

# A Review of Online Banking in Saudi Arabia

Abdullah Saad M. Alzahrani

University of Wollongong, Australia

## Abstract

The aim of this study was to review the studies carried out on online banking in Saudi Arabia. Various databases were searched for keywords ‘Saudi Arabia & internet banking’, ‘Saudi Arabia & e-banking’, ‘Islamic banking & online services’ and ‘Saudi Arabia & online banking’. These studies were shortlisted as per the year of publication. Most of the studies included in this paper talked about the factors which drive online banking. Since banking in Saudi Arabia is Halal, one of the studies included also explored online services provided by Islamic banking. Studies reviewed show that the factors influencing the adoption of online banking in Saudi Arabia include customer’s attitude and trust, perceived risk, local expertise, quality of internet, religion and culture, security and reliability, and perceived usefulness and ease of use.

**Keywords:** Computer Human Interaction, Online Banking, Saudi Arabia, Review

## Introduction

Customers, both individuals and companies, all over the world are rapidly switching over to internet banking, as a result of exponential advances in technology. In the developed world, technological advancements in the area of telecommunications and information technology have continued to revolutionize the banking industry. The developing world is also following the same path. As a result, a transition to online banking can also be witnessed in Saudi Arabia, which is considered to be the largest economy of the Middle East and one of the largest IT markets in the Middle East region (Kadi, 2017).

Recently, the Kingdom of Saudi Arabia has been focused on modernizing its economy in a bid to integrate it with the world economy. This has resulted in the growth of e-commerce activities. But, according to the study by Jehan and Ansari (2018), research in the field of Saudi internet banking is limited.

Banks in Saudi Arabia are increasingly beginning to use the internet and smart phones to offer their services. According to Sohail & Al-Jabri (2014), with the rapid advancements in wireless technology and mobile devices, banks in Saudi Arabia have started offering a number of services like payment of credit card bills, loan instalments, transferring funds between accounts and making remittances to beneficiaries in other banks locally or abroad through the internet and mobile phones.

## Methodology

In this paper, we will review some of the research studies which have been carried out on the subject of online banking in Saudi Arabia. Towards this end, specific search terms were used in Google Scholar search engine, such as “Saudi Arabia & internet banking”, and “Saudi Arabia & online banking”. The results of these searches were shortlisted as per the year of publication. For the purpose of this study, only studies published after 2005 were used, in order to examine online banking in Saudi Arabia.

## Results and Discussion

Banks in Saudi Arabia operate in a very competitive environment where the competition for customer deposits and investments is intense. Many licensed foreign banks have opened branches in Saudi Arabia over the last few years. Customers have more options to shop around for more competitive products and service offerings (Alsheikh & Bojei, 2014). Hence, banks try to provide state-of-the-art services for their customers, especially at the retail or personal level (Al-Jabri, 2015). But there are studies which show that online banking has not been as pervasive in the country when compared to the developed world.

Some studies say that online banking has not been fully utilized in Saudi Arabia. In Saudi Arabia, internet banking is still in its early stages and it is not utilised as a considerable savings tool in operating costs for banks and in improving customer relationships (Al-Somali, Gholami, & Clegg, 2008). Studies such as the study by Al-Somali, Gholami & Clegg (2008) say that there are limited researches that have studied the factors which influence customers' behaviour to adopt or use Internet banking in Saudi Arabia. Hence, the use of online banking in Saudi Arabia is still not as pervasive as in the developed world. Also, the research available on the factors influencing the adoption of internet banking in Saudi Arabia is also very limited.

Even then, the Kingdom of Saudi Arabia has seen an increase in the use of ICT over the last few years. According to the Communication and Information Technology Commission (CITC) in Saudi Arabia, factors such as reduced costs of internet access and purchase of smart devices, fiber optic networks availability, and e-government applications have helped to increase internet penetration in the country from one million in 2001 to about 15.8 million by 2012 (Chung, & Kwon, 2009 – as cited in Alsheikh & Bojei, 2014). This increased internet penetration in the country has led to an increase in the adoption of e-commerce as well as e-banking technology by Saudi customers.

Electronic banking is one of the most successful business-to-consumer applications in electronic commerce (Pousttchi & Schurig 2004 – as cited Al-Jabri & Sohail, 2012). There are various factors which affect the adoption of online banking in any country. There have been studies which have discussed these factors in connection with Saudi Arabia specifically. Factors such as increased internet penetration, more customers purchasing smart devices, greater internet speeds, and technological innovations in banking have helped in the faster adoption of online banking in Saudi Arabia.

Several studies have found that customers mention various reasons for preferring e-banking over regular banking. These factors include transaction speed, lower management costs, greater control over service delivery, shorter wait time, a perception of more customized service and convenient access to services that is not limited by time or space (Lee, 2009; Montazemi & Qahri-Saremi, 2015, Ayo et al., 2016; Hui Ling et al., 2015; Lee, 2009; Tan & Teo, 2000; Yousafzai et al., 2003 – as cited in Jehan & Ansari, 2018).

### Definition

Many authors have defined 'online banking'. According to Al-Somali, Gholami, & Clegg (2008), Internet banking is defined as "the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit-taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money." (Basel

Committee Report on Banking Supervision, 1998, p.3 – as cited in Al-Somali, Gholami, & Clegg, 2008).

A study by Kazmi and Hashim (2015) says that according to some experts, online banking is a delivery of services through the use of computers and mobile sources. Others say that online banking is the delivery of information through the use of different platforms which includes the use of phone, internet, and television. In more broader terms, it involves the use of different facilities, in terms of access to accounts online, transfer of funds by using web sources and buying different products (financial) and services online (Lilesh Gautam, 2014 – as cited in Kazmi and Hashim, 2015)

According to a study by Keivani, Jouzbarkand, Khodadadi, & Sourkouhi (2012), e - banking involves consumers using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean the setting up of a web page by a bank to give information about its products and services. At an advanced level, it involves provision of facilities such as accessing accounts, transferring funds, and buying financial products or services online (Keivani, Jouzbarkand, Khodadadi, & Sourkouhi, 2012).

According to Keivani, Jouzbarkand, Khodadadi, & Sourkouhi (2012), Internet banking, sometimes called online banking, is an outgrowth of Personal Computer (PC) banking. Internet banking uses the Internet as the delivery channel to carry out banking activity, for example, transferring funds, paying bills, checking account balances, paying mortgages, and purchasing financial instruments and certificates of deposit. An Internet banking customer accesses his or her accounts from a browser— software that runs Internet banking programs resident on the bank's World Wide Web server, not on the user's PC. According to Keivani et al. (2012), NetBanker defines a "true Internet bank" as one that provides account balances and some transactional capabilities to retail customers over the World Wide Web. Internet banks are also known as virtual, cyber, net, interactive, or web banks (Keivani, Jouzbarkand, Khodadadi, & Sourkouhi, 2012).

### **Reasons for Internet Banking Infrastructure Investment**

According to Khalfan, et al., (2006) reasons for e-banking infrastructure investment include the promise of reducing transaction costs by limiting overheads associated with bank staff and bank branch costs and providing superior services to customers who increasingly desire 24-hour banking (-as cited in Al-Somali, Gholami, & Clegg, 2008). Banks are strongly encouraging customers to conduct transactions online because electronic banking lowers costs for these institutions. Almogbil (2005) notes that a common reason for bank adoption of e-banking is to maintain the bank's competitive position and image (as cited in Al-Somali, Gholami, & Clegg, 2008).

Banks around the world have increasingly adopted internet banking and have invested in the infrastructure required. As a result, the number of people who use online banking services has increased manifold. In 1994, only 150,000 people banked from their home computers but by 1999, this number had grown to 3.2 million (Orr and Ali 1999 – as cited in Servon & Kaestner, 2008). By 2004, 53 million people or 44% of Internet users and one-quarter of all adults were using online banking (Fox 2005 - as cited in Servon & Kaestner, 2008). In response to increased demand, banks are creating and expanding their online and e-banking presence (Furst, Lang, and Nolle 2001 - as cited in Servon & Kaestner, 2008).

### **Customers' Attitude and Trust**

Customer attitudes towards Internet banking are driven by trust, which plays an important role in increasing usability within the internet banking environment. The issue of trust is more important in online transactions as opposed to offline banking because transactions of this nature contain sensitive information and parties involved in the financial transaction are concerned about access to critical files and information transferred via the Internet (Alsajjan and Dennis, 2006; Suh and Han, 2002 - Al-Somali, Gholami, & Clegg, 2008).

Studies show that the relationship between attitude towards using and usage of internet banking is significant. Attitude towards using systems was significantly affected by perceived usefulness and ease of use, but usefulness was stronger in its relation with attitude to use (Davis, 1993, Taylor and Todd, 1995 – as cited in Al-Ghamdi, 2009). Other studies show that the effect of attitude on intention has been supported in the internet banking domain (Agarwal et al., 2009; Jaruwachirathanakul & Fink, 2005; Kleijnen et al., 2004; Tan & Teo, 2000 – as cited in Jehan & Ansari, 2018). This is because customers' attitudes are an important determinant of whether the technology will be accepted or rejected. Hence, it can be said that the attitude of Saudi customers towards newer banking technology has been positive, which has resulted in greater adoption of online banking in the country.

### **Perceived Risk**

Perceived risk is an important element of consumers' internet banking decision-making process (Libermann & Stashevsky, 2002 – as cited in Jehan & Ansari, 2018). Lee (2009) has defined perceived risk in internet banking as “the subjectively determined expectation of loss by an online bank user in contemplating a particular online transaction” (as cited in Jehan & Ansari, 2018).

Several studies discussed the influence of the perceived risk factor on individuals' attitude toward the adoption of the new technology services in general, and internet banking services, in particular (Tan & Teo, 2000 – as cited in Jehan & Ansari, 2018). According to Pavlou (2003), internet banking has a major weakness when it comes to consumer privacy; many researchers have reported consumer concerns about security and privacy (Lee, 2009; Cunningham et al., 2005 – as cited in Jehan & Ansari, 2018). Jahangir and Begum's (2008) study indicated that ease of use, privacy, security, perceived usefulness and consumer attitude toward use are positively and significantly related to customer adoption. Some online consumers are anxious about internet connection quality, and the possibility of poor connection quality poses a significant risk to banking transactions (Kuisma et al., 2007 – as cited in Jehan & Ansari, 2018).

### **Local Expertise**

Another factor which affects online banking is whether the production of software and hardware is domestic or if the bank is reliant on international software and hardware. In their study, Al-Ghaith, Sanzogni, & Sandhu (2010) found that there is no reliable local production in the fields of software or the hardware. According to Alferaihi (2003), the increased demand for ICTs is met by acquiring overseas technologies (as cited in Al-Ghaith, Sanzogni, & Sandhu, 2010). It can be said that international technologies may not be equipped to deal with the attitude and culture of the individual country.

### **Quality of Internet**

According to Al-Somali, Gholami, & Clegg (2008), quality of the Internet connection is seen to be an essential component for any Internet-based application. In their study, Al-Ghaith, Sanzogni, & Sandhu (2010) found that the quality of the Internet available was an important factor which influenced both the adoption and the usage of e-services in Saudi Arabia. People were more likely to adopt online services of good quality. This factor can also be assumed to affect the adoption of online banking in Saudi Arabia. In Saudi Arabia, the Internet was introduced in 1998 and is controlled by the Saudi government and fire walls were created to block users from accessing material on the Internet that violates religion or encroaches on the Saudi culture (e.g. pornographic sites) (Al-Somali, Gholami, & Clegg, 2008). The adoption of online banking in the country is impacted by the quality of internet available. Hence, in parts of the Kingdom which have poor internet connectivity or few internet service providers, the adoption of internet banking would be low.

### **Religion and Culture**

According to Al-Ghamdi (2009), banks need to understand which factors may influence and attract customers to use internet banking, so that they can build long relationships with existing customers. In their study on the Theory of Reasoned Action in Internet Banking among Saudi customers, Albarq & Alsughayir (2013) say that their research findings would be able to help service providers to better understand the attitude amongst existing Saudi users, which would come handy to them in the future in which in the future to set up “Saudi culture” in their premises in order to cater to the Saudi internet banking needs. The authors emphasize that Saudi internet banking users place greater importance on religious matters in financial transactions. Saudi Arabia is a country with strong religious beliefs, where Shari’ah (Islamic Law) is the constitution (Al-Somali, Gholami, & Clegg, 2008). As per Albarq and Alsughayir, their research is importance as it helps the current internet banking system, which is based on the western culture, to pay greater attention to the importance of both attitude and subjective norms which affect the customer’s usage of internet banking.

Islamic banks have also been providing online banking services to their customers. According to a study by Butt and Aftab (2012), the attitude towards Halal banking positively affects perceived e-service quality and overall e-satisfaction with the online services provided by Islamic banks. Since the banking sector in Saudi Arabia is predominantly Halal, the attitude of the customers towards Islamic banking will influence the perceived quality as well as the satisfaction of the online services being made available by these banks.

### **Security and Reliability**

Security and reliability of transactions over the internet is a very important factor which customers consider before adopting Internet banking (Al-Somali, Gholami, & Clegg, 2008). Some percentage of customers avoid electronic banking altogether as they perceive it as being easily susceptible to fraud. This perception can damage consumers’ confidence of the online system as a whole. In case of Saudi online banking users, security has also been found to be important. Security has been found an important factor that motivates Saudi users to adopt online banking (Alhinai et al., 2013; Alhaliq & AlMuhirat, 2016; Khalfan, 2006 – as cited in Jehan & Ansari, 2018). Pikkarainen concluded that absence of security in the online environment constitutes significant threats to users as they fear that their privacy may be compromised,

ending in loss of their funds (Pikkarainen et al., 2004; Yousafzai et al., 2010 – as cited in Jehan & Ansari, 2018).

### **Perceived Usefulness and Ease of Use**

According to the findings of Fawzy and Esawai (2017), factors important for the adoption of internet banking in Egypt were perceived usefulness and ease of use (as cited in Jehan & Ansari, 2018). The 2009 study by Amin showed that perceived usefulness, perceived ease of use, perceived credibility and social norm were statistically significant in case of online banking intention. Customers of online banking in Saudi Arabia are also likely to be influenced by the perceived usefulness as well as the ease of use of online banking.

### **Conclusion**

Online banking in Saudi Arabia is gaining traction gradually. The review shows that there have been studies carried out on various factors which impact the adoption of online banking in Saudi Arabia. These factors include customer's attitude and trust, perceived risk, local expertise, quality of internet, religion and culture, security and reliability, and perceived usefulness and ease of use. With increasing number of smart device users and e-commerce customers, Saudi Arabia shows potential, as one of the largest economies in the Middle East, to show rapid increase in the number of online banking customers.

### **References**

- Albarq, A.N., & Alsughayir, A. (2013). Examining Theory of Reasoned Action in Internet Banking Using SEM among Saudi Customers. *International Journal of Marketing Practices – IJMP*, 1(1), 16-30.
- Alsheikh, L., & Bojei, J. (2014). Determinants Affecting Customer's Intention to Adopt Mobile Banking in Saudi Arabia. *International Arab Journal of e-Technology*, 3(4), 210-219.
- Al-Ghaith, W., Sanzogni, L., & Sandhu, K. (2010). Factors Influencing the Adoption and Usage of Online Services in Saudi Arabia. *The Electronic Journal of Information Systems in Developing Countries*, 40(1), 1-32.
- Al-Ghamdi, A. (2009). Investigating Factors Affecting Customers of Using Internet Banking: A Comparison study between Saudi Arabia and the UK. In *Brunel Business School Doctoral Symposium*.
- Al-Jabri, I.M. (2015). The intention to use mobile banking: Further evidence from Saudi Arabia. *South African Journal of Business Management*, 46(1), 23-34.
- Al-Jabri, I.M., & Sohail, M.S. (2012). Mobile Banking Adoption: Application of Diffusion of Innovation Theory. *Journal of Electronic Commerce Research*, 13(4), 379-391.
- Al-Somali, S.A., Gholami, R., & Clegg, B. (2008). Internet Banking Acceptance in the Context of Developing Countries: An Extension of the Technology Acceptance Model.
- Amin, H. (2009). An Analysis of Online Banking Usage Intentions: An Extension of the Technology Acceptance Model. *International Journal of Business and Society*, 10(1), 27-40.

- Butt, M.M., & Aftab, M., (2013). Incorporating attitude towards Halal banking in an integrated service quality, satisfaction, trust and loyalty model in online Islamic banking context. *International Journal of Bank Marketing*, 31(1), 6-23.
- Jehan, S.N., & Ansari, Z.A. (2018). Internet Banking Adoption in Saudi Arabia: An Empirical Study. *International Journal of Marketing Studies*, 10(3), 57-72.
- Kadi, M. M. (2017) A review of the determinants of FDI in developing countries and their comparison with Saudi Arabia. *Journal of Contemporary Scientific Research* 1(5), 7-10.
- Kazmi, S.S.A., & Hashim, M. (2015). E-Banking in Pakistan: Issues and Challenges. *International Journal of Academic Research in Business and Social Sciences*, 5(3), 50-54.
- Keivani, F.S., Jouzbarkand, M., Khodadadi, M. & Sourkouhi, Z.K. (2012).International Proceedings of Economics Development and Research
- Servon, L.J., & Kaestner, R. (2008). Consumer Financial Literacy and the Impact of Online Banking on the Financial Behavior of Lower-Income Bank Customers. *The Journal of Consumer Affairs*, 42(2), 271-305.
- Sohail, M.S., & Al-Jabri, I.M. (2014). Attitudes towards mobile banking: are there any differences between users and non-users?. *Behaviour and Information Technology*, 33(4), 335-344.