

**A PRELIMINARY STUDY ON ADOPTION OF SMS BANKING AMONG
CUSTOMER'S IN LIBYA**

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ABSTRACT

Banking has always been a highly information intensive activity particularly over the last few decades that information and Communication technology (ICT) has affected the banking industry heavily. The appearance of SMS banking services has changed the nature of financial services delivery costumers. One of the most growing phenomenon's in financial services is mobile internet banking. The purpose of this study is explorer the adoption of SMS banking among Libya customers, an emerging Middle East economy in the area. The present study modifies the technology acceptance model and applies it to banks customers in Libya. By providing SMS banking services, banks can get notable cost saving, reduce their branch networks, and improve efficiency. But since customers do not adopt and use these service, banks cannot profit from them. A numbers of Libya banks recently have started to offer SMS banking services to their customers, but the fact it got a respectable reaction from people' point of view. A model of TAM with factors from perceived innovation attributes and the personal characteristics of adopters have been developed to identify the most factors that influence SMS banking adoption among Libya customers. Also I used this section describes the research methods used to test the hypothesis developed based on the Theory of technology acceptance model (TAM) as the underpinning theory to the SMS Banking Adoption. The result of this study were contribute were positively related to SMS banking adoption as hypothesized. The positive association between combination among all independent variables (ease of use, usefulness, credibility, compatibility and observability) was supported.

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CHAPTER ONE

INTRODUCTION

1.1. Research issues

Indeed, during the last decade, the number of banks that recognized the benefits of SMS banking services and adopted SMS banking increased dramatically. While in globally, only one bank has offered SMS banking services in 2001, but by the end of 2002 this number increased to 6,000 banks (Claessens et al., 2003). In recent years, many of research studies have been conducted investigating the characteristics of banks that adopted SMS banking, and most of these studies find that large and new banks which are located in highly populated expensive urban areas are likely to adopt SMS banking (Furst et al., 2000a; Daniel, 1999).

This research can contribute to an improved understanding of the factors related to user's acceptance of new technology. In particular, this study acts as an understanding of the theory of (TAM). Also, this research can contribute to an understanding of the acceptance of SMS banking in LIBYA banking industry sitting.

The study has three aims. The first is to determine if the basic demographic factors influence the SMS usage for banking in libya. The second is to examine the factors that affect the adoption of SMS-banking. The third is to investigate if there are any differences between the SMS and non-SMS users relating to the various factors.

The contents of
the thesis is for
internal user
only

REFERENCE

- Agarwal, R. and Prasad, J. (1998), "the antecedents and consequents of user perceptions in information technology adoptions", *Decisions Support System*, Vol. 22, pp. 15-29.
- Ajzen, I. & Fishbein, M. (1980). "Understanding attitudes and predicting social behavior", Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I. (1991), "The Theory of Planned Behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50, Iss. 2.
- Ajzen, I. (1985), "Constructing a TPB Questionnaire: Conceptual and Methodological Considerations"
- Available: <http://wwwunix.oit.umass.edu/~aizen/pdf/tpb.measurement.pdf> [2005, July 13]
- Ajzen, I. (2002), "Residual Effects of Past on Later Behavior: Habituation and Reasoned Action Perspectives", *Personality and Social Psychology Review*, Vol. 6, No. 2.
- Ajzen, I. and Fishbein, M. (1977), "Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research", *Psychological Bulletin*, 84, 888-918.
- Anguelov, C. E., Hilgert, M. A., & Hogarth, J. M. (2004) U.S. consumers and electronic banking, 1995-2003. The Federal Reserve Board.
- Aladwani, A.M. (2003), Key internet characteristics and e-commerce issues in Arab Countries, *Information Technology & People*, 16 (1), 9-20.
- Attiyah, H.S.(1989)"Determinants of Computer System Effectiveness in Saudi Arabian Public Organizations", *International studies of management and organization*, Vol.19, No.2, pp.85-103
- Bhattacharjee, A. (2000), Acceptance of e-commerce services: the case of electronic Brokerage, *IEEE Transaction on Systems, Man, and Cybernetics-Part A: Systems and Humans*, Vol.30, No.4, pp.411-420.
- Cooper, D.R. and Schindler, P.S. (2003) *Business Research Methods* (8 th edn.) McGrawHill: New York.
- Bandura, A. (1977), "Self-efficacy: toward a unifying theory of behavioral change", *Psychological Review*, Vol. 84 No. 2.

- Bandera, A. (1982), "Self-efficacy mechanism in human agency", *American Psychologist*, Vol. 37.
- Chang, Y. (2002). Dynamics of banking technology adoption: An application to Internet banking. Working Paper. University of Warwick.
- Cheung, W., Chang, M.K. and Lai, V.S. (2000), "Prediction of internet and World Wide Web usage at work: a test of an extended triandis model", *Decisions Support System*, Vol. 30, pp. 83-100.
- Chiou, J. S. (1998), "The Effects of Attitude, Subjective Norm, and Perceived Behavioral Control on Consumers' Purchase Intentions: The Moderating Effects of Product Knowledge and Attention to Social Comparison information", *Proceedings of The Straits Times* (1997), "Cyberbanking will open new windows",
- Carolina Lopez-Nicolas^{a,*}, Francisco J. Molina-Castillo^a, Harry Bouwman^b (2008), *Journal*, An assessment of advanced mobile services acceptance: Contributions from TAM and diffusion theory models.
- G. Peevers, G. Douglas, M.A. Jack, (2008), *Journal*, A usability comparison of three alternative message formats for an SMS banking service).
- Tornatzky, L. G., and Klein, K. J. (1982) "Innovation Characteristics and Innovation Adoption Implementation: A Meta-Analysis of Findings," *IEEE Transactions on Engineering Management*, February, 25-45.
- Tornatzky, L.G. and Klein, K.J. (1982), "Innovation characteristics and innovation adoption Implementation: a meta-analysis of findings", *IEEE Transaction of Engineering Management*, Vol. 29 No. 1, pp. 28-45.
- VanHoose, D. (2003). *E-commerce economics*. Cincinnati, Ohio: South-Western/Thomson Learning.
- Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D. (2003), "User acceptance of information Technology: toward a unified view", *MIS Quarterly*, Vol. 27 No.2, pp.425-78.
- Venkatesh, V. and Davis, F.D. (2000), "A theoretical extension of the technology acceptance Model: four longitudinal field studies", *Management Science*, Vol. 45 No. 2.
- Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003), "User acceptance of Information technology: toward a unified view", *MIS Quarterly*, Vol. 27 No. 2.

- Wang, Y.S., Wang, Y.M., Lin, H.H., and Tang, T.I. (2003), "Determinants of user acceptance of SMS banking: An empirical study", *International journal of service industry management*, 14, 5, 501-519.
- Yousafzai, S.Y., Pallister, J.G., Foxall, G.R. (2003), "A proposed model of e-trust for electronic Banking", *Technovation*, Vol. 23 pp.847-60.
- Zeithaml, V. and Bitner, M. (2003), *Services Marketing Integrating Customers Focus Across the Firm*, Mc-Graw= Hill.
- Zeithaml and Gilly (1987), "Characteristics Affecting the Acceptance of Retailing Technologies: A Comparison of Elderly and Nonelderly Consumers," *Journal of Retailing*, Vol. 63, No. 1, 49-86.
- Hair r...r., Anderson, R.E. Tatham, L. and Black, W., (2003), *Multivariate Data Analysis 5th Edition*, Prentice Hall.