goodness of Fit Index
ATM	-	Automated Teller Machine
CFA	-	Confirmatory Factor Analysis
CFI	-	Comparative Fit Index
CONT	-	Content
C-UTAUT	-	Compatibility UTAUT
DF	-	Degrees of Freedom
DOI	-	Diffusion of Innovations Theory
EFA	-	Exploratory Factor Analysis
eP	-	Electronic Procurement
E-Service	-	Electronic Service
ETAM	-	E-Service Technology Acceptance Model
EXPC	-	Expectation
FRIEND	-	User Friendliness
GFI	-	Goodness-of-Fit Index
GOE	-	Generic Office Environment
GOF	-	Goodness-of-Fit
HRMIS	-	Human Resource Management Information System
ICT	-	Information and Communication Technology
IM	-	Igbaria's Model
INT	-	Intention to Use
INTER	-	Interaction
IS	-	Information System
IT	-	Information Technology
IVR	-	Interactive Voice Response
KMO	-	Kaiser-Meyer-Olkin

LISREL	-	Linear Structural Relationship Analysis
MCDM	-	Multiple Criteria Decision Making
MM	-	Motivational Model
MPCI	-	The Model of PC Utilization
NFI	-	Normed Fit Index
PCA	-	Principal Component Analysis
PERF	-	Performance
PMS	-	Project Monitoring System
QUAL	-	Quality
SAT	-	Satisfaction
SCT	-	Social Cognitive Theory
SEC	-	Security
SEM	-	Structural Equation Modeling
SPSS	-	Statistical Package for the Social Sciences
SRMR	-	Standardized Root Mean Square Residual
STS	-	Tax-Self Assessment System
SUPPT	-	Support
TAM	-	Technology Acceptance Model
TIB	-	Theory of Interpersonal Behaviour
TIB	-	Theory of Interpersonal Behaviour
TPB	-	Theory of Planned Behaviour
TRA	-	Theory of Reasoned Action
TRAIN	-	Training
UGT	-	Uses and Gratification Theory
USAB	-	Usability
UTAUT	-	Unified Theory of Acceptance and Use of Technology

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CHAPTER 1

INTRODUCTION

At the beginning chapter, a brief introduction and an insight to this research area are given. This begins by discussing the fast growth of information technology and the necessity of movement from traditional services to electronic services. Then, the background of the problem, problem statement, objectives, scope and significant of the study are described respectively. In this study, acceptance and adoption terms are used interchangeably.

1.1 Introduction

As time went by, fast growth of information technology is made manifest its significance in last decades (Cronan and Al-Rafee, 2008). Therefore, breakthrough revolutionary methods have been developed with the aim of accomplishing online business activities due to the expansion and advancement of Internet , software industry and digital technologies (Cronan and Al-Rafee, 2008; Holsapple et al., 2008). The fact of the matter is that emerging advances in the Internet spheres pave the way for some businesses as they can transform their products into information services, thereby, the personalization and shipping procedures encompassing logistic costs and delays would be optimized, relatively. Since web technologies have been emerging, lots of opportunities have been exposed to businesses. Accordingly, the businesses are intended to create potential values via providing customers/end-user with additional services, in consequence, these businesses have altered to a service-based company rather than being a product-based company (Luo et al., 2011). In regard with this

revolutionary breakthrough advancement, many of traditional services have been embracing the electronic environment, substantially.

The concept of e-service plays an important role to provide a superior experience considering the interactive flow of information (Rust and Lemon, 2001). Indeed, through expanding the range of options, consumers convenience and comfort may be impressed coupled with this value and consistency of relationship with a prospective corporation would be enhanced (Alsop, 1999). Overwhelming, majority of industry sectors have been influenced by the emergence of e-service, for example, governments, education, transportation, financial services, healthcare, retail, etc.

Recently, businesses have been engaging the Internet as a platform with the aim of delivering services to their both partners and customers (Casati and Shan, 2001). There is empirical evidence that e-service has emerged in the form of websites on the Internet. Furthermore, using online channels comprising, sharing information and performing business interactions automatically with business partners (Torre and Moxon, 2001; Lu and Zhang, 2003). Notwithstanding of the benefits of these innovations, there is a significant concern in regard with the fact that which method is used by customers to do their business activities (Looney et al., 2006). Notably, the major challenge raised, particularly during selling and distributing products is evoking user acceptance toward information service once the digital channels are in place (Luo et al., 2011).

Within the last two decades, information technology usage has provoked a debate in the field of information system (Martins et al., 2014). Literary, successful implementation of information system is tied with the ultimate usage of new developed technology (DeLone and McLean, 1992), however, the final proposed achievements of the system cannot ensure a successful implantation. The shining example in this case, reveals that implemented information technology cannot improve organizational performance if it will not be used in the organization. Notwithstanding benefits of the new developed system, employees are reluctant to apply new developed system, so that, this refuse is known as a critical risk in technology change projects (Markus, 2004). Moreover, this might be seen as a serious barrier for an organization to attain

potential benefits from new implemented system. Therefore, in order to eradicate this issue, users should be encouraged by firms to utilize the system (Bouten, 2008). Researchers have indicated that user adoption of information technology is a crucial condition for both successful and effective implementation of any information technology project (Pinto and Mantel, 1990).

Further development of any new technology and e-service technology are tied with user acceptance and confidence in all. The metaphor “acceptance” has been observed as a function of user participation in systems development and can be defined as “an antagonism to the term refusal and means the positive decision to use an innovation” (Simon, 2001). A number of models, as well as frameworks, have been developed so far in regard with scrutinizing user adoption of new technologies. Moreover, these models contribute to the introduction of factors which can affect the user acceptance per se (McKenna et al., 2013). This research aims at developing an adoption model via combining previous models along with adding new required constructs with the aim of investigating the user acceptance toward e-service technology.

1.2 Background of the Problem

A numerous opportunities are generated from the growth of web-based information services (WIS) globally (Luo et al., 2011). It has been argued that the Internet is not only rapid marketplace growth, also it is obviously a boundless chance for both products and services marketing (Ruyter et al., 2001). IT is utilized as e-service platform (Watson et al., 2002). On the other hand, the Internet has been characterized as a robust medium to offer services and it is known as the second phase of Internet innovation (Evanschitzky, 2007; Ruyter et al., 2001).

Reconfiguration of service value networks is tied with an increasingly growth of Internet, globalization, and automation. As innovation is known as consistent process instinctively, new opportunities are always on the way to not only develop innovative services and researches but also to deliver new information as well as

business services (McKenna et al., 2013). There are numerous e-service applications comprising: e-financial, e-business, e-banking, e-government, e-insurance, e-shopping, e-commerce, and e-education. The applications of e-service contribute to reduce the service cost and consequently provide a situation in which the service can be differentiated and segmented in service contracts.

The emergence of new formulas for the relationship between firms and consumers are tied with Internet's capacity to access, communicate information and organize (Crespo and Bosque, 2010). Assume that you plan to have a trip for your holidays, so after you choose your destination, you need some information about the place (its hotels, attractions, flights and so on). In this case, if you want to use the traditional services, you have to go to the travel agencies to collect the needed information, then go to the airways agencies to get your ticket and booked your hotel in the destination by phone and further, get your rental car when you arrive there. While all these can be done only by some clicks through the web sites. Not only you are able to book your flight tick and reserve your hotel and car but also you can choose your seat on the airplane personally, see the pictures of the rooms and cars to have a better decision. Therefore, you are able to manage your whole journey from your place, 24 hours a day and with your own computer. Thus, compare to the traditional services, e-service can result to the saving time and cost hence it is valuable to switch from traditional services to the e-services and this movement can be happened successfully if the users accept the e-services, so users need to be aware and educated about the e-service characteristics and features.

The e-service usage results in delivering the products and services effectively via transforming and mechanizing the customers' relationship and marketplace. Therefore, the majority of firms are attracted interest in developing and implementing the e-service with the aim of expanding their performance effectiveness and efficiency. There is empirical evidence that the customer behavior itself can be affected significantly by this expansion and evolution (Sharma, 2007).

The e-service benefits can be listed as reducing the cost of any transactions, adjusting the customer desires through moving from location-based activities to non-

locational and non-temporal behaviors and time (Watson et al., 2002). Undeniably, a system can enhance the job performance but sometimes users are not keen on using the systems. It has been highlighted that if people do not use information systems then it cannot be effective (Mathieson, 1991).

Therefore, it is significant to identify the root causes which affect users' decision for using a specific system. Analyzing and scrutinizing the main reasons of people's willingness to accept these technologies are of central importance for both parties including organizations and customers (Martins et al., 2014). E-service providers are playing a crucial role as they must understand the root issues which affect users' decision about using a particular service, thereby, they would be capable of concentration on effective adoption matters into account during both development phase (Mathieson, 1991) and at once after implementation.

Recognition the needs and acceptance of individuals is the beginning stage of any businesses and this understanding would be helpful to find the way of future development, thus academicians are interested to realize the factors that drive users' acceptance or rejection of new technologies. It is the common question of both practitioners and researchers that why people accept new technologies and electronic service as well. Answering this question may help them to better methods for designing, evaluating and predicting the response of the users to the new technologies (Dillon and Morris, 1996). Technology acceptance model is made manifest its role as the basis for understanding consumer behaviour within studies which concerns consumers' adoption of service (McKenna et al., 2013). However, a number of studies which linked consumer behaviour to information systems development are rare and limited (McKenna et al., 2013). In technology adoption research context, the challenges are generated from understanding and scrutinizing consumers' behavior in decision making in order to understand why users adopt or do not adopt certain services or technologies, so that, the risk of rejection and resistance are reduced substantially (Al-Debei and Al-Lozi, 2014). In regard with this, technology adoption from individual vantage point has provoked a significant debate and become a crucial research sphere over two decades (Chuttur, 2009).

In brief, recently, the advancement of Internet offers organizations to preserve their customers by providing them new Web-based services (Martins et al., 2014). Ultimately, learning what drives users to adopt e-services is of central importance within past decade and a half within e-service context (Grellhesl, 2010).

1.3 Statement of the Problem

Adoption of information technology is perceived to be today's worldwide business atmosphere concern due to its dynamic and comprehensive nature (Özer and Yilmaz, 2011). Apart from the increasing emergence of a large number of electronic markets, the development of e-service is still slow (Özer and Yilmaz, 2011).

Recently, advancement of web technologies provide golden opportunities, so that, firms can offer supplementary services to their customers (Hanafizadeh et al., 2014). Accordingly, the user acceptance has been viewed as a prospective challenge of e-services and digital channels (Luo et al., 2011). Therefore, decision makers need to understand what factors encourage users to use e-services in order to be able to move their businesses from the traditional delivery systems to the electronic environments (Alawadhi and Morris, 2008). Complete benefits of the information technology investments are not being comprehended because of the number of reasons (Clegg et al., 1997; McCarroll, 1991) and the lack of information technology acceptance has been recognize as one of the reason (Henderson et al., 1995; Ives and Olson, 1984).

In the 20th century, the information technology explosion that occurred globally has managed to influence and change the lifestyle of the world (Othman et al., 2012). In many developing countries, E-government initiatives are in their infancy stage. In Malaysia, e-services application is among five pilot projects under these initiatives that have been selected by the government to be implemented at the first phase. The success of this application is dependent on government support as well as citizens' adoption of this application. Therefore, it is important to identify the adoption factors of the implementation of e-services in Malaysia (Othman et al., 2012).

According to the Malaysian Public Sector ICT Strategic Plan (2011- 2015), which was launched on 7th July 2011, one of its targets is towards zero face-to-face service delivery, with 90% of all government services are available online by 2015 and 90% of all transactions for online services are available online by 2015 (Nawi et al., 2013). Currently, the government agencies have transformed their operation and services through the use of ICT; however, most of them have difficulties in sustaining the e-services after their successful implementation (Nawi et al., 2013). Therefore, it is important to identify and understand the factors effecting on user decision toward e-service. Nawi et al. (2013) proposed a model to identify the issues and problems regarding the sustainability of e-service projects in Malaysia. Within their model, user resistance to use e-service is one of the problems for Implementers and Service Providers.

Practitioners and academicians have been confronted to both challenges and opportunities provided by e-services (Evanschitzky, 2007). Unquestionably, the productivity and quality of work can be increased by applying information systems; in consequence, its usage deficiency would result in major loss to society and organizations. Therefore, in order to develop a proper method, people's perception toward accepting and rejecting a new technology should be understood (Bouten, 2008).

Currently, many models have been introduced to address both rejection and acceptance of the information system. Many studies have been used various frameworks along with developing new models to carry out their studies such as Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Diffusion of Innovation Theory (DOI), Model of PC Utilization (MPCU), Theory of Planned Behavior (TPB), Motivational Model (MM), Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Interpersonal Behaviour (TIB), Compatible Unified Theory of Acceptance and Use of Technology (C-UTAUT), and Social Cognitive Theory (SCT). However, amongst all aforementioned models, it has been discussed that traditional acceptance models cannot adequately help academicians and practitioners to have a complete explanation and prediction of factors which influence the users' acceptance of new services (Nysveen et al., 2005).

Users have been vacillated to make transactions applying the Web due to mistrust on the Web environment (Rotchanakitumnui and Speece, 2004). As articulated by Vassilakis et al. (2005), security and privacy are serious concerns of e-service users and known as the critical barriers of e-service usage (Vassilakis et al., 2005). E-service users are not willing to send their personal information (financial or non-financial) via electronic channels due to the insufficient trust on electronic service provider's ability to control their information safely. More specifically, the security issue is perceived as main concerns which manifest itself in the form of refusing the electronic services. Therefore, security concern will substantially affect the users' intention to use e-services (Shareef et al., 2011). Analysis of previous studies uncovered that in spite of the significance of security concerning explaining and predicating the intention to use e-services, none of the aforementioned models scrutinized its effect on user intention to use.

The odd of success can be enhance through consideration of e-service quality as it can increase attractiveness, customer retention, hit rate, and positive word of mouth, and can take advantage of the online competitive advantages of e-service (Santos, 2003) although research regarding quality of e-service issues is still in immature phase. As long as service quality is an ultimate evaluation of service under certain circumstances, customer satisfaction is considered as the exit point of specific service transaction (Jun et al., 2004). Thereby, it can be asserted that consumer satisfaction is an indicator of company's portfolio considering its past, current and future performance. In regard with scrutinizing the system use, it is essentially required to develop tools for measuring and analysing user satisfaction (Legris et al., 2003). User satisfaction should be recognized as an object-based attitude, however, research in this sphere has the limitation to predict system usage (Wixom and Todd, 2005). The analyses of previous researches reveal that in spite of the significance of both quality and satisfaction dimensions, very little efforts have been assigned to not only identify their dimensions but also examine their potential effects on intention to use. Ultimately, the contribution in this domain is necessitated; therefore, relevant dimensions of quality and satisfaction along with their effects on intention to use e-services should be identified coherently and comprehensively.

To conclude, one of the most studied field in information technology and information system is IT acceptance since it is a vital factor to gain success for any IS and IT project. Therefore, numerous acceptance frameworks and models have been developed and applied to predict and explain the users' behaviour and decisions regarding particular system usage. However, none of the developed models consider security as an effective factor influencing on intention to use or acceptance. On the other hand, the influence of satisfaction and quality on acceptance decisions of users has received limited attention. To address this gap, this research contributes to acceptance theory with consideration of proposing a model (E-Service Technology Acceptance Model) that put spotlight on the influence of security, satisfaction and quality on end-user intention to use e-services and consequently e-service acceptance. Besides, there is no instrument to assess the e-service technology acceptance, so the academicians and practitioners have difficulties to examine the user acceptance of e-service project. This study is going to develop a valid and reliable survey instrument to address this gap.

1.4 Research Questions

This study will answer the below general questions:

- What are the factors that affect users' acceptance of e-services?
- What is the intention of people towards the acceptance of e-services?
- What are the dimensions of e-service satisfaction?
- What are the dimensions of e-service quality?
- What are the dimensions of e-service security?
- How to measure the user acceptance of e-service?
- What would be a proper model to investigate user adoption of e-service?

1.5 Objectives of Study

The main goal of this research is to develop an assessment model to examine user acceptance of e-service technology. So the study objectives are as follows:

- i. To identify factors influencing on adoption of e-service.
- ii. To propose an adoption model to assess e-service acceptance.
- iii. To assess the adoption response of e-service technology.

1.6 Scope of the Study

The current study develops an adoption model to evaluate user acceptance of e-service. “Provision of services via Internet ” (Rust and Kannan, 2002; Pavlichev and Garson, 2003; Karim and Khalid, 2003; Reynolds, 2000) has been adapted as e-service definition in this study so services that are delivered through other networks or media are not in the scope of this study. Furthermore, this research is limited to electronic services that are provided on the screen thus other processes connected to electronic services are not in the scope of this research. In addition, this research only evaluates the adoption of e-service from the individual perspective and respondents for this research include 426 e-service (e-commerce and e-banking sectors) users in Malaysia.

1.7 Significance of the Study

The development of electronic communication has important effects on human daily's activities. The researchers of this area for fascinating daily activities of industries owners, service organizations and other centres attempt to apply this technology and able them to communicate with their clients without any limitations in time and place, also, they can offer, buy and sell their products. The adoption and distribution of information and communication technologies (ICTs) significantly influence country's economic growth (Hanafizadeh et al., 2014).

On the other side, rapidly development of technologies such as Internet , wireless, broadband and warehousing put organizations under pressure and increase customers' expectation, on the other hand, organizations would be able to improve their competitive position and business process by developing these technologies (Rust and Kannan, 2003). Due to the technological development, new opportunities and instruments are accessible to service providers (Rust, 2004). Therefore, according to Järvinen and Lehtinen (2005), it is important to examine different types of currently marketed e-services, particularly the e-service characteristics and e-service definition. However, several studies have been carried out on e-commerce and Internet adoption, only a few researches have been conducted particularly on electronic service acceptance (Yong and Jing, 2006). To describe electronic service acceptance, the trusted and validated measures have not been produced. E-service providers must follow the customer rational and irrational concerns about the usage of e-service to successfully replace traditional services by e-services (Hoffman, 2003).

Prediction of user acceptance regarding the candidate projects is the concern of both researchers and practitioners. User acceptance is one of the vital factors in determining the success of any information technology projects and e-service as well. Even if an e-service project is accomplished in which can result in impressive performance of users but users are not willing to use it, the project will be failed.

With regards to success, advantages of electronic services, quality and usability, and the electronic services usage should be assessed (Smith, 2001). To obtain success in new information systems and e-service technology, lack of user adoption is a vital obstacle. According to Anderson et al. (2005), the majority of studies in the field of Web services focused on the technological aspects, therefore, the social and managerial aspects are still unclear particularly in developing countries.

Earlier, the success of information system had been examined and observed from user satisfaction and technology acceptance perspectives. Both approaches separately had been examined until an integrated research framework developed by Barbara and Todd that links these two approaches by distinguishes beliefs and attitudes regarding the system and system usage (Wixom and Todd, 2005). But, the effect of

quality and security has not been studied and these two factors have not been included in the prior acceptance models that should be considered for evaluation of user adoption of electronic-based technologies. The current study aims to advance our knowledge in the field of e-service by revealing the roles of security, quality and satisfaction towards behavioral intention and usage of e- services in Malaysia.

User acceptance of e-services has not been fully explained by previous acceptance models and theories. For instance, TAM has been applied to explain computer tools usage, a system such as text editing instruments, database applications and also an individual's acceptance (Chau, 1996; Igbaria et al., 1995). According to Gefen et al. (2003) the use of TAM in the WWW context has been supported by some studies, but still it has not been validated to describe e-service adoption.

An analysis of e-service acceptance literature reveals that only few studies have been concentrated on this issue among developing countries, this may occur due to the low number of businesses that offer e-service and slow infrastructure development (Dwivedi et al., 2006). With the focus on developing countries, this study may give insights of factors which has affect the user's acceptance of e-service and further recognizing the obstacles and assist in accelerate the procedure of people adoption of e-service in Malaysia.

As mentioned earlier, both practitioners and researchers are strongly interested in realizing why people adopt e-service so that better methods to design. Also, they will be able to evaluate and predict how users will respond to e-service. Findings of this study can be used by policy creators and stakeholders for designing strategies and making a decision. Therefore, this study will add new knowledge of information in this field.

1.8 Thesis Organization

This thesis is organized as follow: Literature Review (Chapter 2), Research Methodology (Chapter 3), E-service Technology Acceptance Model (Chapter 4), Results and Analysis (Chapter 5), and Conclusion (Chapter 6).

In Chapter 2, the background on the e-service technology, definition, and characteristics are provided. Then, the most common used acceptance models will be discussed and the related models and theories to e-service acceptance are described. Finally, dimensions of security, satisfaction and quality are extracted from the literature..

Chapter 3 provides the methodological procedure which will help research to achieve the objectives of the study will be discussed in details. It includes the research purpose, design, strategy, philosophy, sampling, scaling, data analysis, validity and reliability.

In Chapter 4, the dimensions of quality, satisfaction and security of e-services are examined using explanatory factor analysis and analytical hierarchy process. Furthermore, other related constructs to e-service acceptance are examined and the research hypotheses will be proposed.

In Chapter 5, structural equation modelling is applied to test the E-Service Technology Acceptance Model (ETAM), so the analysis is presented along with the calculated validity and reliability of the survey.

Chapter 6 discusses the conclusion, contributions and future works for this research. Firstly, the introduction is discussed; then, the contribution of this research is provided; finally, the future works are drawn for more investigation in this field.

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