# **E-BANKING: REVIEW OF LITERATURE**

Anukool Manish Hyde\*

A feature of the banking industry across the globe has been that it is increasingly becoming turbulent and competitive, characterized by an increasing trend towards internationalization, mergers, takeovers and consolidation of the banking industry. Moreover a number of nonbanking companies are entering the banking industry by offering financial products and services (e.g., Toyota's credit card, GM's auto financing, Merrill Lynch investments). This has given a myriad of options to customers in choosing banking services. Internet banking has attracted the attention of banks, securities trading firms, brokerage houses, insurance companies, regulators and lawmakers in developing nations since the late 1990s. With the rapid and significant growth in electronic commerce, it is obvious that electronic (Internet) banking and payments are likely to advance. This study attempts to explore literature review on e-banking and gives conclusion on the basis of past studies.

Key Words: e-banking, Information technology, Internet.

<sup>\*</sup>Associate Professor, Prestige Institute of Management and Research

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### **INTRODUCTION**

Today's world is one with increasing online access to services. One part of this which is growing rapidly is online banking. Combined with online retailers there is a lot of money changing hands, directed only by communication over the internet. This is very convenient and the ready access to the internet in all first-world countries, coupled with the cost savings from closing bank branches, is driving the deployment and adoption of these services. Purely online transactions, however, lead to increased risk. None of the normal safeguards of realworld transactions are present. Conversely, risk to the criminals is a lot lower (the attacker can be in a completely separate jurisdiction from all the other parties in the transaction) and the retailer sees nothing but a faceless, nameless connection providing card details. Banks have traditionally been in the forefront of harnessing technology to improve their products, services and efficiency. They have, over a long time, been using electronic and telecommunication networks for delivering a wide range of value added products and services. Penalty due to non-payment of bill is not new to anyone of us. And quite obviously, who likes the long procedure of writing a cheque, standing in a long queue and then ensuring that the particular amount is available in your bank account? Indian banks are trying to make our life easier. Not just bill payment, we can make investments, shop or buy tickets and plan a holiday at your fingertips. Services are as under:

#### Bill Payment Service

Almost all banks have tie-ups with various utility companies, service providers and insurance companies, across the country. One can facilitate payment of electricity and telephone bills, mobile phone, credit card and insurance premium bills. To pay bills, all we need to do is complete a simple one-time registration for each biller. We can also set up standing instructions online to pay your recurring bills, automatically. One-time standing instruction will ensure that we don't miss out on our bill payments due to lack of time. Most interestingly, the bank does not charge customers for online bill payment.

#### • Fund Transfer

One can transfer any amount from one account to another of the same or any another bank. Customers can send money anywhere in India .Once we login to our account, we need to mention the payees' account number, his bank and the branch. The transfer will take place in a day or so, whereas in a traditional method, it takes about three working days.

#### Credit Card Customers

Credit card users have a lot in store. With Internet banking, customers can not only pay their credit card bills online but also get a loan on their cards. Not just this, they can also apply for an additional card, request a credit line increase and we can forbid if we lose our credit card, we can report lost card online.

#### Railway pass

This is something that would interest all the *aam janta*. Indian Railways has tied up with ICICI bank and we can now make our railway pass for local trains online. The pass will be delivered to us at our doorstep. But the facility is limited to Mumbai, Thane, Nashik, Surat and Pune. The bank charge quite nominal service tax for these services.

#### Investing through Internet Banking

Opening a fixed deposit account cannot get easier than this. One can now open an FD online through funds transfer. Online banking can also be a great friend for lazy investors. Now investors with interlinked demat account and bank account can easily trade in the stock market and the amount will be automatically debited from their respective bank accounts and the shares will be credited in their demat account. Moreover, some banks even give the facility to purchase mutual funds directly from the online banking system.

So one need not worry about filling those big forms for mutual funds, they will now be just a few clicks away. Nowadays, most leading banks offer both online banking and demat account. However if you have your demat account with independent share brokers, then you need to sign a special form, which will link your two accounts.

### Recharging your Prepaid Phone

Now there is no need to rush to the vendor to recharge prepaid phone, every time when talk time runs out. We just need to top-up our prepaid mobile cards by logging in to Internet banking. By just selecting our operator's name, entering our mobile number and the amount for recharge, our phone is again back in action within few minutes.

#### Shopping at your fingertips

Leading banks have tie ups with various shopping websites. With a range of all kind of products, we can shop online and the payment is also made conveniently through our account. We can also buy railway and air tickets through Internet banking.

# LITERATURE REVIEW

E-banking is an innovation when new information technologies merge into traditional banking services. Operating costs minimization and revenue maximization are the major drivers that boost e-banking services (Sannes, 2001; Reibstein, 2002). E-banking service is basically a self-service by customers, so for banks, it requires less resources and lower transaction and production costs (Southard and Siau, 2004; Witman and Poust, 2008). A study about the e-banking over 1999–2006 shows that the application of e-banking can improve banks' performance in terms of the growth in assets, reduction in operating expenses and portfolio enhancement (Dandapani et al., 2008). Even in 1990s, Sraeel (1996) emphasises that creating virtual banking will not only create a new service delivery channel, but also lead to value creation to both banks and customers (Hwang et al., 2007; Murphy, 2007). Amato-McCoy (2005) further argues that customers will be attracted to e-banking when the advanced e-banking services like e-transfer and e-bill options are available. Through interviewing banks in a small island and examining their e-banking websites from 2004 to 2006, Jenkins (2007) indicates that those banks were using e-banking as an assurance to their customers to maintain a competitive quality of service. To continually improve the performance of e-banking services, several core-capacities are critical:

- Planning new IT infrastructure
- Enhancing transaction security
- Providing value-added content
- Delivering differentiated services
- Managing customer relationships
- The retention and expansion of relationships with relative older and lower IT awareness customers (Wu et al., 2006).

Consumers today are much selective in choosing banking services in terms of their demands and preferences. To be competitive, banks must develop services to satisfy customers as well as delight them at the same time. Liao and Cheung (2002) indicate that the most important quality attributes underlying perceived usefulness of e-banking are expectations of accuracy, security, network speed, user-friendliness, user involvement and convenience. A basic Electronic Service Quality standard is developed with four dimensions: efficiency, fulfilment, system availability and privacy (Parasuraman et al., 2005; Ibrahim et al., 2006). Herington and Weaven (2007) indicate that online service quality has no direct impact on customer delight, e-trust or the development of stronger relationships with customers, but it does have a relationship to e-loyalty. Their research also indirectly explains the change of households of using online banking service. For example, in 2003, 91% of US households held bank accounts and 93% of those used at least one electronic transfer of funds option with their account (Kolodinsky and Hogarth, 2004). However, Fest (2007) points out that only 40% of US households took advantage of e-banking service, whereas over 50% of households that had not been attracted yet to e-banking because those customers might have had a bad experience on a self-service site (Swann, 2008). The winners in e-banking industry are those banks that are able to successfully enhance their offerings while simultaneously enhancing security measures and getting customers to believe in them (Rombel, 2006). In addition, for all e-banking customers, customer satisfaction is affected not only by banks' service quality, but also by their cultural features (Levesque and McDougall, 1996).

E-banking in developing countries grows rapidly in the past decade (Akinci et al., 2004). Their research indicates that for consumers' attitudes and adoption towards e-banking, there were significant differences between the two groups, e-banking users and non-e-banking users, with respect to demographic profiles, attitudinal properties and preferences for service delivery channels. For instance, in China, there were only 6000 computers connected to the internet with 40,000 internet users in 1995, but there were 10.2 million internet-connected computers and 26.5 million internet users nationwide by the end of June 2001 (Zhao, 2002). Lu et al. (2005) reveal that one of the key strategic responses of banks in China before joining WTO was to develop e-banking to a more competitive environment, even under the current condition of lack of practical customer credit system. In another research, Laforet and Li (2005) examine the extent of e-banking and m-banking in China by investigating its market status, identifying the target customers, the demographic characteristics of users and non-

users, and comparing their attitudes towards e-banking adoption. They conclude that there was a low awareness of such services in China, owing to security concerns, perceived risks, low computer skills and a Chinese tradition of cash-carry banking.

The rise of Internet Banking is also due to its number of benefits for both the provider and the customer as well. From the bank's perspective these are mainly related to cost savings (Sathye, 1999; Robinson, 2000) and internet banking remain one of the cheapest and more efficient delivery channels (see Pikkarainen et al, 2004). Other rationales for the adoption of such services are also related to competition as internet banking strategy has been an interesting way to retain existing customers and attract new ones (Robinson, 2000) and to the numerous advantages to banks for instance, mass customization, more effective marketing and communication at lower costs amongst others (Tuchila, 2000). Benefits for the end users are numerous as well and include mainly conveniency of the service (time saved and globally accessible service), lower cost of transaction and more frequent monitoring of accounts among others (Pikkarainen et al, 2004). However, it should also be noted that there are still customers who fear to make use of Internet banking, as they are concerned with security aspects of such a system.

Centeno (2004) argues that speed, the convenience of remote access, 24/7 availability and price incentives are the main motivation factors for the consumers to use internet banking. Durkin et al. (2008) notes that the simplicity of the products offered via internet banking facilitates the adoption of internet banking by consumers. Calisir and Gumussoy (2008) compare the consumer perception of internet banking and other banking channels and report that internet banking, ATM and phone banking substitute each other. Maenpaa et.al. (2008) examine the consumer perceptions of internet banking in Finland and their findings indicate that familiarity has a moderating role in the perception. Guerrero et al. (2007) examine the usage of internet banking by Europeans and their results indicate that ownership of diverse financial products and services, attitude towards finances and trust in the internet as a banking channel influence clients" usage of internet banking. Confirming other papers, Sohail and Shanmugham (2003) document accessibility of internet, awareness of e-banking and resistance to change are found to be influencing Malaysians use of internet banking. Another factor that promotes clients usage of internet banking is seller support (Nilsson, 2007).

The rapid expansion of internet banking is most noticeable in the developed countries such as the USA where the availability of computers and easy access to the internet has made it easier for banks to adopt internet banking. Adoption of internet banking services in developing countries appears to be taking place at a slower pace. In recent years however, banks in developing countries are increasingly offering internet banking services despite the limitations they face. Polatoglu and Ekin (2001) reported that, since 1997 several leading Turkish banks have offered online banking services successfully. According to the Turkey banks association, 27 out of a total of 47 banks, in other words 58% of all banks in Turkey were offering internet banking services in 2006 (Banks Association of Turkey, 2006).

Joseph and Stone (2003) investigated the customer perception of the impact of technology on service delivery in the banking sector. According to the findings of this research, high scores on the ability to deliver service via technology appear to be correlated with high satisfaction with services deemed most important to customers. Hence, availability of internet banking services appears to be very important for banks for customer satisfaction and retention. However, availability of internet banking services itself is not a sufficient factor to increase customer satisfaction. User friendliness of the internet banking services appears to be an important for customers to use these services. In a similar study, Lang and Colgate (2003) found that customers who do not have IT gap, find it easier to use internet banking services therefore they have higher satisfaction levels than the ones who do not have IT skills. The empirical study by Broderick and Vachirapornpuk (2002) also show that the level and nature of customer participation in using internet banking services has the greatest impact on the perception of service quality.

# CONCLUSION

Studies show that the mostly used e-banking services are inter account transfer, payment to other personal account, transfer to credit card account, recharge mobile phones, standing order transactions, savings, current and fixed deposit account application and debit/ credit card. No doubt studies reveal that e-banking reduces time in transactions as well as crowd in the banks. One can easily sit at home or at cyber to have transfer of money, recharge of vouchers, making FD's, etc. Few banks have offered full-service online banking successfully. Banks have not only provided e-banking facility to the customers but also increased the

satisfaction level of customers. In India, people are still not fully aware of advantages of ebanking but those who are tech savvy are using e-banking successfully. There was a time when customers used to go the bank, Insurance companies, and railway station for various purposes and used to stand in long queue for hours and hours but now many people prefer ebanking to save time, energy, fuel, money etc. Important thing is that people need to be technically sound so that they can use e-banking facility properly. Banks should also generate trust in the minds of customers that e-banking is safe.

## REFERENCES

Akinci, S., Aksoy, S. and Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. *The International Journal of Bank Marketing*, 22, (2–3), 212–219.

Amato-McCoy, D.M. (2005). Creating virtual value', *Bank Systems and Technology*. 42, (5), 22–27.

Broderick, A. and Vachirapornpuk, S. (2002). Service Quality in Internet Banking: The Importance of Customer Role. *Marketing Intelligence and Planning*, 20, (6), 327-335.

Calisir F. and Gumussoy, C. A., (2008). Internet banking versus other banking channels: Young consumers' view. *International Journal of Information Management*, 28, 215-221.

Centeno, C. (2004). Adoption of Internet services in the Acceding and Candidate Countries, lessons from the Internet banking case, *Telematics and Informatics*, .21, 293-315.

Dandapani, K., Karels, G.V. and Lawrence, E.R. (2008). Internet banking services and credit union performance. *Managerial Finance*, 34,(6),437–447.

Fest, G. (2007). Internet banking: luring the laggards will require enhancements: banks need added functionality to interest the millions of households yet to enroll in web banking. Vendors are adapting their wares accordingly. *Bank Technology News*, 20,(5),18.

Guerrero, M. M., Egea, J. M. O. and Gonzalez, M. V. R. (2007). Application of the latent class regression methodology to the analysis of Internet use for banking transactions in the European Union. *Journal of Business Research*, 60, 137-145.

Kolodinsky, J.M. and Hogarth, J.M. (2004). The adoption of electronic banking technologies by US consumers. *The International Journal of Bank Marketing*, 22(4), 238–259.

Han, L. (2008). Bricks vs. clicks: entrepreneurial online banking behaviour and relationship banking. *International Journal of Entrepreneurial Behaviour and Research*, 14(1), 47-60.

Herington, C. and Weaven, S. (2007). Can banks improve customer relationships with high quality online services. *Managing Service Quality*, 17(4), 404–414.

Hwang, H.G., Chen, R.F. and Lee, J.M. (2007). Measuring customer satisfaction with internet banking: an exploratory study. *International Journal of Electronic Finance*,1 (3),321–335.

Jenkins, H. (2007). Adopting internet banking services in a small island state: assurance of bank service quality. *Managing Service Quality*, 17(5), 523–534.

Joseph, M. and Stone, George (2003). An Empirical Evaluation of US Bank Customer Perceptions of the Impact of Technology on service Delivery in The Banking Sector. *International Journal of Retail and Distribution Management*, 31(4), 190-202.

Laforet, S. and Li, X.Y. (2005). Consumers' attitudes towards online and mobile banking in China. *The International Journal of Bank Marketing*, 23(4–5), 362–381.

Lang, Bodo and Colgate, Mark (2003), Relationship Quality, On-Line Banking and The Information Technology Gap. *International Journal of Bank Marketing*, 21(1), 29-37.

Levesque, T. and McDougall, G.H. (1996).Determinants of customer satisfaction in retail Banking. *International Journal of Bank Marketing*, 14(7),12–20.

Liao, Z.Q. and Cheung, M.T. (2002). Internet-based e-banking and consumer attitudes: An empirical study', *Information and Management*, 39(4), 283–292.

Lu, M.T., Liu, C.H., Jing, J. and Huang, L.J. (2005). Internet banking: strategic responses to the accession of WTO by Chinese banks. *Industrial Management and Data Systems*, 105(3–4),429–443.

Murphy, P.A. (2007). Digital DIVIDE. Independent Banker, 57(11), 57.

Nilsson, D. (2007), Internet Banking and the Impact of Seller Support and Third Party *Journal of Internet Banking and Commerce*, 12 (1), 1-9.

Parasuraman, A., Zeithaml, V.A. and Malhotra, A. (2005). E-S-qual: a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–234.

Pikkarainen, T.; Pikkarainen, K.; Karjaluoto, H. and Pahnila, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet Research*, 14, (3), 224–235.

Polatoglu, V.N. and Ekin, S.(2001). An Empirical Investigation of the Turkish Consumers' Acceptance of Internet Banking Services. *International Journal of Bank Marketing*, 19(4), 156-165.

Reibstein, D.J.(2002). What attracts customers to online stores, and what keeps them coming back?. *Academy of Marketing Science Journal*, 30,(4), 465–474.

Robinson, G. (2000), 'Bank to the future', Internet Magazine.

Rombel, A. (2006).Banks build on twin pillars of security and service. *Global Finance*, 20(8), 39–43.

Sannes, R. (2001). Self-service banking: value creation models and information exchange', *Informing Science*, 4(3), 12–23.

Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation', *International Journal of Bank marketing*, 17(7), 324-334.

Sohail, M.S. Shanmugham, B. (2003). E-banking and Customer Preference in Malaysia: An Empirical Investigation. *Information Science*, 150, 207-217.

Southard, P.B. and Siau, K. (2004). A survey of online e-banking retail initiatives. *Communications of the ACM*, 47(10), 99–102.

Sraeel, H. (1996). Creating real value propositions with virtual banking', *Bank Systems and Technology*, 33(8), 6–8.

Swann, J. (2008). Catering to consumer expectations online. Community Banker, 17(2), 55-56.

Tuchila, R. (2000). Servicii bancare prin Internet. E-finance Romania, 3(3), 23-32

Witman, P.D. and Poust, T.L. (2008). Balances and accounts of online banking users: a study of two US financial institutions. *International Journal of Electronic Finance*. 2(2), 197–210.

Wu, J., Hsia, T. and Heng, M.S. (2006). Core capabilities for exploiting electronic banking', *Journal of Electronic Commerce Research*, 7(2),111–123.

Zhao, H. (2002). Rapid internet development in China: a discussion of opportunities and constraints on future growth', *Thunderbird International Business Review*, 44(1),119–138.