CUSTOMER ADOPTION AND USE OF E-BANKING: AN APPLICATION OF TECHNOLOGY ACCEPTANCE MODEL (TAM)

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Introduction

Today, Information Technology (IT) receives a vital role in all sectors in an economy.E banking services is one such information technology improvement which use in the banking sector. Automated Teller Machines (ATM), online banking, mobile banking, telephone banking and internet payment gateway are such IT driven banking services banking has become the self service delivery channel that allows bank to provide information and offer services to their customers with more convenience via the web services.

The challenging business process in the financial services pressurized banks to introduce alternate delivery channel to attract customers and improve customers' perception. Many banks have implemented Internet banking to offer their customers a variety of online services with more convenience for accessing information and making transactions. Customer satisfaction and customer retention are increasingly developing into key success factors in E-banking (Bauer et al, 2005).

E-banking provides several distinct advantages to customers as well as the banking institutions. Saving time, cost and human effort are major benefits to the banking institutions and customers are benefited by way of saving their personnel time; they can attend to their banking transactions all day-every day at a lower cost. Although the benefits are significant and the banks allocate large budgets towards developing such services, Sri Lankan banking customers appear to be reluctant to use them. For example, ATM services are extensively used by banking customers in Sri Lanka where as the preliminary investigations revealed that the usage of other E-banking services are extremely poor (Suraweera et al.2011).

Methodology

This study examines the factors contributing to the adoption and use of E banking in Sri Lanka with special reference to North Western Province (NWP). The researcher proposed a model using Technology Acceptance Model (TAM) developed by Davis in 1989 and another two factors which

have been identified in the literature as major factors impacting the adoption and use for E- banking to reach the research objective. TAM identifies two major factors towards adoption of new technologies: perceived ease of use and perceived usefulness. Perceived usefulness is the extent to which a person believes that using a particular system will enhance his or her performance, while perceived ease of use is the extent to which a person believes that using a particular system

will be free of effort. Although this model is specifically tailored to understand the adoption of computer based technologies on the job or in the workplace, many researchers have proved that it is suitable as a theoretical foundation for the adoption of E banking too. By applying awareness about E-banking and perceived risks with Technology Acceptance Model (TAM) in to E –banking context, proposed model is shown in figure No.1.
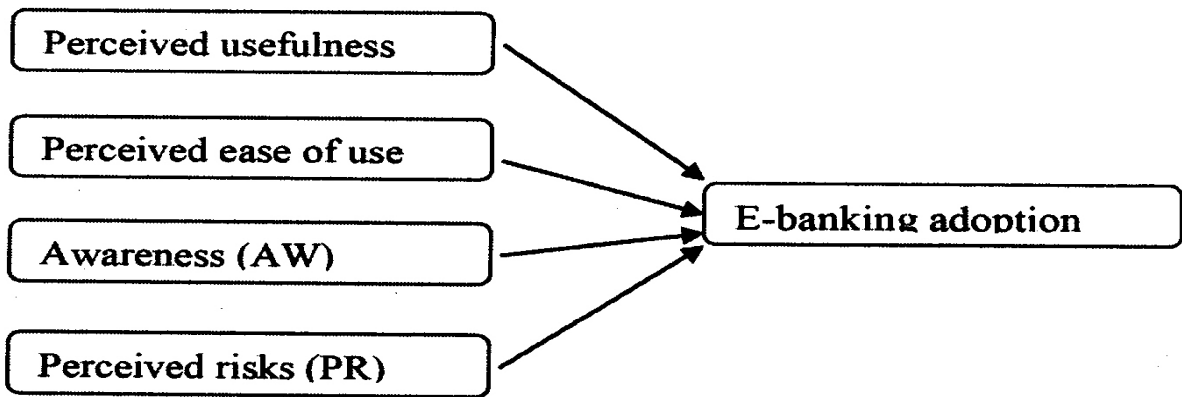
Perceived usefulness

Perceived ease of use

Awareness (AW)

Perceived risks (PR)

E-banking adoption

Figure No.1.Proposed Model using Technology Acceptance Model by Davis: 1989.

The following hypotheses are built to reach the objectives of the study.

H1: Perceived usefulness has a positive effect on intention to adopt and use E-banking.

H2: Perceived ease of use has a positive effect on intention to adopt and use E-banking.

H3: Awareness about E-banking has a positive effect on intention to adopt and use E-banking.

H4: Perceived risks have a negative impact on intention to adopt and use E-banking.

In the study, a survey was carried out during the months from June to August

in 2013. A questionnaire was designed after extended literature review and, it distributed out to individuals and encourages the completion and return of the completed questionnaires. Only 150 questionnaires were distributed mainly to people in employment public and private sector in North Western province in Sri Lanka and received response rate recorded 74%.

Results and Discussion
Computed Cronbach's coefficient alpha was used to test for reliability of the respondents' data (table 01).As a standard mechanism it is suggested to have minimum 0.6 Cronbach's alpha for early stages of research to assess its

reliability (Nunnally,1967 ;Hair et al. 1998). The constructs values had an adequate reliability to continue the data analysis.

Table 1: Reliability results

Determinants	No. of items	Reliability for this sample (value of Cronbach's alpha)
PU	5	0.934
PEU	6	0.860
AW	7	0.936
PR	4	0.600

Source: Author computation using Survey data 2013

To analyze the data and to test hypotheses, multiple linear regression technique was used in this study. Based on the statistical analysis and the results of the study, revealed that perceived usefulness, perceived ease of use and awareness about E-banking has a positive and significant impact on customers' attitude toward electronic banking services while perceived risks have a negative impact on intention to adopt and use E-banking .Hence the results show that H1, H2, H3 and H4 are confirmed.

Conclusion

This paper has examined about the determinants that influence customer adoption and use of E-Banking by extending TAM, the author has developed an extension of the TAM model which is incorporating additional constructs such as awareness and perceived risks. Furthermore, this study reflects the E-banking understanding from the employees' point of view. The result of this study shows that perceived usefulness, perceived ease of use, consumer awareness and perceived risk are the important determinants of E- banking adoption. Although this study has

achieved its objective, limitation and future research are outlined. The relatively small size of the sample limits generalization of the outcome of the study. The study is concentrated on a particular location and hence the result may vary with location and the demography of the people. Conducting a similar study on different countries that perhaps share similar characteristics with Sri Lanka would be valuable to match the findings of the study.

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