

**A STUDY OF E- BANKING IMPLIMENTATION IN THE LIBYAN
BANKING SECTOR: FROM EMPLOYEES PRESPECTIVE**

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Master of Science International Accounting

University Utara Malaysia

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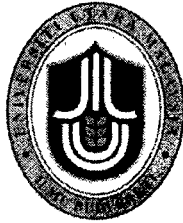
**A Thesis submitted to the UUM College of Business
In partial fulfillment of the requirement for the degree
Master of Science International Accounting
University Utara Malaysia**

By

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ABSTRACT

The topic of this paper is relationship between e-banking system and Libyan banks employees: A study in Libya. The main purpose of this study is to investigate the relationship between e-banking system and Libyan banks employees' perspective. This study was conducted among 128 banks in Libya that were listed in Algumhorea website only. The finding obtained from this study indicated that there was a significant, positive relationship between two variables .A positive relationship between e-banking system implementation and Libyan banks employees which lead to reduce transaction cost through e-banking system and make it happened faster. A survey from of this study was considered as questionnaires were distributed among the respondents of this study. The subsequent result shows that all the variables considered are significantly related to e-banking adoption. Recommendations and conclusions are also reported.

Keywords: Libyan Banking Industry, E-banking, technology adoption

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1 CHAPTER ONE: INTRODUCTION

1.1 INTRODUCTION

1.2 PROBLEM STATEMENT

1.3 RESEARCH QUESTION

1.4 RESEARCH SIGNIFICANT

1.5 RESEARCH OBJECTIVES

1.6 RESEARCH VARIABLES

1.7 CONCLUSION

CHAPTER ONE: INTRODUCTION

1.1 Introduction

With increased of competition and the tremendous advances in technology, it was necessary to achieve the competitive advantages of banking, which lead it to focus on accounting professionals' acceptance of e-filing system.

Libyan banks, despite recently acknowledging the benefits of e-banking technology in improving banking services, have not adopted and integrated this innovation within its banks. So it was essential to adopt this system to achieve their goals and win the competition, On the other hand the use of electronic banking technologies (e-banking) such as Automated Teller Machines (ATMs), tele-banking, home banking and internet banking, in the delivery of banking services and products has speedily become an essential aspect of contemporary banking systems (Mols, 1998). For the reason that banking services are informational (Bradley and Stewart, 2002) and can be simply automated and digitized (Porter and Millar, 1985). Most banks consider the adoption of e-banking technology as revenues to improve efficiency and performance, and service quality (Robinson, 2000).

The word e-banking is relatively new (Moenaert and Lievens, 2000), and more than a few definitions have been cited in the literature. Nevertheless, the majority of banking technology researchers and practitioners (e.g., Daniel, 1999; Keyes, 1999; Pikkarainen et al., 2006; Nikola et al., 2002; Lassar et al., 2005) agree that the concept of e-banking mentions to the system that enables banks to offer their customers access to their accounts to transact business and obtain information via electronic communication channels; these channels can include Automated Teller Machines (ATMs), tele-banking, home banking and internet banking (Turban, 1999).

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REFERENCES

- Abdul-Gader, A. (1997) Information Systems Strategies for Multinational Companies in Arab Gulf Countries, *International Journal of Information Management*, 7, 1, 3-12.
- Ajzen, I. and Fishbein, M. (1980) *Understanding Attitudes and Predicting Social Behaviour*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Ajzen, I. (1985) From Intentions to Actions: A Theory of Planned Behavior, in: Kuhl, J. and Beckmann, J. (Eds) *Action Control: From Cognition to Behavior*, New York, 11-39.
- Aladwani, A.M. (2001) Online Banking: A Field Study of Drivers, Development Challenges, and Expectations, *International Journal of Information Management*, 21, 3, 213-225.
- Alshawaf, A. (2001) Critical Issues of Information System Management in Kuwait, *Journal of Global Information Technology Management*, 4, 1, 5-26.
- Al- Sukkar, A. and Hasan, H.(2005) Toward a Model for the Acceptance of Internet Banking in Developing Countries, *Information Technology for Development*, 11,4, 381-398.
- Bradley, L. and Stewart, K. (2002) A Delphi Study of the Drivers and Inhibitors of Internet Banking, *International Journal of Bank Marketing*, 20, 6, 250-260.
- CBL, Central Bank of Libya. (2007) General News, <http://www.cbl.gov.ly/en/>.
- CBL, Central Bank of Libya. (2008) General News, <http://www.cbl.gov.ly/en/>.
- Centeno, C, (2004) Adoption of Internet services in Acceding and Candidate Countries, Lessons from the Internet Banking Case, *Telemetric and Informatics*, 21, 293-315.
- Chan, S.C. and Lu, M.T. (2004) Understanding Internet Banking Adoption and Use Behavior: A Hong Kong Perspective, *Journal of Global Information Management*, 12, 3, 21-43.
- Chen, T. (1999) Critical Success Factors for Various Strategies in the Banking Industry, *International Journal of Bank Marketing*, 17, 2, 83-91.

- Chau, P.Y.K. and Hui, K.L. (1998) Identifying Early Adopters of New IT Products: A Case of Windows 95, *Information & Management*, 33, 5, 225-230.
- Constantine, L. and Chaniotakis, L., (2005) Factors Affecting Acceptance of the Internet as a Marketing-Intelligent Tool among Employees of Greek Bank Branches, *International Journal of Bank Marketing*, 23, 6, 484-505.
- Cooper, R. and Zmud, R.W. (1990) Information Technology Implementation Research: A Technology Diffusion Approach, *Management Science*, 36, 2, 123-139.
- Daniel, E. (1999) Provision of Electronic Banking in UK and the Republic of Ireland. *International Journal of Bank Marketing*, 17, 2, 72-82.
- Danowitz, A., Nassef, Y. and Goodman, S. (1995), Cyberspace Across the Sahara: Computing in North Africa, *Communications of the ACM*, 38, 12, 23-28.
- Davis, F. (1986) Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results, Boston, MA, Massachusetts Institute of Technology.
- Davis, F., Bagozzi, R. and Warshaw, P. (1989) User Acceptance of Computer Technology: A Comparison of Two Theoretical Models, *Management Science*, 35, 8, 982-1003.
- Fichman, R.G. and Kemerer, C.F. (1999) The Illusory Diffusion of Innovation: An Examination of Assimilation Gaps, *Information Systems Research*, 10, 3, 255-275.
- Jaruwachirathanakul, B. and Fink, D. (2005) Internet Banking Adoption Strategies for a Developing Country: The Case of Thailand, *Internet Research*, 15, 3, 295-311.
- Kamal, M. (2006) IT Innovation Adoption in the Government Sector: Identifying the Critical Success Factors, *Journal of Enterprise Information Management*, 19, 2, 192- 222.

- Kamel, S. and Hassan, A. (2003) Assessing the Introduction of Electronic Banking in Egypt Using the Technology Acceptance Model, *Annals of Cases on Information Technology*, 5, 1-25.
- Karjaluoto, H., Mattila, M. and Pentto, T. (2002) Factors Underlying Attitude Formation towards Online Banking in Finland, *International Journal of Bank Marketing*, 20, 6, 261-272.
- Keyes, J. (1999) *Banking Technology Handbook*. CRS Press. London.
- Khalfan, A. and Alshawaf, A. (2004) Adoption and Implementation Problems of E-banking: A Study of the Managerial Perspective of the Banking Industry in Oman, *Journal of Global Information Technology Management*, 7, 1, 47-64.
- Khalfan, A., and Akbar, A. (2006), Adoption and Implementation Obstacles of E-Banking Services: An Empirical Investigation of the Omani Banking Industry, in: Kamel, S. (Ed.) *Electronic Business in Developing Countries: Opportunities and Challenges*, Hershey: Idea Group, 283-302.
- Lassar, W.M., Manolis, C. and Lassar, S.S. (2005) The Relationship between Consumer Innovativeness, Personal Characteristics, and Online Banking Adoption, *International Journal of Bank Marketing*, 23,2, 176-199.
- Liao, S., Shao, Y., Wang, H. and Chen, A. (1999) The Adoption of Virtual Banking: An Empirical Study, *International Journal of Information Management*, 19, 1, 63-74.
- Liao, Z. and Cheung, M.T. (2002) Internet-based E-banking and Consumer Attitudes: An Empirical Study, *Information & Management*, 39, 4, 283-295.
- Libya Investment (2004) General News, http://www.libyaninvestment.com/libya_news.php.
- Libya Investment (2007) General News, http://www.libyaninvestment.com/libya_news.php.

- Libyan Economic Forum (2007) Libyan Economic News, <http://www.aleqtisadi.net/details.php?id=3745>.
- Libyan News and Views (2007) General News about Libya, <http://www.libya-atanona.com>.
- Libyan News and Views (2008) General News about Libya, <http://www.libya-watanona.com>.
- Lymperopoulos, C. and Chaniotakis, I.E. (2004), Branch Employees' Perceptions towards Implications of E-banking in Greece, *International Journal of Retail and Distribution Management*, 32, 6, 302-311.
- Manross, G. and Rice, R. (1986) Don't Hang Up: Organisational Diffusion of the Intelligent Telephone, *Information and Management*, 10, 3, 161-175.
- Moore, G.C. and Benbasat, I. (1991), Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation, *Information Systems Research*, 2, 3, 173-191.
- Moenaert, R.K. and Lievens, A. (2000) Project Team Communication in Financial Service Innovation, *Journal of Management Studies*, 37, 5, 733-766.
- Mols, N.P. (1998) The Behavioral Consequences of PC Banking, *International Journal of Bank Marketing*, 16, 5, 195-201.
- Mols, N.P. (2001) Organizing for the Effective Introduction of New Distribution Channels in Retail Banking, *European Journal of Marketing*, 35, 5/6, 661-686.
- Nath, R., Schrick, P. and Parzinger, M. (2001) Bankers' Perspectives on Internet Banking, *E-Service Journal*, 1, 1, 21-36.
- Nehmzow, C. (1997) The Internet Will Shake Banking's Medieval Foundations, *Journal of Internet Banking and Commerce*, 2, 2, <http://www.arraydev.com/commerce/JIBC/9702-01.htm>.

- Nikola, S., Veljko, M., Kovacevic, M. and Nikola, K. (2002) E-banking in E-Business and E-Challenges, in: Milutinovic V and Patricelli F. (Eds) *Emerging Communication: Studies on New Technologies and Practices in Communication*, IOS Press, Netherlands.
- Pikkarainen, K., Pikkarainen, T., Karjaluoto, H. and Pahnla, S. (2006) The Measurement of End-user Computing Satisfaction of Online Banking Services: Empirical Evidence from Finland, *International Journal of Bank Marketing*, 24, 2/3,158-172.
- Porter, M.E. and Millar, V.E. (1985) How Information Gives you Competitive Advantage, *Harvard Business Review*, 63, 4, 149.
- Robinson, G. (2000) Bank to the Future, *Internet Magazine*, April 1st.
- Rogers, E.M. (1983) *Diffusion of Innovations*, New York: Free Press.
- Sathye, M. (1999) Adoption of Internet Banking by Australian Consumers: An Empirical Investigation, *The International Journal of Bank Marketing*, 17, 7, 324-333.
- Tan, M. and Teo, T. (2000) Factors Influencing the Adoption of Internet Banking, *Journal of the Association for Information Systems*, 1, 5, 1-42.
- Turban, E., Lee, J., King, D. and Chung, H.(1999) *Electronic Commerce: A Managerial Perspective*, Prentice Hall.