# AN INVESTIGATION OF FACTORS INFLUENCING THE CONTINUED AND FREQUENT USE OF INTERNET BANKING BY AUSTRALIAN CONSUMERS

By

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### **CERTIFICATION**

I certify that the substance of this thesis has not already been submitted for any degree and is not currently submitted for any other degree or qualification.

I certify that to the best of my knowledge any help received in preparing this thesis, and all the sources used, have been acknowledged in this thesis.

Sujana Adapa

#### **ABSTRACT**

The goal of this study was to investigate the factors that influence how consumers continue to use, and how frequently they use, internet banking in Australia. Patterns of continued use and frequency of use of internet banking have been neglected as most of the existing studies focus on either consumer adoption or acceptance of internet banking. However, in comparison to new customer acquisition, measures of continued and frequent use of internet banking are related to a cost-effective marketing strategy aimed at retaining customers. The research in this thesis is a response to a gap in existing literature which requires the application of more integrated theory testing and the identification of factors that influence the continued and frequent use of internet banking in order of importance to consumers.

In order to address the research goals, the study sets out to develop a conceptual framework based on theoretical models related to the acceptance of technology and diffusion of innovations theory. The conceptual model developed encompasses technology, channel, social and value for money factors as predictors in the identification of influential factors for consumers and their continued and frequent use of internet banking.

Quantitative and qualitative data were collected using a cross-sectional mall intercept survey in the Western Sydney region, comprising a sample of 372 internet banking users and 311 non-users of internet banking. After testing the data for accuracy, exploratory factor analysis was performed for factor clarification on five key scales related to the use of internet banking service delivery based on technology, channel, social, value for money and continued use factors. The final components that emerged were employed in hierarchical multiple regression and hierarchical logistic regression analyses to test the proposed framework. Finally, thematically-clustered matrix displays were used to identify relevant macro and micro themes to categorise the qualitative data.

Several major substantive findings emerged from the present study. Value for money factors significantly and positively influenced consumers' continued and frequent use of internet banking. The channel factors that were identified consisted of perceived safety and perceived specialty components and demonstrated a positive and

significant impact on consumers' continued use of internet banking. With regard to consumers' frequent use of internet banking, the perceived safety component was found to be significant and perceived specialty component non-significant. Among the influence exerted by the technology factors, the perceived usability and perceived trialability components were found to predict a significant and positive increase in both consumers' continued and frequent use of internet banking. Social factors were found not to be significantly associated with consumers' continued and frequent use of internet banking. Demographic characteristics were not systematically influential on consumers' continued use of internet banking; however, the demographic characteristics of level of education and level of income of research participants were found to predict a positive and significant increase in consumers' frequent use of internet banking.

The qualitative data revealed that non-users of internet banking were hindered by factors such as 'security', 'trust', 'risk', 'value', 'lack of resources', 'social influence', 'technology apprehension', 'interactivity', 'preference to other channels', 'routine', 'past users', and 'performed by spouse'. Whereas, users revealed factors such as 'unable to perform over the internet', 'lack of internet access', 'not sure of something', 'problem rectification', 'proximity to auxiliary facilities' and 'type of internet connectivity' were relevant in identifying the circumstances under which they preferred to use other banking channels. Internet banking users' perceptions regarding electronic banking methods and their experiences with the use of internet banking revealed factors such as 'positive perceptions' encompassing 'convenient', 'easy to use', 'user friendly', 'compatible', 'advantageous', 'quality', 'time saving', 'fast', 'no fees' and 'independence', 'negative perceptions' relating to 'convenient for banks', 'saves costs for banks', 'forced to do', 'not much difference', and 'still need to go to the bank', 'dual perceptions' consisting of 'convenient to banks and customers', 'saves costs to banks and customers' and 'saves time to banks and customers', 'positive experiences' including 'benefits outweigh clearly' and 'change in lifestyle'. Whereas, 'negative experiences' emphasise on factors such as 'safety', 'fraud', 'lack of personal help', 'presence of fake websites' and 'hacking'.

Value for money, channel and technology factors were found, in that order, to be influential in predicting consumers' continued and frequent use of internet banking. Overall, the study had several theoretical and managerial implications. Future research should employ integrated theory testing, such as that used in this study, in order to overcome the inadequacies associated with single theory testing. The application of quantitative and qualitative components in the methodology enhances the credibility of the findings obtained. Qualitative data identified some new themes as well as supporting the story that emerged from the quantitative analysis. The study provides important implications for the formulation of effective service delivery channel management strategies by way of implementing effective mechanisms to protect consumers' sensitive data through adequate control. Moreover, the study also outlines important guidelines for practical solutions in order to reduce the barriers to internet banking adoption thus creating business customer value. With the information provided by this research, bank executives, consultants and academics will have enhanced knowledge of the service areas they need to focus on to improve customer satisfaction, retention and profitability in the financial services businesses.

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#### **ABBREVIATIONS**

ABA Australian Bankers' Association ABS Australian Bureau of Statistics

ACCC Australian Consumer and Competition Commission

**APRA** Australian Prudential Regulation Authority

ASB **Auckland Savings Bank** 

Australian Securities and Investments Commission ASIC

Automated Teller Machine ATM

BM Bank Muscat BOA Bank of Asia BOT Bank of Thailand

**CABS** Central Africa Building Society

CBN Central Bank of Nigeria

COB Capital One Bank

DBS Development Bank of Singapore

Electronic Funds Transfer at Point of Sale **EFTPOS** 

GDP **Gross Domestic Product** 

**HSBC** Hong Kong Shanghai Banking Corporation Industrial and Commercial Bank of China **ICBC** 

KTB Krung Thai Bank

Monetary Authority of Singapore MAS MISC Market Intelligence Strategy Centre **NBFI** Non-Bank Financial Intermediaries National Bank of New Zealand **NBNZ** 

NBO National Bank of Oman

NSW New South Wales

**OCBC** Overseas Chinese Banking Corporation

OECD Organisation for Economic Co-operation and Development

OUB Overseas Union Bank

Personal Identification Number PIN RBA Reserve Bank of Australia Standard Chartered Bank SCB SDF Savings Deposit Fund SMS Short Message Service SSL Security Socket Layers TFB Thai Farmer Bank United Arab Emirates UAE

UK United Kingdom

UNCTAD United Nations Conference on Trade and Development

United Overseas Bank UOB United States of America USA

### STATISTICAL ABBREVIATIONS

Estimated regression weight for each predictor В

Degrees of freedom Df

F F-ratio

**HMR** Hierarchical multiple regression

KMO Kaiser-Meyer-Olkin

Kolmorogov-Smirnov test K-S test

Number of participants in overall sample N

NS Non-significant  $\frac{P}{R^2}$ Significance value

Coefficient of multiple determination

S. E. Standard error

Statistical Package for Social Sciences SPSS Squared part (semi-partial) correlations  $sr^2$