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Electronic-banking (e-banking): Strengths and Weaknesses

Dr. Sudhakar D. Bhoite

Asso.Professor, Department Of Computer Studies, SIBER, Kolhapur

KEYWORDS:

Introduction

Electronic banking is the process by which a user(client) makes banking transactions electronically without visiting a physical institution. Below given terms all refer to one type or another of electronic banking: Personal Computer (PC) banking, Internet banking (net banking), virtual banking, online banking, home banking, remote electronic banking, and phone banking. PC banking and Internet or online banking are the most frequently used terms nowadays. It is to be noted, however, that the terms used to describe the various types of electronic banking are often used interchangeably. PC banking

Is a kind of on-line banking that allows customers to perform bank transactions from a PC via a modem. Frequently in PC banking process, the bank offers the customer a proprietary financial software program that allows the customer to perform financial transactions from his or her home computer. The customer then dials into the bank with his or her modem, downloads data, and runs the programs that are resident on the customer's computer. Currently, many banks offer PC banking systems that allow customers to obtain account balances and credit card statements, pay bills, and transfer funds between accounts. Internet banking

Is called as an online banking, has taken birth from the concept of PC banking. Internet banking makes use of the Internet as the transactional channel with the help of which to process banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying electricity bills, 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. Net Banker 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. As on today, more banks have established an advertising presence on the Internet— primarily in the form of informational or interactive web sites—than have created transactional web sites. However, a number of Banks that do not yet offer transactional Internet banking services have indicated on their web sites that they will offer such banking activities in the near coming future. Although Internet banks offer many of the same services as do traditional brick-and-mortar Banks, experts view Internet banking as a means of retaining increasingly sophisticated customers, of developing a new customer base, and of capturing a greater share of depositor assets. A typical Internet bank site specifies the types of transactions offered and provides information about account security. Because Internet banks generally have lower operational and transactional costs than do traditional brick-and-mortar banks, they are often able to offer low-cost checking and high-yield Certificates of deposit. Internet banking is not limited to a physical site; some Internet banks exist without physical branches, for example, Telebank (Arlington, Virginia) and Banknet (UK). Further, in some cases, web banks are not restricted to conducting transactions within national borders and have the ability to make transactions involving large amounts of assets instantaneously. According to industry experts, electronic banking provides a variety of attractive possibilities for remote account access, including:

- Provision for inquiry and transaction services around the clock;
- Without hurdle worldwide connectivity;
- At tip-of-finger access to transactional data, both recent and historical; and
- "Full and Direct customer control of international movement of funds without intermediation of financial institutions in customer's jurisdiction."

How to Open An Account?

Basically there are various ways to open and deposit an electronic banking account in some developed states in and around the globe. Customers who have existing accounts at brick-and-mortar banks and want to begin using electronic banking services may simply ask their institution for the software needed for PC banking or obtain a password for Internet banking. Either approach requires minimal paperwork. Once they have joined the system, customers have electronic access to all of their accounts at the bank. New customers can establish an account either by completing a PC banking application form and mailing it to an institution offering such a service or by accessing a bank's web site and applying online for Internet banking. In either instance, the customer can fund the new online account with a check, wire transfer, or other form of remittance. No physical interface between the customer and the institution is required. Due to E-banking it has possible to transform the banking business as it significantly lowers transaction and delivery costs. Thus customers do not have to visit the bank's premises. The focus here is to study different operational environments for public and private sector banks, the problems of security and authentication, management and regulation; and inadequate financing of small and medium scale enterprises (SMEs) are need to be touched upon.

The Need of E-banking:

Prior to e-banking the banking operations were carried as usual manually with some little technical support like facsimile, typing machine, calculator etc. The concept of banking has changed as quickly due to e-banking revolution. Through-out world banks are reorienting their business strategies towards new opportunities offered by e-banking. E-banking has enabled banks to scale borders, change strategic behavior and thus bring about new possibilities. E-banking has shifted real banking behavior closer to neoclassical economic theories of market functioning. Due to the absolute transparency of the market, clients (both business as well as retail) can compare the services of various banks more easily. For instance, on the internet, competitors are only one click away. If clients are not happy with the products, prices or services offered by a particular bank, they are able to change their banking partner much more easily than in the physical or real bank-client relationship. From the banks' point of view, use of the internet has significantly reduced the physical costs of banking operations. As discussed by Turner (2001), progress in information technology has slashed the costs of processing information, while the internet has facilitated its transmission, thus facilitating change in the very essence of the banking business. Around the world, electronic banking services, whether delivered online or through other mechanisms, have spread quickly in recent years. It must be noted that the impact of e-banking is not limited to industrial and advanced emerging economies. Even in countries with underdeveloped banking systems, E-banking has offered many new business opportunities.

E-banking Means:

In simple words, e-banking implies provision of banking products and services through electronic delivery channels. Electronic banking has been around for quite some time in the form of automatic teller machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the internet a new delivery channel that has facilitated banking transactions for both customers and banks. For custom-

ers, the internet offers faster access, is more convenient and available around the clock irrespective of the customer's location. For banks, it is a much more efficient and cost- saving channel.

Various Trends in E-banking

Though data on internet banking are scarce, and differences in definitions make cross-country comparisons difficult, a preliminary analysis by Nsouli and Schaechter from International Monetary Fund (IMF) shows that internet banking is particularly widespread in Austria, Korea, the Scandinavian countries, Singapore, Spain, and Switzerland, where more than 75 per cent of all banks offer such services [Nsouli and Schaechter 2002]. The Scandinavian countries have the largest number of internet users, with up to one-third of bank customers in Finland and Sweden taking advantage of e-banking. In the US, Internet banking is still concentrated in the largest banks. While most US consumers have accounts with banks that offer internet services, only about 6 per cent of them use these services. As of today, most banks have combined the new electronic delivery channels with traditional brick and mortar branches, but a few that have emerged offer their products and services only through electronic distribution channels. These 'virtual' or 'internet only' banks do not have a branch network but might have a physical presence, for example, an administrative office or non branch facilities like ATMs. The US has about 30 virtual banks; Asia has two, launched in 2000 and 2001; and the European (2) Figures taken from ICICI Bank Union has several, either as separately licensed entities or as subsidiaries or branches of brick and mortar banks. In developing economies, however, the spread of e-banking is much limited. Globally speaking, internet usage only starts to take off once the average purchasing power of citizens exceeds US $ 10,000, although of course this is also affected by the distribution of income. But there are some emerging economies, which have higher internet usage than their incomes would suggest such as Korea. An important factor that affects usage is the cost of connecting to the internet, which varies widely. This highlights the critical importance of an efficient telecommunications industry in developing economies. Thus overall picture gives us an idea about India's relative position in the penetration of information and telecommunications technology vis-a-vis other developed and emerging economies. Which reveals, an usage of personal computers (PCs) or the internet or total expenditure on 'IT and Telecom' as a per cent of GDP in India is on to-to low in comparative terms.

Indian Status

To tackle with the pressures of growing competition, various Indian commercial banks have adopted several ways and e-banking is one of them. It is witnessed that the competition has been tough for the public sector banks (PSBs), as the newly established private sector and foreign banks have made focus on their competitive strength. Few of the aggressive PSBs have been attempting hard to make their framework adjustable enough to accommodate Technological changes. Due to adoption of technology has facilitated alternative ways for providing services within the PSBs, and, in turn, put pressure on them to restrict or limit the Branch network and employ a better skilled workforce. E-banking, facilitated by the technological revolution, has strongly impacted strategic business considerations for Indian banks (including the PSBs) by cutting down costs of delivery and transaction massively. In India, currently, there are two types of customers – one who is a multi-channel user and the other who still relies on the branch as the anchor channel. The primary challenge for banks is to provide consistent service to customers irrespective of the kind of channel they use. The channels broadly cover the primary channels of branch (i e, teller, platform, ATM), phone (i e, call centre, interactive voice response unit), and internet channel (i e, personal computer, browser, wireless) banking. Banks in India have been working towards a vision that includes transformed branches, enhanced telephone services, and leading-edge internet banking functions that provide a consistently positive multi-channel experience for customers. Even for PSBs, the ongoing and future investments in technology are massive. At present, the cumulative amount earmarked by 10 major PSBs add up to a hefty Rs 2,200 crore plus (Table 3). It is expected that the provision of financial services through a versatile technology platform will enable these banks to acquire more customers, cut costs, and improve service delivery. Though many positive signs are already visible in India, including a higher acceptance of technology by banks and customers, it is a reality that most projects have not yet been deployed on a large scale.

E-banking in India: Major Problems

In India, it is found to be there is a risk of the emergence of a 'digital divide' as the poor are excluded from the use of the internet and so from the financial system. Empirical evidence shows that richer countries possess higher concentrations of internet users (higher than income concentration) in comparison with poorer countries [Hawkins 2002]. In India (where the poverty ratio is still adverse at 26.1 per cent of total population), it is likely that wealthier people will rapidly migrate to e-banking platforms leaving the poor to bear the cost of the physical infrastructure of branches in the form of transaction fees or non-competitive interest rates on their deposits. Second, even today, the operational environment for public, private and foreign banks in the Indian financial system is quite different. A handful of foreign banks operating in India first offered e-banking services to their customers such as ATMs, computerized monthly statements, secure online operations, etc. The new generation of private sector banks (who did have developmental obligations similar to their counterparts in the public sector) did not possess a legacy of manual practices and, hence, were able to adopt easily modern banking practices with state-of-the-art operations. However, challenges before the public sector banks are plenty and of a different kind. While, they have to handle volumes which are mind boggling, there are also issues of legacy, old habits and political pressures. Systems of accounting, control and delegation were set up decades ago and adoption of technology in terms of 'real time' banking and its compatibility with all phases of banking is not yet adequately perceived. Furthermore, the security risk involved in computerization is directly related to the size of the network. For PSBs, the major problems are in the form of security risks, network downtime, scarcity of trained personnel, expensive system upgrades and recurring costs given the massive scale of their current operations. A research study by Errol D'Souza (2002) on the comparative performance of public and private sector banks in the decade of the 1990s shows that though the turnover/employee ratio rose in PSBs, the turnover per employee in private and foreign banks doubled relative to the ratio for PSBs. Also, this is not due to the presence of a large rural and semi-urban concentration of bank branches amongst PSBs but rather due to technological up-gradation in the private and foreign banks. Private and foreign banks have changed the structure of their employment towards a higher skilled workforce by increasing the recruitment of officers

and reducing clerical and subordinate staff. The combination of higher technology and higher skills have posted a higher turnover for these banks as they have been able to provide better customer support and have managed their assets well. Third, confidentiality, integrity and authentication are very important features of the banking sector and were very successfully managed the world over in pre-internet times. Communication across an open and thus insecure channel such as the internet might not be the best base for bank-client relations as trust might partially be lost [Grethen 2001]. Though at different levels in the computerization spectrum, both public and private banks in India have realized the importance of Public Key Infrastructure (PKI) solutions. PKI is expected to guarantee the required level of trust and to provide for the security needs of all e-communities in terms of confidentiality, integrity, non repudiation services, etc. However, the size of the initiative is going to vary significantly between public and private banks. For private banks, security considerations are an important value added and risk reduction utility for their online and real time transactions. But for public sector banks, computerization is the first agenda – a massive exercise given their very large branch networks and security is the second priority. But this endangers the position of public sector banks in the immediate period as breaches of security and disruptions in the system's availability can damage a bank's reputation. The more a bank relies on electronic delivery channels, the greater the potential for reputational risks. Fourth, e-banking has created many new challenges for bank management and regulatory and supervisory authorities. They originate not just from increased potential for cross-border transactions but also for domestic transactions based on technology applications which raise many security related issues [Hawkins 2002]. The Basel Committee on Banking Supervision's Electronic Banking Group (EBG) (2001) has defined risk management principles for electronic banking. They primarily focus on how to extend, adapt, and tailor the existing risk-management framework to the electronic banking setting. It is necessary

to know whether the efforts undertaken by the RBI are sufficient to ensure a reasonable level of security .Fifth, there are some serious implications of international e-banking. It is a common argument that low transaction costs potentially make it much easier to conduct cross-border banking electronically. For many banks, cross-border operations offer an opportunity to reap economies of scale. But cross-border finance also needs a higher degree of cross-border supervision. Such cooperation may need to extend to similar supervisory rules and disclosure requirements (for efficiency and to avoid regulatory arbitrage) and some harmonizing of legal, accounting and taxation arrangements. The real question here is whether India at the present juncture is adequately prepared to face the consequences of cross border e-banking? Sixth, there is no commercial bank in India, which has exclusively specialized in the small business segment. SMEs in India have generic problems like the inability to provide quality data, to exhibit formal systems and practices and the lack of asset cover. This has created unwillingness in banks to undertake large-scale lending to SMEs. Legal and regulatory compliance has also been inadequate. Traditional drawbacks like asymmetric and nontransparent data and low capital bases continue to characterize their balance sheets. The problem is further compounded due to the preponderance of a large cash economy in this segment. There are many challenges involved in a web-based relationship model for SMEs within India given the current state of regulation [Sushant Kumar 2001]. 5380 Economic and Political Weekly December 27, 2003

E-banking Regulations in India

At present, there are three major statutes or guidelines governing e-finance operations within India, notably, The Information Technology Act, 2000; The Information Technology (Certifying Authorities) Rules 2000; and Central Bank (Reserve Bank of India (RBI)) guidelines on Internet Banking in India. The RBI guidelines have defined the operational framework on internet banking with a focus on security issues. Though the RBI has mandated that the commonly used PKI technology standard should be followed, no compulsory timeframe has been set for the same so far. However, the guidelines detail the organizational, operational, and supervisory structures that banks will have to implement while offering internet banking. The IT Act 2000 and the IT Rules for Certifying Authorities lay down the framework for appointment of digital certifying authorities, acceptance of digital signatures, etc, which would enable the orderly development of cyber business [Sushant Kumar 2001]. However, there is a feeling that the Act has not given enough power to safeguard E-banking from frauds and complexities. With many sites getting hacked and content being changed, it is felt that the IT Act should have given more powers to deal with the complexities of the virtual world.

Usage of E-banking in India for Strategic Advantage

Nobody would deny that electronic banking is the wave of the future. Though the 'practice' of e-banking in India is quite limited, there is a huge potential for it given its impact on the cost and efficiency of financial intermediation. As suggested by Claessens, Glaessner and Klingebiel (2001), developing countries in general have an advantage as they can learn from the experience of advanced economies. It may even be possible for them to leapfrog straight to the most advanced technologies. They can put in place appropriate policies (especially regarding security aspects) before e-banking becomes widespread rather than reacting to it at the time of implementation.

Vital Issues In Internet Banking

The survey conducted by the Online Banking Association, member institutions indicates security as the most important issue of online banking. There is a dual requirement to protect customers' privacy and protect against fraud. Banking Securely: Online Banking via the World Wide Web provides an overview of Internet commerce and how one company handles secure banking for its financial institution clients and their customers. Some basic information on the transmission of confidential data is presented in Security and Encryption on the Web. A multi-layered security architecture comprising firewalls, filtering routers, encryption and digital certification ensures that your account information is protected from unauthorized access:

- Firewalls and filtering routers ensure that only the legitimate Internet users are allowed to access the system.
- Encryption techniques used by the bank (including the sophisticated public key encryption) would ensure that privacy of data flowing between the browser and the Infinity system is protected.
- Digital certification procedures provide the assurance that the data you receive is from the Infinity system.

Conclusions

In brief it makes clear that the low transaction cost will make banking on the Net irresistible, but also that this will require banks to carefully consider and plan customer relations programs.

• As today's banking transactions based on content and context, and where execution becomes a key aspect.

From a customer point of view and service provider perspective, this is what is the world is moving-it is going to be real-time, on-line, personalization for both promotion and the service experience. Today's banks If wants to survive and prosper, it is this challenge of Integration that they need to embrace in order to win and explore. The more things change, the less they change. In the months and years-ahead are going to be how Service Providers integrate and promote their offerings across different channels. The strategic and executional battles of the future are going to be fought for Channel Integration. If a sales representative tries to sell you a housing loan, you get e-mail a day later reminding you about the loan. That's called Integrated Sales, which results in incremental economic activity and improved efficiencies of communications. Channel Integration across the phone web can clearly lead to a gain of several percentage points of GDP. These helps to feed on each other to create incremental value for the customer, as well as the institution.

• Lastly the product range is another issue which becomes important. It will take a technological revolution to make available advanced banking products on the net and given the rate at which the technology is developing we can expect this to happen in near future.

Strategies Useful For Indian Banking

Internet banking would drive us into an age of creative destruction due to non-physical exchange, complete transparency giving rise to perfectly electronic market place and customer supremacy. The question to be asked right now is "What the Indian Banks should do" Whatever is the strategy chosen and options adopted, certain key parameters would determine the bank's success on web:

1. For long term success, a bank may follow:

- Adopting a webs mindset
- Catching on the first mover's advantage
- Recognizing the core competencies
- Ability to deal multiplicity with simplicity
- Senior Management initiative to transform the organization from inward to outward looking
- Aligning roles and value propositions with the customer seg ments
- Redesigning optimal channel portfolio
- Acquiring new capabilities through strategic alliances.

2. The above can be implemented in four steps:

- Familiarizing the customer to new environment by demo version of software on bank's web site. This should contain tour through the features which are to be included. It will enable users to give suggestions for improvements, which can be incorporated in later versions wherever feasible.
- Second phase provides services such as account information and balances, statement of account, transaction tracking, mail box, check book issue, stop payment, financial and customised information.
- The third phase may include additional services such as fund transfers, DD issue, standing instructions, opening fixed deposits, intimation of loss of ATM cards.
- All the above strategies will help banks in translating their traditional business model into an Internet one, falling into three main categories
- One stop shop
- Virtual one-stop-shop
- Best of breed supplier.

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