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THE INFLUENCE OF ONLINE SERVICE QUALITY ON
CUSTOMERS' ACCEPTANCE: A STUDY OF
INTERNET BANKING

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DECLARATION

The materials in this thesis are original except for the quotations, excerpts, summaries and references, which have been duly acknowledged.

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ABSTRACT

The purpose of this study is to test the relationship between online service quality (content, accuracy, ease of use, timeliness, aesthetics and security) and customers' acceptance. This study will also look into how demographic factors such as age, gender and education background influence the relationship between online service quality and customers' acceptance. The online service quality dimensions were adapted from Jun and Cai (2001). This study was carried at four bank branches, namely, Hong Leong Bank Berhad, Kota Kinabalu, Hong Leong Bank Berhad, Lintas, Maybank Berhad, Kota Kinabalu and Maybank Berhad, Lintas. 240 questionnaires were distributed to the four bank branches. With 179 samples of respondents, it was discovered that not all the online service quality dimensions were found to be significant in the relationship between online service quality and customers' acceptance. Interesting findings was that all the demographic character used in this study has no effect on the relationship. This study was able to gather important and interesting findings regarding the characteristics of the respondents for both banks in both areas. Online service provider may find these information beneficial as they can consider using it to enhance their service quality as well as to increase the level of acceptance of internet banking in Kota Kinabalu area.



ABSTRAK**“PENGARUH KUALITI PERKHIDMATAN ONLINE TERHADAP KADAR PENERIMAAN PELANGGAN: KAJISELIDIK TERHADAP PERBANKAN INTERNET”**

Tujuan kaji selidik ini diadakan adalah untuk mengenalpasti sama ada terdapat hubungan di antara kualiti perkhidmatan online (isi kandungan, ketepatan, mudah digunakan, ketepatan masa, estetik dan keselamatan) dengan kadar penerimaan pelanggan terhadap perbankan internet. Kajian ini juga akan melihat bagaimana faktor demografik seperti umur, jantina dan tahap pendidikan mempengaruhi hubungan di antara kualiti perkhidmatan online dan penerimaan terhadap perbankan internet. Dimensi kualiti perkhidmatan online telah diadaptasi daripada Jun dan Cai (2001). Kajian ini telah diadakan di empat buah cawangan bank iaitu Hong Leong Bank Berhad, Kota Kinabalu, Hong Leong Bank Berhad, Lintas, Maybank Berhad, Kota Kinabalu dan Maybank Berhad, Lintas. Sebanyak 240 borang kaji selidik telah diedarkan ke semua empat cawangan bank. Dengan sampel sebanyak 179, adalah didapati bahawa tidak kesemua dimensi kualiti perkhidmatan online mempunyai signifikan dalam hubungan antara kualiti perkhidmatan online dan tahap penerimaan perbankan internet. Satu lagi penemuan yang menarik adalah kesemua faktor demografik yang digunakan di dalam kaji selidik ini adalah tidak signifikan. Kaji selidik ini membolehkan pengumpulan data penting dan menarik mengenai karektor para responden untuk kedua-dua buah cawangan bank. Pemberikhidmat online juga boleh menggunakan maklumat yang diperolehi dari kaji selidik ini untuk memperbaiki kualiti perkhidmatan mereka dan seterusnya meningkatkan tahap penerimaan perbankan internet.



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CHAPTER 1

INTRODUCTION

1.1 Overview

"Today, many financial services organizations are endeavoring to become customer focused. A key component of improved customer focus is the implementation of tools that allow development of better relations between banks and their customers (customer-bank relationship)." (Gonzalez et al., 2004:317) In almost every service organizations, service quality remains a critical issue as businesses strive to maintain a comparative advantage in the marketplace. Financial services, particularly banks, compete in a marketplace where the features of their products or services are almost similar to each other, therefore, service quality becomes the primary competitive weapon.

In order to survive in this highly competitive economic and business environment, service providers are moving towards offering customers with IT-based service options. Banking industry is no exception. Banks are moving towards multi-channel banking services, providing innovative products, and offering wider choices with lower costs to customers.

The internet was first used as a platform for providing banking services in the USA in 1995. In just a few years, this new channel has rapidly gained popularity in almost all developed countries and many developing countries (Wan, Chung and Chow, 2005). Internet banking is very attractive to banks and to consumers who now have higher acceptance of new technology and increasingly understand more complex products (Polatogiu and Ekin, 2001). This trend is also evident in many developing countries, such as Malaysia (Ong Hway Boon and Cheng Ming Yu, 2003), Thailand (Rotchanakitumnuai



and Speece, 2003) and Turkey (Akinci, Aksoy and Atilgan, 2004). As mentioned in Rotchanakitumnuai and Speece (2003), internet banking is expanding in many Asian countries, including South Korea, Hong Kong, Singapore, China, and Taiwan.

In Malaysian banking industry, bank branches are no longer enough to provide banking services to cater the needs of today's sophisticated and demanding customers. The provision of banking services through electronic channels namely ATMs, mobile banking, internet banking and banking kiosks have provided an alternative means to acquire banking services and to make banking more convenient (Ong Hway Boon & Cheng Ming Yu, 2003). Users of online banking in Malaysia expected to reach 1.1 million in 2004 and the total number of online banking accounts reaching 1.6 million or 23% of all Malaysia internet users for that year. This is the indicator of the potential of internet banking in Malaysia (Ramayah, T et al., 2002)

Internet banking allows customers to have direct access to their financial transactions without the need of going to the bank. From the banks' point of view, use of the internet banking is expected to lead to cost reductions and improved competitiveness. The success of internet banking in Malaysia depends on the rate at which the new technology is accepted by the Malaysian consumers both retail and corporate alike (Suganthi et al., 2001).

It is for this reason that this study is undertaken. The objective of this paper is to identify the factors that encourage customers to accept internet banking services in Kota Kinabalu, as well as to determine the moderating factors that influence the relationship between online service quality and customers' acceptance. The findings from this study can be used by banks to develop strategies on how to maximize the rate of acceptance of internet banking.



1.2 Research Problem

Internet banking is gaining popularity as a delivery channel in the banking sector worldwide. According to the Pan European Internet Monitor, internet usage in Europe is growing rapidly. 34% of European currently has access to the internet. By comparison, Sweden has the highest level of internet usage at 53.3%. The ensuing growth in internet banking and the increase in the range of interface options available to access internet banking solutions has resulted in customers' preference to interact using the remote technological channels (Durkin et al., 2003).

As for Turkey, the transaction volume of internet banking in the Turkish banking sector, which was \$1.2 billion in 1997, was forecasted to be \$5 billion in 2001. The reason behind the increase in the adoption of internet banking services and the increase in the number of banks offering internet banking services in Turkey is basically due to the fact that Turkish consumers are becoming more computer literate and have access to the internet in larger numbers (Polatogiu and Ekin, 2001).

In Scandinavian countries, usage figures for banking through the internet are around 65% while in the UK the figure is at 20%. Ireland has about 14% of the banked population interacting through the web while in the USA about a quarter of its population uses internet banking (Durkin and Howcroft, 2003).

However, most Malaysian consumers still prefer patronizing the bank branches and also find human interaction with tellers as important. This also indicated that PC-based channels of banking have not realized its full potential in Malaysia (Guru, Vaithilingam and Prasad, 2001). The traditional way of banking which was the brick and mortar branch network has been the most popular or trusted delivery channel for a long time (Ramayah, T. and Koay Pei Ling, 2002).



For locals in Kota Kinabalu, IT-based products and services are still considered as a new thing and still not well accepted. Most of the customers still prefer face-to-face interaction with branch staff even though they knew that they face problems such as long queue, slow service and traffic jams. Therefore, this research wishes to explore the relationship between the online service quality and customers' acceptance on internet banking in the Malaysian banking scenario. This research will focus more on the acceptance of internet banking by the Kota Kinabalu consumers. This study will also explore how age, gender and education background of an individual influence the online service quality and its impact on customers' acceptance.

This research will also cover the following issues;

- 1- Which dimensions of the online service quality namely, contents, accuracy, ease of use, timeliness, aesthetics and security has the most significant influence on customers' acceptance?
- 2- To what extent the six dimensions can encourage the acceptance of internet banking?
- 3- How age can moderately influence the online service quality with customers' acceptance.
- 4- How gender can moderately influence the online service quality with customers' acceptance.
- 5- How education background of an individuals have a moderating influence on the online service quality with customers' acceptance.

1.3 Research Objectives

The purpose of this research is to offer knowledge of online service quality in influencing customers' acceptance. It will also cover the element of



moderating factor namely, age, gender and education background that have significant impact to induce customer acceptance.

The objectives of this study are as follows;

- 1- To study which online service quality namely, contents, accuracy, ease of use, timeliness, aesthetics and security are likely to affect the acceptance of the new banking services.
- 2- To determine the moderating influence of age on the relationship between the online service quality and customers' acceptance.
- 3- To determine the moderating influence of gender on the relationship between the online service quality and customers' acceptance.
- 4- To determine the moderating impact of education background on the relationship between the online service quality and customers' acceptance.

1.4 Scope of Study

This study will look into the customers' acceptance of internet banking within the Kota Kinabalu vicinity. Banks, namely Hong Leong Bank Berhad and Maybank Berhad from two areas were chosen; (1) Hong Leong Bank Berhad, Kota Kinabalu; (2) Maybank Berhad, Kota Kinabalu; (3) Hong Leong Bank Berhad, Lintas and (4) Maybank Berhad, Lintas

Maybank Berhad and Hong Leong Bank Berhad were chosen because they are the first two local banks that offer internet banking. Maybank is the largest domestic bank in Malaysia in terms of assets as well as network distribution. It became the first bank to offer Internet banking services on June 15, 2000, through its own portal, www.maybank2u.com. In December 2000, Hong Leong Bank commenced its Internet banking operation "Ec-Banking"

through its web site, www.hlbb.hongleong.com.my (Vijayan P. and Shanmugam B., 2003).

Banks in Gaya Street (Hong Leong Bank Berhad) and Beach Street (Maybank Berhad) were chosen because it is located in the Kota Kinabalu city centre where most the banks branches are located. Banks in Lintas area were chosen because it is situated in a residential area and are blooming.

The customers that will be the subject of interest in this research would include the locals from all types of races and background who is either existing or walk-in customers of the particular banks who are experiencing the product, service and facilities provided by the banks.

1.5 Significance of Study

In determining the factors that influence the acceptance of the new banking services i.e. internet banking in the Kota Kinabalu vicinity, it is hoped that this study will be able to provide;

- 1- A clear understanding of the relationship between online service quality and the customers' acceptance, moderated by age, gender and education background in the banking sector.
- 2- Encourage the acceptance of internet banking as an alternative to current traditional face-to-face banking practices.
- 3- As a guideline and room for improvement for the banking sector to enhance their services offer to their customer.
- 4- Provide information to the management on who their customers really are, what are their preferences and expectations.
- 5- Provide information to the management in order to help them to save cost and create value added services to their customers.



1.6 Definition of Key Terms

The following definition of terms may be useful in order to avoid misconception and confusion on what it is meant.

1.6.1 Services

“Service is an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems.” (Kim, Bridge and Skitmore, 2001:720).

Services are performances rather than objects. Most services cannot be counted, measured, inventoried, tested and verified prior to sale to ensure quality delivery. The performance of services often differs among employees, among customers, and from day to day (Zeithami, Berry and Parasumaran, 1988).

1.6.2 Service Quality

Hung, Huang and Chen (2003) defined service quality as the degree to which an event or experience meets individual's needs or expectations. According to Kim, Bridge and Skitmore (2001), service quality is whatever a customer says it is and whatever a customer perceives it to be. It involves a comparison between expectations and performance, the degree to which the previously agreed standard of performance and the expectations of the internal and external customers are met.

Three underlying themes emerge (Parasuraman et al., 1985):



- Service quality is more difficult for the consumer to evaluate compared to the quality of goods;
- Service quality perceptions result from a comparison of consumer expectations with actual service performance; and
- In service quality, the quality evaluations are not made solely on the outcome of a service. Evaluations of the process of service delivery also plays important role.

Parasumaran et al., (1985) also mentioned that there are five dimensions of service quality that are applicable to any service organization namely;

- Tangible: physical facilities, equipment, appearance of personnel, communication material.
- Reliability: ability to perform the promised service dependably and accurately.
- Responsiveness: the willingness to help customers and provide prompt service.
- Assurance: the knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Empathy: the caring, individualized attention provided to customers.

In turn, from these five dimensions, they constitute the base of a global measurement devise for service quality, namely, SERVQUAL. SERVQUAL has been widely used to measure service quality in various service organizations, including banks.

Service quality is represented by answers to such questions as: Is the service delivered to you what you expected or different from what you expected? Was the service you received approximately what



you expected, or better or worse than expected? (Woodside, Frey and Daly, 1989).

1.6.3. Internet Banking

International Electronic Network or better known as the internet began in 1968 by the Advanced Research Projects Agency of the Department of Defense. Internet was originally known as the ARPAnet, it was started as an experimental network connecting different university computer centers throughout the country (Pallab, 1996).

The internet will bring about changes in the working environment, living conditions and patterns of banking use (Jayawardhena and Foley, 2000). There has been an increase in the use of the internet in the banking industries. Internet banking provides customers with the ability to access almost any type of banking transaction, with the exception of cash withdrawals at the click of a mouse, in the comfort of their own home or office (Ibbotson and Moran, 2003). By use of the internet, customers now can get up to date balance information on deposit and loans accounts, transfer fund between accounts, pay their utility bills, and etc. The most important part is that customers now will be able to communicate with the banks by e-mail.

1.6.4. Customers' Acceptance

Based on the Oxford Dictionary (1989), customer is defined as person who buys something from a tradesman.

Acceptance or adoption is the decision by an individual after first hearing about an innovation and becomes a regular user of the product (Kotler and Armstrong, 2004). According to Ramayah T and



Koay Pei Ling (2002), adoption means acceptance and continued use of a product, service and idea. Consumers go through a process of knowledge, persuasion, decision and confirmation before they adopt the product or services.

1.7 Organization of Study

This report consists of five parts.

Chapter 1 basically gives the fundamental ideas of what the research is all about. It will cover research problem, research objectives, scope and significant of study as well as the definition of the key terms.

Chapter 2 provides a more in depth literature review which will look into the various studies conducted previously by researchers from all over the world which are deemed related to this study.

Chapter 3 will discuss on how the research will be carried out in terms of data gathering, formulation of research framework, formulation of hypotheses and sample group chosen. The questionnaires and the method used for data analysis will also be discussed in this chapter.

Chapter 4 provides an overview of the findings and analysis based on the data gathered, which is related to the research hypotheses.

Finally, chapter 5 will discuss on how the findings in chapter 4 is related to the literature review in chapter 2, indicating whether the findings are significant or not. This chapter will also cover the limitations of the study as well as suggestions for future research. It will be ended with a conclusion on how the objectives and research questions of the study have been answered by the present research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, the researcher will discuss thoroughly various studies done by previous researchers which are related to this study.

2.2 Internet Banking

The banking sector occupies a key position in the global economy. The sector has been subject to many external and internal forces in many countries. Technology, in particular, the internet, is a key driver of internal changes. The internet is causing major delivery changes. The synergies of these forces will bring about a major transformation of the banking sector (Jayawardhena and Foley, 2000). Since the mid 1990s, there has been a fundamental shift in banking delivery channels towards using self-service channels such as online banking services (Pikkarainen et al., 2004).

As mentioned by Rogerson, Foley and Jayawardhena (1999) in Jayawardhena and Foley (2000), Internet-enabled consumers will be able to change banks at the press of a button, in the comfort of their homes. They will have access to online "intelligent agents" that will give them the ability to compare products and services.

2.2.1 The Rationale for Banks Using the Internet

Bank customers are divided into an internet banking segment and a branch banking segment. It is argued that the internet banking is growing and the branch banking or face-to-face banking is declining (Mols, 1999).



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