Proposal online banking

Finance, Banking

There has been a fundamental shift in the use of banking delivery channels toward self-service channels such the Internet [Hernandez-Ortega, 2007]. Internet banking, which was introduced in the early 1990s [Srivastava, 2007], makes it possible to replace the manual service functions provided by bank employees, along with the brick and mortar investment required of financial institutions [Dandapani, et al. , 2008]. It represents an electronic marketplace where consumers may conduct their financial transactions virtually [Reiser, 1997; Daniel, 1999].

Today, financial service institutions that offer their services over the Internet are keen to accelerate the adoption process, knowing that the cost of delivering the service over the Internet is much less than delivering the same service over-the-counter [Polatoglu and Ekin, 2001]. In addition, Internet banking is an important innovation that presents institutions a vital distribution channel, which could act as a means of attaining competitive advantage through cost reduction and better satisfaction of customer needs [Carrington, et al. , 1997; Kassim and Abdulla, 2006; Mols, 1999].

In response to the increased competition, banks in Malaysia are starting to leverage the Internet as a means to provide financial services. An empirical study by Sulaiman, et al. [2005] suggests that the adopters' perceptions of e-banking in developing countries appear to be very favorable. In Malaysia, however, despite the authorities? encouragement to the public to adopt Internet banking, traditional branch-based retail banking remains the most common method for conducting banking transactions.

For example, Sivanand, et al. [2004] found that, although more than 80% of their respondents were aware of Internet banking, less than 10% were currently using the services. With regard to informationtechnologyadoption, previous studies have suggested that the set of beliefs that influences an individual to adopt the technology may not be the same as the set of beliefs that leads to his or her initial adoption [Venkatesh, et al. , 2003]. According to Kruglanski and Klar [1985], each time a particular goal of an individual is achieved by a specific behavior, the cognitive link between the behavior and goal becomes stronger.

The result is a cognitive goal-behavior link that creates an automatic response behavior (i. e. , habit). This may suggest that factors that are considered by an individual in the initial stage of adoption may be different from the factors that are considered by him or her after using the technology. Repurchasing intention is one of the important constructs being studied by researchers [Soderlund and Ohman, 2003].

Zeithaml, et al. [1996] suggest that repurchasing intention is associated with a service provider? s ability to get its customers to remain loyal (i. e. , repurchase from the company), spend more with the company, and pay price premiums. In online business, the founder of Amazon. com, Jeff Bezos, noted that one way to build a relationship with customers is by observing their purchase behavior over time [Porter, 1998]. In another aspect, previous literature has highlighted numerous barriers to the adoption of Internet banking.

One local finding suggests that the adoption of Internet banking is not so encouraging in Malaysia mainly because of factors such as lack of Internet

accessibility, poor awareness, and security concerns [Suganthi, et al. , 2001]. Although there is sufficient evidence that the electronic revolution has commenced in Malaysia, Internet banking research, however, is still in its infancy, particularly with regard to the predictors of intention among current users to continue using the services.

This study was undertaken, therefore, to better understand the predictors that may influence current Internet banking users to continue using these services. This paper attempts to determine predictors that may influence the current users of Internet banking to continue using the services. Based on the literature reviewed, we strongly believe that trust, compatibility, and ease of use are key predictors of their intention to continue using Internet banking services. The current users of Internet banking services in Klang Valley, Malaysia, were chosen as the population of this study.

1. 1 Research Question

The objective of this study attempts to answer the following research question: Whether Internet banking services in Klang Valley Malaysia is accepted the Internet banking services for the country growth. Whether Internet banking services could improve the performance in Klang Valley in Malaysia?

1. 2 Problem Statement

The explosion of internet usage and the huge funding initiatives in electronic banking have drawn the attention of researchers towards internet banking. (Yi-Shun Wang, Yu-Min Wang, Hsin-Hui Lin, Tzung-I Tang, (2003)) Point out the need for research to identify the factor that determine acceptance of

internet banking by the user. (Yi-Shun Wang, Yu-Min Wang, Hsin-Hui Lin, Tzung-I Tang, (2003))

This study focuses on the adoption of Internet banking services by corporate customers in Malaysia and aims to gain a deeper understanding of the factors influencing the adoption of Internet banking services by Malaysian, particularly in Klang Valley customers. (Syed Shah Alam, Rosidah Musa, Faridah Hassan, (2009))

1. 3 Objective of the Study

The objective of this project is to study effect of Internet banking services in Klang valley Malaysia on determinant of user acceptance of internet banking. Based on this goal, I have come up with sub-objectives to find out the determinants. The main objective why this study is being undertaken is to analyze whether the internet banking is accepted by people at Klang Valley in Malaysia. To determine that people in Klang Valley can adobe and can used it to improve their bank performance in the future.

1. 4 Significant of the Study

This information is at least be able to provide knowledge to researcher and me as well whether there is effect of financial risk management on financial sector performance in Malaysia and also how far the correlation between it.

1. 4. 2 Investor

This knowledge can be used by investor about the impact of financial risk management on financial sector in Malaysia when they need to make a certain decision

1. 4. 3 To Generate Further Research

With this study and other thousands research, it would be best to generate more knowledge for the future. As done by past professors and researchers, which now are being updated and improved to adapt to newenvironmentand modern civilization. Not all past research can be reliable in the future, that’s why it is important to continuously keep it updated.

1. 5 Scope of Study

The scope of this study are consist of banks in Malaysia and will focus in major area which is in Klang Valley. These studies are based bank in Klang Valley Malaysia. The data is a primary data and will be gathered directly from customer at the area.

CHAPTER TWO

LITERATURE REVIEW

2. 0 Introduction

Basically, in this chapter will briefly explain in detail regarding the previous researches that have been done on overall topics about the determinants of user acceptance of internet banking ; an empirical study Klang Valley in Malaysia. There are several arguments favors and against on this debating issues that had been discover through previous studies.

2. 1 Previous studies

Lichtenstein and Williamson from Australian (2006)

Used mass media theories through individual and focus group discussion to determine the decision of internet banking adoption. Findings showed that Australian older people with low income reported themselves were lack of

awareness towards internet banking and its advantage, lack of internet lack of internet access and internet confidence, inadequate knowledge and support to use or initial setting up procedure, lack of trust, security and privacy risks were among the reasons of not using internet banking services.

Aktas and Topcu from Turkey (2010)

Found that security and reliability were among the important factor that influences the adoption of internet banking. This followed by infrastructural competencies and user friendliness among respondents with accessibility to internet, aged 20 to 45, higher level ofeducationand socioeconomic class. The study used Multi-criteria decision aid-based (MCDA-based).

Suganthi and Balachandran from Malaysia (2001)

Focused on the factors of accessibility, reluctance to changes, costs, trust in one’s bank, security concerns, convenience, ease of use through online survey that potentially influence internet banking adoption. The results revealed that there were positive significant relationships between accessibility, reluctance to changes and awareness with internet banking adoption.

Chung and Payter from Malaysia (2002)

Study the information, legal statement, order, ease of use, aesthetics effects, performance and others elements of bank that provide internet banking. The study found that a negative significant relationship between age and internet banking adoption among Klang Valley adopters. Monthly gross income and job position level had positive significant relationship with internet banking adoption among Klang Valley adopters. Further, there was no significant

relationship between gender, marital status, ethnic group, level of education with internet banking adoption.

Khalil and Pearson from Malaysia (2007)

Applied theory of diffusion of innovation (IDT) (Rogers, 1995) that focused on five key belief (relative advantage, compatibility, complexity, trial ability and obeservability) and trust (Mayers et al., 1995) to explore the intention to use internet banking among university students. The results of structural equation modeling showed that trust, relative advantage and trial ability significantly influence attitude. The attitude was play as moderator that influences intention to use technology that is internet banking.

CHAPTER THREE

DATA AND METHODOLOGY

3. 0 Introduction

This chapter will focus on the method that will applied, where the procedures is clearly stated and defined. The data section clearly elaborate on the process of collecting data that needs to be obtained in order to perform the tests while the methodology section elaborates on the types of methods or tests that will be performed in order to determine the effective results.

3. 1 Questionnaire

Data that used in this study is by using the number of 300 executive level peoples with a questionnaire investigation. This is based on the primary data that been collect and obtain by the executive level people in the area.

3. 2 Research Model and Hypotheses

1. Perceived usefulness

2. Perceived ease of used

3. Perceived credibility

3. 3 Computer Self-Efficacy

In general, prior research has suggested a positive relationship between experience with computing technology and a variety of outcomes such as an affect towards computers and computer usage (Levin and Gordon, 1989; Harrison and Rainer, 1992; Agarwal and Prasad, 1999). A related construct, called computer self-efficacy, has been examined in the IS literature (e. g. Compeau and Higgins, 1995; Compeau et al., 1999; Hong et al., 2001). Computer self-efficacy is defined as the judgment of one's ability to use a computer (Compeau and Higgins, 1995).

3. 4 Research Framework

The research framework in this study provides a picture regarding the relationship between Computer Self-Efficiency, Perceived Usefulness, Perceived Ease of Use, and Perceived Credibility to Behavior Intention. The Computer Self- Efficacy is the main thing to develop to the three and becoming the Behavior Intention. The figure below will show the relationship of the variables.

3. 5 Research Model

This section will briefly explain the research model and methodology related to this research on the determinant of user acceptance of internet banking : an imperial study Klang Valley in Malaysia. The research model will be used

to find the relationship between the three factors and will achieved the objectives of this study.

3. 6 Method used

Descriptive statistic

The following definitions are vital in understanding descriptive statistics: C Variables are quantities or qualities that may assume any one of a set of values. Variables may be classified as nominal, ordinal, or interval. — Nominal variables use names, categories, or labels for qualitative values. Typical nominal variables include gender, ethnicity, job title, and so forth. — Ordinal variables, like nominal variables, are categorical variables. However, the order or rank of the categories is meaningful.

For example, staff members may be asked to indicate their satisfaction with a training course on an ordinal scale ranging from “ poor” to “ excellent. ” Such categories could be converted to a numerical scale for further analysis. — Interval variables are purely numeric variables. The nominal and ordinal variables noted above are discrete since they do not permit making statements about degree, e. g. , “ Person A is three times more male than person B” or “ Person A rated the course as five times more excellent than person B.”

Interval variables are continuous, and the difference between values is both meaningful and allows statements about extent or degree. Income and age are interval variables. C Frequency distributions summarize and compress data by grouping them into classes and recording how many data points fall into each class. The frequency distribution is the foundation of descriptive

statistics. It is a prerequisite for the various graphs used to display data and the basic statistics used to describe a data set, such as the mean, median, mode, variance, standard deviation, etc. (See the module on Frequency Distribution for more information.)

C. Measures of Central Tendency indicate the middle and commonly occurring points in a data set. The three main measures of central tendency are discussed below. — Mean is the average, the most commonmeasure of central tendency. The mean of a population is designated by the Greek letter mu (F). The mean of a sample is designated by the symbol x-bar (0). The mean may not always be thebest measure of central tendency, especially if data are skewed. For example, average income is often misleading since those few individuals with extremely high incomes may raise the overall average. — Median is the value in the middle of the data set when the measurements are arranged in order of magnitude.

For example, if 11 individuals were weighed and their weights arranged in ascending or descending order, the sixth value is the median since five values fall both above and below the sixth value. Medianfamilyincome is often used in statistics because this value represents the exact middle of the data better than the mean. Fifty percent of families would have incomes above or below the median. — Mode is the value occurring most often in the data.

If the largest group of people in a sample measuring age were 25 years old, then 25 would be the mode. The mode is the least commonly used measure of central tendency, particularly in large data sets. However, the mode is still important for describing a data set, especially when more than one value

occurs frequently. In this instance, the data would be described as bimodal or multimodal, depending on whether two or more values occur frequently in the data set. C Measures of Dispersion indicate how spread out the data are around the mean. Measures of dispersion are especially helpful when data are normally distributed, i. e. closely resemble the bell curve.

The most common measures of dispersion follow. — Variance is expressed as the sum of the squares of the differences between eachobservationand the mean, which quantity is then divided by the sample size. For populations, it is designated by the square of the Greek letter sigma (F2). For samples, it is designated by the square of the letter s (s2). Since this is a quadratic expression, i. e. a number raised to the second power, variance is the second moment of statistics. Variance is used less frequently than standard deviation as a measure of dispersion.

Variance can be used when we want to quickly compare the variability of two or more sets of interval data. In general, the higher the variance, the more spread out the data. — Standard deviation is expressed as the positive square root of the variance, i. e. F for populations and s for samples. It is the average difference between observed values and the mean. The standard deviation is used when expressing dispersion in the same units as the original measurements. It is used more commonly than the variance in expressing the degree to which data are spread out.

Pearson product-moment correlation coefficient

Definition

Pearson's correlation coefficient between two variables is defined as the

covariance of the two variables divided by the product of their standard deviations. The form of the definition involves a " product moment", that is, the mean (the first moment about the origin) of the product of the mean-adjusted random variables; hence the modifier product-moment in the name. For a population

Pearson's correlation coefficient when applied to a population is commonly represented by the Greek letter ρ (rho) and may be referred to as the population correlation coefficient or the population Pearson correlation coefficient. The formula for ρ is:

For a sample

Pearson's correlation coefficient when applied to a sample is commonly represented by the letter r and may be referred to as the sample correlation coefficient or the sample Pearson correlation coefficient. We can obtain a formula for r by substituting estimates of the covariances and variances based on a sample into the formula above. That formula forr is:

An equivalent expression gives the correlation coefficient as the mean of the products of the standard scores. Based on a sample of paired data (Xi, Yi), the sample Pearson correlation coefficient is where are the standard score, sample mean, and sample standard deviation, respectively. Mathematical properties The absolute value of both the sample and population Pearson correlation coefficients are less than or equal to 1.

Correlations equal to 1 or -1 correspond to data points lying exactly on a line (in the case of the sample correlation), or to a bivariate distribution entirely supported on a line (in the case of the population correlation). The Pearson

correlation coefficient is symmetric: corr(X, Y) = corr(Y, X). A key mathematical property of the Pearson correlation coefficient is that it is invariant (up to a sign) to separate changes in location and scale in the two variables.

That is, we may transform X to a + bX and transform Y to c + dY, where a, b, c, and d are constants, without changing the correlation coefficient (this fact holds for both the population and sample Pearson correlation coefficients). Note that more general linear transformations do change the correlation: see a later section for an application of this. The Pearson correlation can be expressed in terms of uncentered moments.

Since μX = E(X), σX2 = E[(X − E(X))2] = E(X2) − E2(X) and likewise for Y, and since the correlation can also be written as Alternative formulae for the sample Pearson correlation coefficient are also available: The above formula suggests a convenient single-pass algorithm for calculating sample correlations, but, depending on the numbers involved, it can sometimes be numerically unstable.

Linear regression

In linear regression, the model specification is that the dependent variable, is a linear combination of the parameters (but need not be linear in the independent variables). For example, in simple linear regression for modeling data points there is one independent variable: , and two parameters, and : straight line: (In multiple linear regression, there are several independent variables or functions of independent variables.) Adding a term in xi2 to the preceding regression gives: parabola:

This is still linear regression; although the expression on the right hand side is quadratic in the independent variable , it is linear in the parameters , and In both cases, is an error term and the subscript indexes a particular observation. Given a random sample from the population, we estimate the population parameters and obtain the sample linear regression model: The residual, , is the difference between the value of the dependent variable predicted by the model, and the true value of the dependent variable . One method of estimation is ordinary least squares.

This method obtains parameter estimates that minimize the sum of squared residuals, SSE,[17][18] also sometimes denoted RSS: Minimization of this function results in a set of normal equations, a set of simultaneous linear equations in the parameters, which are solved to yield the parameter estimators, . Illustration of linear regression on a data set. In the case of simple regression, the formulas for the least squares estimates are where is the mean (average) of the values and is the mean of the values. See simple linear regression for a derivation of these formulas and a numerical example.

Under the assumption that the population error term has a constant variance, the estimate of that variance is given by: This is called the mean square error (MSE) of the regression. The standard errors of the parameter estimates are given by Under the further assumption that the population error term is normally distributed, the researcher can use these estimated standard errors to create confidence intervals and conduct hypothesis tests about the population parameters.

General linear model

In the more general multiple regression model, there are p independent variables: where xij is the ith observation on the jth independent variable, and where the first independent variable takes the value 1 for all i (so is the regression intercept). The least squares parameter estimates are obtained from p normal equations. The residual can be written as The normal equations are In matrix notation, the normal equations are written as where the ij element of X is xij, the i element of the column vector Y is yi, and the j element of is . Thus X is n×p, Y is n×1, and is p×1. The solution is For a derivation, see linear least squares, and for a numerical example, see linear regression (example).

3. 7 Hypothesis

The null hypothesis of the study is developed to cater for the pooling regression model. The null hypotheses are: 1. (A) H01: Computer self-efficacy will not have a positive effect on perceived usefulness of the Internet banking systems. H11: Computer self-efficacy will have a positive effect on perceived usefulness of the Internet banking systems. (B) H01: Computer self-efficacy will not have a positive effect on perceived ease of use of the Internet banking systems.

H11: Computer self-efficacy will have a positive effect on perceived ease of use of the Internet banking systems. (C) H01: Computer self-efficacy will not have a negative effect on perceived credibility of the Internet banking systems. H11: Computer self-efficacy will have a negative effect on perceived credibility of the Internet banking systems. 2. H02: Perceived ease of use will not have a positive effect on perceived usefulness of the Internet

banking systems. H12: Perceived ease of use will have a positive effect on perceived usefulness of the Internet banking systems.

3. H03: Perceived ease of use will not have a positive effect on perceived credibility of the Internet banking systems. H13: Perceived ease of use will have a positive effect on perceived credibility of the Internet banking systems. 4. H04: Perceived ease of use will not have a positive effect on behavioral intention to use the Internet banking systems. H14: Perceived ease of use will have a positive effect on behavioral intention to use the Internet banking systems.

3. 8 Expected Outcome

Using the technology acceptance model as a theoretical framework, this study introduced " perceived credibility" as a new TAM factor to reflect the user's security and privacy concerns in the acceptance of Internet banking, and examined the effect of computer self-efficacy on the intention to use Internet banking. Provide evidence of the significant effects of the individual difference variable (i. e. computer self-efficacy) on behavioral intention through perceived ease of use, perceived usefulness, and perceived credibility.