

Internet Banking: Development and Prospects in Bangladesh

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Abstract

Internet Banking applications offer wide benefits to customers and banks and it is now no longer a “nice to have” but an “impossible to survive without” for all banks. “Internet Banking” refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent devices. Numerous factors including competitive cost, customer service, and demographic considerations – are motivating banks to evaluate their technology and assess their electronic commerce and Internet banking strategies. The challenge is to make sure the savings from internet banking technology more than offset the costs and risks associated with conducting business in cyberspace. Most of the banks do not offer online or electronic service such as Direct Deposit. Bangladesh Government is developing the IT infrastructure, computer literacy, etc. This will encourage the banks to expand Internet Banking facilities from their current level of 12% of the services provided through internet. The latest and most innovative global evolution to Citibank customers is CitiDirect Online Banking. This paper intends to give an idea of what a full fledged internet banking service may provide and find out its viability for local banks in Bangladesh. From the customer point of view the overall improvement in education specially computer literacy and the expanding vast network of ISPs will make an enabling environment to make the customer feel safe for banking through internet.

1.0 Introduction

For decades, banking analysts have been predicting the coming of the cashless and chequeless economy as more and more payments are made electronically. In the American Banker’s Century Edition, Marianovic (2000) wrote, “In 1963, Dale L. Reistad of the American Bankers Association said at the first ABA National Operations and Automation Conference that we would be a checkless society by 2000. By the middle of the 1990s, Internet fever was rampant in the United States and it intensified as the decade wore on. The exponential growth in Internet-related, non-financial activity such as e-mail fueled predictions of dramatic future growth in Internet-based banking and payments.

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A 1995 Business Week cover story, “The Future of Money¹” cited predictions that the number of electronic purchases would grow more than seven-fold by the year 2000 and that by 2005, nearly 20% of all purchases would be made electronically. Internet Banking is one of the few web applications where benefits to customers and banks are already widely proven. It is now no longer a “nice to have” but an “impossible to survive without” for all banks. “Internet Banking” refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent devices. Internet banking means a kind of self-help financial services provided by the bank for its clients by the medium of Internet, including account information inquiry, account transfer & payment, online payment issues in Internet Banking.

Sound management of banking products and services, especially those provided over the internet, is fundamental to maintaining a high level of public confidence not only in the individual bank and its brand name but also in the banking system as a whole. Key components that will help maintain a high level of public confidence in an open network environment include:

- **Security:** Banks must have a sound system of internal controls to protect against security breaches for all forms of electronic access.
- **Authentication:** Transactions on the internet or any other telecommunication network must be secured to achieve a high level of public confidence. In cyberspace, as in the physical world, customers, banks, and merchants need assurances that they will receive the service as ordered or the merchandise as requested, and that they know the identity of the person they are dealing with.
- **Trust:** Public and Private key cryptographic systems can be used to secure information and authenticate parties in transactions in cyberspace. A trusted third party is a necessary part of the process. That third party is the certification authority.
- **Non-repudiation:** Non-repudiation is the undeniable proof of participation by both the sender and receiver in a transaction. It is the reason public key encryption was developed, i.e. to authenticate electronic messages and prevent denial or repudiation by the sender or receiver.
- **Privacy:** For the case of internet banking personal information is very confidential. So the information should be very much private. The banks should ensure the privacy of all these information.
- **Availability:** The bank should maintain their service at every moment. The customers of internet banking are time conscious and time is much more important to them. So the service should be available all the time.

1.1 Objectives of the Study

The objectives of the Study are:

- **To assess the existing internet banking scenario in Bangladesh**
- **To explore the prospects of Internet Banking in Bangladesh context.**

1.2 Research Methodology

1.2.1 Data

Secondary data was derived from various sources including the annual reports of Citigroup, Citigroup website, the Financial Statements of Citibank N.A. Bangladesh etc. Primary information was obtained from the specific person dealing certain products. For the comparison of products, websites of different banks offering Internet Banking and some bankers working on those particular banks were consulted. For some specific information officials of Bangladesh Computer Council and Bangladesh Institute of Bank Management provided necessary inputs. For the industry related, legal, infrastructure related information internet was a good source.

1.2.2 Limitation of the study

Interviewing target respondents adopted convenience sampling as alternative to random sampling, at some phases where respondents were inaccessible or not available. Bank officials were found too busy and also reluctant to talk without a proper written permission from the competent authority.

2.0 Global Scenario of Internet Banking

2.1 Internet Banking

Internet Banking is one of the few web applications where benefits to customers and banks are already widely proven. It is now no longer a “nice to have” but an “impossible to survive without” for all banks. “Internet Banking” refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent devices. Internet banking means a kind of self-help financial services provided by the bank for its clients by the medium of Internet, including account information inquiry, account transfer & payment, online payment, agency services, etc.

2.2 Internet Banking products and services

Internet Banking products and services can include wholesale products for corporate customers as well as retail and fiduciary products for individual customers. Ultimately, the products and services obtained through internet banking may mirror products and services offered through other bank delivery channels. Some examples of wholesale products and services include:

- Cash management
- Wire transfer
- Automated clearinghouse transactions
- Bill presentment and payment

Examples of retail and fiduciary products and services include:

- Balance inquiry
- Funds transfer
- Downloading transaction information
- Bill presentment and payment
- Loan applications
- Investment activity
- Other value-added services

Other internet banking services may include providing internet access as an Internet Service provider (ISP). Historically, banks have used information systems technology to process checks (item processing), drive ATM machines (transaction processing), and produce reports (management information systems). In the past, the computer systems that made the information systems operate were rarely noticed by customers. Today, web sites, electronic bill presentment and payment systems are an important way for banks to reach their customers.

2.3 Growth in Internet Banking

Numerous factors including competitive cost, customer service, and demographic considerations – are motivating banks to evaluate their technology and assess their electronic commerce and Internet banking strategies. The challenge is to make sure the savings from internet banking technology more than offset the costs and risks associated with conducting business in cyberspace. Some of the market factors that may drive a bank's strategy towards internet banking include the following:

- **Competition:** The competitive pressure is the chief driving force behind increasing use of internet banking technology, ranking ahead of cost reduction and revenue enhancement. Banks see internet banking as a way to keep existing customers and attract new ones to the bank.
- **Cost efficiencies:** Banks can deliver banking services on the internet at transaction costs far lower than traditional ways. The actual costs to execute a transaction will vary depending on the delivery channel used. These costs are expected to continue to decline.
- **Geographical Reach:** Internet Banking allows expanded customer contact through increased geographical reach and lower cost of delivery channels. In fact some banks are doing business exclusively via the internet – they do not have traditional banking offices and only reach their customers online.
- **Branding:** Relationship building is a strategic priority for most banks. Internet banking technology and products can provide a means for banks to develop and maintain an ongoing relationship with their customers by offering easy access to a broad array of products and services. By capitalizing on brand identification and by providing a broad array of financial services, banks hope to build customer loyalty, and enhance repeat businesses.
- **Customer Demographics:** Internet banking allows banks to offer a wide array of options to their banking customers. Some customers will rely on traditional

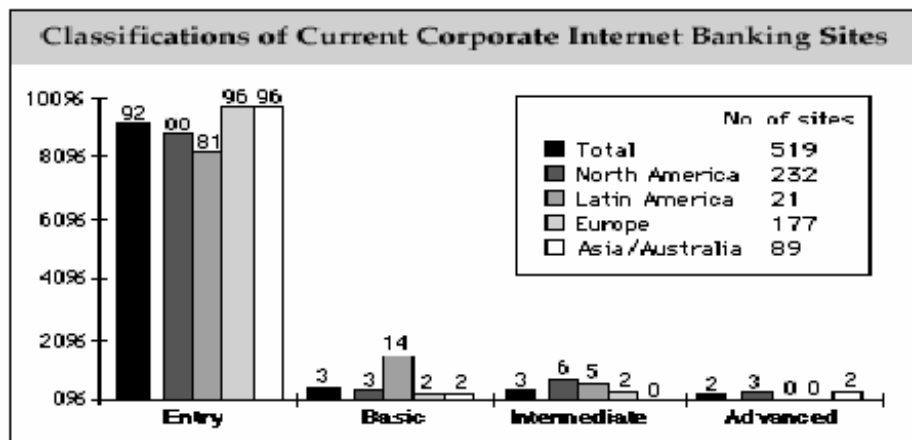
branches to conduct their banking business. Other customers are early adopters of new technologies that arrive in the marketplace. The challenge to banks is to understand their customer base and find the right mix of delivery channels to deliver products and services profitably to their various market segments.

As use of the internet continues to expand, more banks are using the web to offer products and services or otherwise enhance communications with consumers. The internet offers the potential for safe, fast, and convenient new ways to shop for financial services and conduct banking business, any day, any time.

3.0 Extent of Internet banking services

A clear idea about the availability of internet banking level (location wise) can be obtained from the graph below. Most of the internet banks are in the entry level out of the four levels defined as below:

- Entry: The bank is offering informational services only
- Basic: The bank is offering communicative services only
- Intermediate: The bank is offering some specific transactional services such as fund transfer, remittance etc.
- Advanced: The bank is offering all the transactional services a customer needs.

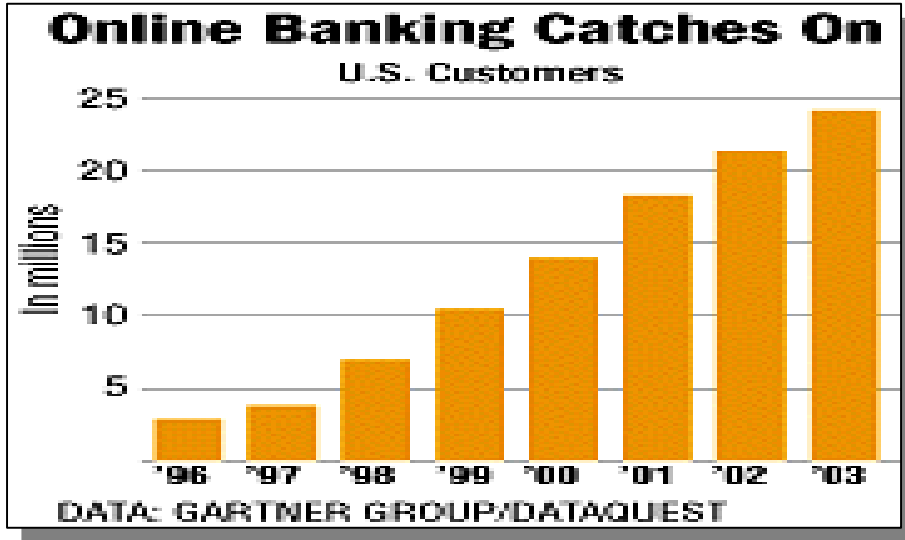


Source: BAH Corporate Internet Banking Survey

Figure 1: Classification of Current Corporate Internet Banking Sites

3.1 Trends of Internet Banking

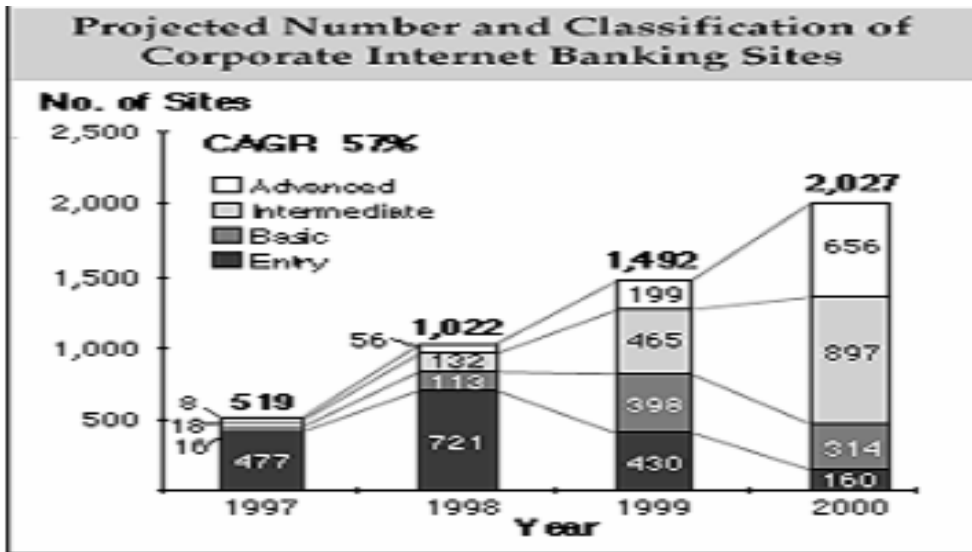
In the United States of America, in the recent years, there was a sharp rise in internet banking. The US customers are very much technology conscious. So the internet banking took away the market very quickly.



Source: BAH Corporate Internet Banking Survey

Figure 2: The Trend of Internet Banking in USA

From Internet Banking Survey it is evident that the advanced and intermediate level internet banking service providers are increasing at a higher rate.



Source: BAH Analysis, BAH Corporate Internet Banking Survey

Figure 3: Projected Number and Classification of Corporate Internet Banking Sites

4.0 Internet Banking in Bangladesh

4.1 Internet Banking offerings in Bangladesh

4.1.1 CitiDirect®

To gain more control over ones cash positions, one needs easy access to accounts and information in real time. One needs an application that is easily customized by individual users and streamlines day-to-day operations. One will need the convenience of local banking and the global solutions of an industry leader. The solution is CitiDirect® Online Banking. The motto of CitiDirect® is “Money isn’t everything but it can be everywhere”. The facilities available are:

- Online Direct Debit Transaction Process
- Information Reporting
- Real-time information reporting for more effective cash management
- Delivered with the highest level of security
- Easy-to-use application
- World Link through CitiDirect
- comprehensive payment transaction solution
- Flexible, streamlined functionality
- Reliability, speed and information
- Payments through CitiDirect

- A comprehensive payments solution globally and locally
- Simplified, secure transaction management
- Timely, accurate information
- E-mail and Wireless Banking Alerts by CitiDirect

4.1.2 Other banks offering Internet banking services

Eastern Bank Limited

Eastern Bank Limited Internet banking application addresses the needs of small, individual and corporate account holders of the bank. This application provides a comprehensive range of banking services that enable the customer to meet most of their banking requirements over the net. The transactions that are supported by the internet banking provided by Eastern Bank Limited are Account operations and Inquiries, Fund Transfers and Payments, Utility Bill Payments, Deposits, Loans, Session Summary etc.

Bank Asia

Bank Asia symbolizes modern banking with innovative services in Bangladesh. It has centralized Database with online ATM, SMS and Internet query service. The significant

delivery channel of Bank Asia is the shared ATM Network. Bank Asia has 21 ATMs as a member of ETN along with eleven other banks. Bank Asia is maintaining its competitiveness by leveraging on its Online Banking Software and modern IT infrastructure. It is the pioneer amongst the local banks in introducing innovative products like SMS banking, and under the ATM Network the Stellar Online Banking software enables direct linking of a client's account, without the requirement for a separate account.

BRAC Bank

BRAC Bank deployed a layer of security system for its Internet Banking. These measures extend from data encryption to firewalls. BRAC Bank uses the most advanced commercially available Secure Socket Layer (SSL) encryption technology to ensure that the information exchange between the customer's Computer and BRACBank.com over the internet is secure and cannot be accessed by any third party. SSL has been universally accepted on the World Wide Web for authenticated and encrypted communication between customers' computers and servers.

Arab Bangladesh Bank Ltd.

The first private bank of Bangladesh with a long standing experience in domestic and international banking. Its 153 branches in all the major commercial centers of the country and 152 correspondents worldwide provide proficient banking services to its customers.

HSBC

Business Banking Account enables a person to receive credit of all the cash or cheque deposits along with inward remittance and make all local payments and provide access to the wide range of services for the business requirements. A person may deposit upto BDT50,000 cash per transaction and any BDT amount in cheque 24 hours a day, 7 days a week through the ATM Machines, conveniently located Sales and Service Centers. EasyPay Machines are also available for deposit of BDT 50,000 cash per transaction and any BDT amount in cheque to the Business Banking Account. With EasyPay Machines both HSBC and Non-HSBC customers can make deposits and pay their utility bills, credit card payments and etc.

SCB

Standard Chartered offers the client a comprehensive range of Cash Management services. Whether it is a financial institution, a multi-national corporation or a domestic company, Electronic Banking application has the capability to support full range of Cash Management reporting and transaction initiation needs. It provides the secure, reliable and effective link between the client and client's accounts anywhere across the Standard Chartered network. Electronic Banking provides various types of support through a wide range of operating systems, sweeping transaction accessories with the provision of reporting features or other special functions. There are 10 offices and 50 employees under this division, which operates in 26 countries.

4.5 Information Communication Technology (ICT) Policies

Information Communication Technology (ICT) encompasses the broad fields of data or information processing, transmission and communications by means of computer and telecommunication techniques and these modern tools are being increasingly used for organizational or personal information processing in all sectors of economy and society. A dependable information system is essential for efficient management and operation of

the public and private sectors. But there is a shortage of locally generated information needed for efficient performance of these sectors. In order to meet this objective, ICT use in every sector shall have to be accelerated in terms of information generation, utilization and applications.

This Policy aims at building an ICT-driven nation comprising of knowledge-based society by the year 2010. In view of this, a country-wide ICT-infrastructure will be developed to ensure access to information by every citizen to facilitate empowerment of people and enhance democratic values and norms for sustainable economic development by using the infrastructure for human resources development, governance, e-commerce, banking, public utility services and all sorts of on-line ICT-enabled services. The policy statement set by the Ministry of Science, Information & Communication Technology, Government of the Peoples' Republic of Bangladesh are based on the following areas:

- Human Resources Development through Education and Training
- ICT Infrastructure
- Research and Development in ICT
- Development of ICT Industry
- Development of E-Commerce
- E-Government / E-Governance
- Establishment of Legal Issues

4.6 The supporting IT infrastructure

4.6.1 Computer Technology

Though the first main frame computer came to Bangladesh in 1964, but the usage of PC became popularize very late to the common people. Several large banks and private entrepreneurs in industrial sectors are the path makers of achieving benefits from computer and computerized applications. Bureau of Statistics and a few nationalized banks are the leaders in using computer in government sector by processing data and information, while industrial concerns in private sectors are the leaders in applying computer for their accounting, payroll and inventory related applications.

4.6.2 The age of Internet begin

The Internet came late in Bangladesh, with UUCP e-mail beginning in 1993 and IP connectivity in 1996. By July 1997 there were an estimated 5,500 IP and UUCP accounts (Press, L., 1999) in the country and by the end of 2000 it has been forecasted that the account holder could reach more than 50,000 through different Internet Service Providers (ISP), who are offering Internet services with bandwidth ranging between 65 Kbps and 2 Mbps through VSAT, Broadband.

In June 1996, the government decided to allow private entrepreneurs to act as ISPs using VSATs (Very Small Aperture Terminal). In 1999, there were about 22,000 account holders with 10 ISPs (8 in Dhaka and 2 in Chittagong) and the total number of users ranges around 100,000, while in 2000, there are about 50 ISPs providing Internet services to more than 250,000 Internet users. The growing demand of the society and the

congenial global atmosphere towards Internet has pressurized the entrepreneurs to re-think their policies and strategies to accommodate the newly emerged rapidly enlarging target group.

Initially there were only a few UUCP (Unix-to-Unix Copy Protocol) accounts in the country and then they were replaced by IP (Internet Protocol) accounts. At a later stage low bandwidth 64Kbps VSAT (Very Small Aperture Terminal) link became the main Internet backbone of the country with 120 million people. Demand did not inclined high compared to the huge population base, because most of them lives in rural areas where minimum tele-communication infrastructure is missing and at the same time purchasing power of the general communities limiting Internet connectivity with prevailing socio-economic conditions.

Bangladesh Telegraph and Telephone Board (BTTB) has already established a network for high bandwidth Internet connectivity through offering commercial services. BTTB has established a fiber optics backbone throughout the country and also has a plan to offer ISDN (Integrated Services Digital Network) service using the facilities in Dhaka and Chittagong cities. They have opened X25 and X28 services in eight cities of the country and established Digital Data Network (DDN) at Dhaka and four other cities. Through DDN they are going to offer IPLC (International Private Leased Line Circuits), National (Point to Point High Speed data Circuits), Local (Point to Point High Speed Data Circuits) and E1 Access from PSTN (Public Switched telephone Network) to ISPs. [Source: BTTB²]

4.6.3 New ISPs are emerging

After the withdrawal of imposition on VSAT in April 2000 the Internet scenario of the country has been changed drastically. An entrepreneur has only need to obtain a simple permission from the government run BTTB with an annual mandatory fee of USD3500 and can choose any globally available transponder services. Breaking of this monopoly has increased competition in the market with rapid reduction of equipment cost and cost of satellite services, reflecting abrupt reduction of Internet usage fee. Legal framework now also permits ISPs to float public share in the stock exchange (Rahman, H., 2000).

Current bandwidth of Internet backbone ranges between 64Kbps and 2Mbps through dedicated full-duplex VSAT links. There are a few companies, who are trying to make popularize their Broadband connectivity sharing an allocated bandwidth. Zacknet seemed to lost popularity because of its one way communication. There were a few ISPs who were using Zacknet for downloading during rush hours, but cost of the service has been restricting its popular use.

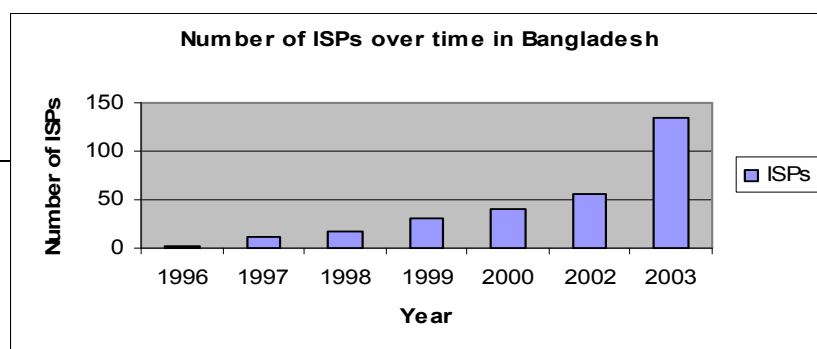
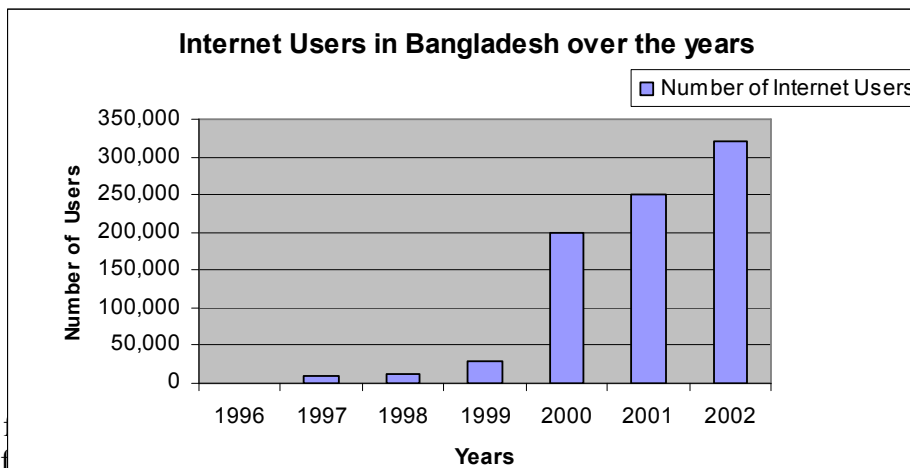


Figure 4: Trend of the increment of the number of ISPs

Concentration of ISP is the most in Dhaka city, where more than 80% of them are located. Only three has been established in Sylhet, three in Chittagong and one each in Rajshahi, Khulna and Bogra. There are about 5 large ISPs and among them Grameen Communications has a customer base of more than 6000. Two of the ISPs are offering their Internet services through 2Mbps full-duplex VSAT link, while highest peak time Internet usage rate ranges from Taka 1.50 to lowest Taka 0.20 (2.00 to 6.00 am for one ISP).

4.6.4 Internet users are increasing

Today the people are getting more technology conscious. They are well aware of the benefits of the technology. This made many people a user of the internet facilities. The number of users increased fast over the years.



From the number of one million, partly due to lower tariffs. This will form a strong background in favor of internet banking in Bangladesh. The over

4.6.5 The constraints on Internet Growth in Bangladesh

Though we have seen some sharp rise in the growth of internet and internet users, there are some impediments on the way to the growth of internet in Bangladesh. Some of the reasons⁴ are listed below:

- Underdeveloped IT industry
- Lack of efficient use of IT network
- No direct access to the information super highway

- Limited skilled human resources
- Poor telecommunication infrastructure
- Low-level of computer literacy
- Widespread poverty
- Low telephone penetration
- Lack of software in the Bengali language

4.6.6 Opportunities for a better Internet support

- Bangladesh has a nationwide fiber-optic network established by Bangladesh Railway. Hardly 8% of this fiber-optic capacity was ever used during the years of its existence. This facility can provide excellent backbone for nationwide voice and data communication.
- As we have no direct access to the information super highway the only option is to communicate through satellite. Satellite communication is costlier than fiber optic.
- To avoid satellite communication and its high cost, we can establish the missing link to the information super highway if the nation-wide fiber-optic network is allowed to link up with the high speed fiber-optic backbone in India.
- Availability of telephone lines and reduction in service fee will attract many professionals into internet arena.
- Young generation should play a vital role in developing IT industry in Bangladesh.

5.0 Empirical Analysis

5.1 Research and Development in ICT

Research and development in ICT will focus on need based fundamental and applied research contributing to the improvement of quality and efficiency of the application to our ICT industry. Bangladesh Computer Council will encourage ICT R&D activities carried out by the public and private sector organizations. along with ICT industries, will assist in formulating plans to conduct need-based R&D activities in the Universities, BITs and public & private sector R&D institutions and encourage the younger generation in these activities. The ICT industry may fund for R&D activities for new ICT products and services through Industry-Academia collaboration. R&D efforts on Bangla text processing, Bangla voice recognition, translation and synthesis will be intensified. Technology Corporations such as Microsoft, IBM, Computer Associates, Oracle, SAP etc. will be approached to set up their R & D Centers in Bangladesh. Contents for Internet and Intranet will be developed in Bangla

5.2 E-Commerce

The Government and the private sector will promote business in electronic form and create an environment in which it will be well secured. Government will take initiative to introduce and promote Government-to-Government (G2G) transaction under the purview of e-commerce. Gradually this initiative will also be extended from G2G to Government to Business (G2B) transaction in the same line. Authentication of the identities of both

buyer and seller or the involved parties in an electronic transaction is crucial to promote inter-bank transaction, encryption e-commerce. Security of electronic transaction should be ensured through appropriate measures. Establish immediately inter-banking payment system in electronic form. Legal framework to provide the guiding principles, rules and legislation for e-Commerce shall be put in place.

5.3 SWOT Analysis

To find out the viability of a particular product we must perform a SWOT Analysis of the product. This will analyze the Strengths, Weaknesses, Opportunities, and Threats of the particular product. For analyzing the performance of Internet Banking in Bangladesh we the following SWOT Analysis is considered

5.3.1 Strength

- Internet Banking is new in our market. Only a few banks are now offering internet services in solving banking problems. Most of the banks are offering only accounting information online. Actual fund transfer and fund disbursement is not possible in all the banks that are offering internet services. So this product will enjoy the benefit of a first mover.
- It is cheap both for the banks and the customers. The bank will be able to lower down the overhead costs and make more profit out of it. Internet banking will require less manual workers. Again the customers will be able to save time as well as money for their transaction needs.
- Internet banking is convenient as the service is available all the time at just a click away.

5.3.2 Weaknesses

- Security breakdown: The system will have a problem with the identification of the individual who is initiating the transaction. In Bangladesh, the identification of an individual is not yet supported digitally. So there will be a problem in moving to the Internet era for banking purposes just now. First we will have to develop a digital database of the users of the internet banking services.
- The transaction can be cancelled only via internet. The internet infrastructure of our country is not that much supportive to provide all time access to the web. So there will be a problem in executing the service with its full functionality.

5.3.3 Opportunities

- Non-branch banking is becoming popular in our country. Many banks are now offering non-branch banking facilities. A person can withdraw or deposit money in any branch of the bank he has account with. So moving to internet banking will allow the banks to offer non-branch banking facilities.
- The internet services are becoming very common to us. So a service offered through the internet will be widely accepted in the near future.

5.3.4 Threats

- People have concern about security and privacy. They like to feel their money with their hand. They actually don't believe in virtual money transfer.
- In the field of IT new technology is coming everyday. The one which is very popular today might get obsolete tomorrow. So to have a competitive edge over the competitors the banks must always update their services.
- The movement towards online banking might marginalized the customers who do not have internet access or who are not technologically sound.

Despite the presence of online Internet service in Bangladesh, its scope is largely underutilized. The reasons include high service charges, lack of awareness, poor telecommunication systems, government policy, low buying power of potential clients, and lack of institutional support.

5.4 Cost Benefit Analysis

The main benefit of internet banking is the amount of time (thus money) it saves. Although Internet banking is restricted to managing accounts and making on-line transactions, it cuts out much of the need to personally visit the bank. Using Internet banking will also increase the efficiency of paying money (bills, debts, wages, etc) as it can reduce the need for writing and sending cheques (which can take up to 5 days to clear). Wages and Salary payments can be created via internet banking to pay such money, which is also an efficient way of paying staff wages. On-line banks are able to offer their customers higher interest rates than high street banks due to their reduced overheads. If the popularity of Internet banking takes off as predicted the banks may also be capable of offering their Internet banking customers higher interest rates (due to reduced overheads or as an incentive). Though Internet banking will require a higher initial investment, the operating expenses will be much lower. Again customers will be satisfied through fast, accurate, easy-to-use, comprehensive delivery of the services. So internet banking will be much more beneficial to banks as well as customers.

6.0 Findings

A broad spectrum of electronic banking services, a subset of e-finance, is available in Bangladesh with various degree of penetration. Credit card and POS services are provided by 23 percent of banks [PCBs and FCBs]. Several thousands of POS terminals have been set in major cities of the country. Tele-banking is second most penetrated e-banking service in Bangladesh. ATM is expanding rapidly in major cities. A group of domestic and foreign banks operate shared ATM network, which drastically increase access to this type of electronic banking service. The network will gradually be extended to other parts of the country. Credit card is also becoming very popular service in major cities of Bangladesh; during 1999-2005 the growth of credit card market is more than 100 percent. The credit card service is available from VISA, MasterCard and VANIK. Some foreign banks provide electronic fund transfer services. Microchips embedded Smart Card is also becoming popular in the country, particularly for utility bill payment.

Table 1: Electronic Banking Services in Bangladesh (percentage of Banks)

Product	2000	2001	2002	2003	2004	2005
Tele Banking	20	24	25	28	30	32
Online Corporate Banking	8	12	14	15	18	25
Electronic Fund Transfer	15	18	20	22	25	30
ATM	15.4	28	28	30	35	40
Credit Card	23	-	20	25	28	24
Debit Card	3.8	18	22	28	33	40
Merchant Account Service	3.8	12	15	18	18	20
Internet Banking	7.7	12	15	22	35	45

“-” represents data unavailable

Last couple of years shows dramatic improvement in the awareness situation in the banking community regarding the comprehensive application of ICT. The experts forecast that ICT penetration in the banking sector will improve dramatically by 2005. Majority of banks is planning to introduce ICT for integration of banking services and new e-finance services, which will play a vital role in bringing efficiency in the financial sector. Among the banks surveyed 75 percent of banks have strategic plan to implement ICT and internet banking.

The foreign banks are the pioneers in adopting electronic finance in Bangladesh. Most of the foreign banks are using the computerized transaction system and taking advantage of the superior technology by attracting customers and providing inter-branch and inter-bank linkage. Foreign banks through successful use of a global network, has increased the timeliness and accuracy of information, benefiting its customers, its employees and also its management.

Bangladesh Bank is now moving to the era of technological advancement. Bangladesh Bank is planning to have Automated Clearing House (ACH) which will automate the processing of checks by MICR coding. This shows the intention of Bangladesh Bank to the betterment of the services. This will eventually lead to internet banking to a requirement for all banks in the near future. With all the strategies we have set for us we can enter into a new world of internet banking.

7.0 Conclusion

Internet Banking is one of the few web applications where benefits to customers and banks are already widely proven. It is now no longer a “nice to have” but an “impossible to survive without” for all banks. “Internet Banking” refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent devices.

Internet Banking products and services can include wholesale products for corporate customers as well as retail and fiduciary products for consumers. Numerous factors including competitive cost, customer service, and demographic considerations – are motivating banks to evaluate their technology and assess their electronic commerce and Internet banking strategies. The challenge is to make sure the savings from internet banking technology more than offset the costs and risks associated with conducting business in cyberspace.

Though there are 28 banks in Bangladesh, mostly head quartered in Dhaka (7)., only a select few have web pages. However, most of these banks do not offer online or electronic service such as Direct Deposit. There are some ATM machines, though not nearly as concentrated as in a developed economy.

Internet is a new product in Bangladesh. The extent of Internet is not that vast in our country. But one end of the financial market is technologically aware. They are the customers of internet banking. Most of the banks have their own websites but not all of them offer internet facilities. The main reason of this is that the banks do not have the IT infrastructure and proper security features.

The Ministry of Science, Information and Communication Technology has given out the policy for the development in the IT sector. The ministry has concentrated on the following sections:

- Human Resources Development through Education and Training
- ICT Infrastructure development
- Research and Development in ICT
- Development of ICT Industry
- Development of E-Commerce
- E-Government / E-Governance establishment
- Establishment of Legal Issues

The Government spending in ICT is going to increase by at least 2% of ADP in coming years. The new budget provision encouraged the investment in the application of ICT in trade and finance. The ICT companies will get preferential terms which will be able to meet up 20% of its revenue expenditure. BCC has created a centralized fund for R&D which would encourage to contribute 1% of all profits from ICT-enabled services to the HRD fund. This will greatly help the development of ICT in Bangladesh.

The software support for internet banking, i.e. FLEXCUBE is available in Bangladesh. Again Bangladesh Government is working on the copyright law and the preservation of intellectual property act. After the successful implementation of all these policies and strategies we are expecting that more than 50% of the banks will be offering internet banking facilities which is now 12% only.

Another important issue in extending the internet banking services throughout the country is gaining popularity. The sense of security is of great importance. In Bangladesh most of the people are illiterate and obviously they are technology ignorant. But among the literate portion many of them have computer phobia. So these people can't trust on the internet banking services. To gain the confidence on internet banking the overall computer literacy must be developed. With that goal government has taken initiative even in the root level to develop it literacy in the country. This would be a perfect ground for the development of internet banking.

Bangladesh Bank is now moving ahead towards technological advancement. They are planning to have Automated Clearing House which will automate the cheque clearing process. This will eventually lead to internet banking a requirement for all banks in the near future.

References:

AKM Mahtab Hossain, Department of Computer Science and Information Management, School of Advanced Technologies, AIT, Thailand

and Conditions (10/2005).

ANZ Bank, *Internet, Phone, ATM and EFTPOS Banking – Your Guide* (10/2005).

Bers, Joanna Smith. "Banks must decide whether to be a catalyst or catatonic in the face of e-commerce." *Bank Systems & Technology* v33, n11 (Nov 1996):16.

CEEMA stands for Central and Eastern Europe, Middle East and Africa

Choudhury T. A. and A. Raihan. 2000. Structural Adjustment Participatory Review Initiative Bangladesh, Study Theme 2(C): Implications of Financial Sector Reforms. The World Bank, Government of Bangladesh and Civil Society, 2000.

Chowdhury, J.R., 1999

Commonwealth Bank, *Transaction, Savings and Investments Accounts – Product Disclosure*

Huff, S. L. Schneberger, W. M. Newson, P. Parent, M., Case in Electronic Commerce, Boston: McGraw – Hill

Greenstein, M. and Feinman, T., Electronic Commerce: Security Risk Management and Control. Boston: McGraw-Hill

Fein, M L, 'Regulating Cyberspace' (1995) 71 *Bank Management* 8.

Founded in 1902

Geva, B, *Bank Collections and Payment Transactions* (2001).

Internet-based eBusiness in the forest products industry” by Dr. Richard Vlosky, 1999.

John Hawkins, 2001. “Electronic Finance and Monetary Policy,” *Bank for International Settlements Papers*, No. 7, pp.98-105

National Australia Bank, *National Internet Banking – Product Disclosure Statement Including Terms*

Report on Survey of IT Resources of Bangladesh and Identification of Y2K Problem Areas, 1999

Skare, Marinko; Cota, Boris, Internet Banking & The New Business Model Evolution - a Croatian case, Portoroz, Slovenija, 27-29.03.2002.

Source: The Age Company Ltd. Subtitled: E-cash could transform the world’s financial life *Statement* (01/2006).

Taken from "ICT Policy of Bangladesh" by Bangladesh Computer Council
Tucker, G, 'Regulation of Electronic Banking' (1990) 64 *Law Institute Journal* 706.

http://h71028.www7.hp.com/enterprise/downloads/iflex_sb.pdf

<http://www.bccbd.org/html/itpolicy.htm>

http://www.bttb.net/bttb_home_ddn_rate.htm).

<http://www.theage.com.au/news/Breaking/Bangladesh-net-users-cross-1m/2005/04/29/1114635721380.html?from=moreStories&onclick=true>)

http://www.fnc.gov/Internet_res.html

<http://www.it.iitb.ernet.in/~sri>

<http://info.isoc.org/internet/history/brief.html>
