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An overview study of IT enabled Services and IT spending –Indian Banking Perspectives

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Abstract:

The advent of technology and innovation in the IT sector brought revolutionary changes in the operations of banking business. The development and dissemination of technologies helped bankers to adopt IT enabled services to have an efficient business practices and channels to sell their services. The concept and scope of IT enabled services although is in its nascent, it is successful in facilitating for an effective payment and accounting system. Delivery channels are the major components of IT enabled services. ITeS refer to the use of technology as a remote delivery channels for banking services. E-banking through various delivery channels has gained wide acceptance internationally and is fast catching up in India with more and more banks embracing. The present study empirically presents the status of delivery channels in India banks. The findings show that the Indian banks have been perceived IT application in banking as a strategic tool for promoting business development. The customers are delighted in making use of the e-banking facility. But the rate of adoption is not according to the expected level (IBA, 2009). The adoptability of ITeS by respective banks has been influenced by many factors such as investments, ROI, volume of business and customers satisfaction etc., Evolving a suitable ITeS model is required to keep bank and customers accomplishing their assigned goals.

Key words: Delivery channels, E-banking, IT driven risk, ITeS

Evolution of IT in Banking Sector:

In the first phase, banks computerized their labor intensive back office operations to reduce costs and improve housekeeping.

In the second phase, banks focused on enhancing customer convenience to gain competitive advantage.

In the third phase, which is presently in progress, banks have implemented Core Banking Solutions (CBS) combining both front office and back office. This phase marked a paradigm shift in more senses than one and branch customers are now bank customers as they can access their accounts from any branch for defined purposes. CBS offered new opportunities for information management, for better customer service and improved risk management.

However, one of the shortcomings that has been observed is a disconnect between the Information (I) and Technology (T). Owing to this, banks have not been able to reap the benefits of the technology revolution in terms of cost reduction of small value transactions, improved customer services and effective flow of information within the banks and to the regulator. Although banks have deployed technology for transaction processing, the same has not been explored extensively for analytical processing.

In this background, the role of IT in banking sector needs to be revisited with focus on the following:

- Introducing technologies that balance 3 Cs – Cost, Control and Customer Service
- Implementing data warehouse and business intelligence that meets all internal MIS requirements as well as the information needs of the regulator
- Adoption of technology-based strategies for financial inclusion
- Usage of analytics for improvement of Customer Relationship Management (CRM), risk management and fraud detection / prevention

E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. Customers access e-banking services using an intelligent electronic device, such as a personal computer (PC), personal digital assistant (PDA), automated teller machine (ATM), kiosk, or Touch Tone telephone. While the risks and controls are similar for the various e-banking access channels, this booklet focuses specifically on Internet-based services due to the Internet's widely accessible public network.

Origin of E-banking In India The Indian banking system has undergone significant technological transformation since the 1980s.The Rangarajan Committee report in 1980s was the first step towards computerization of banks. Banks started exploring the idea of 'Total Bank Automation (TBA)'. Although titled 'Total Bank Automation,' TBA was in most cases confined to branch automation. It was only in the early 1990s that banks started thinking about tying-up disparate branches together to facilitate information sharing. At the same time, private banks entered the banking arena with radically different strategies. The private banks provided huge budgets to the adoption of technology to provide a whole new range of financial products and services at minimal costs.

E-Banking in India Most of Indian commercial banks are providing non-conventional and innovative banking services. Product innovation is tied to internet banking; increasing competition amongst the leading banks also promotes product and service differentiation. For example, despite the Internet Banking System developed in 1990 by the reserve bank of India with the help of department of telecommunication of India. Moreover, Indian banks offer innovative technology based banking products and service to their customers. Information technology revolution affect on traditional banking practice in following manner in India.

Computerization of Banks in India Computerization is general trend in all sector, banks also trying to Computerization, as per recommendation of Rangarajan Committee (II), the progress in implementation of the directive of the Central Vigilance Commission (CVC) on the need to computerize 70 per cent of the banking business by public sector banks before January 1, 2006, all banks have achieved the desired level. As on date, all banks have achieved 100 per cent computerization of the banking business.

Introduction to E- Banking Business:

Introduction:

In the world of banking, the adoption and development of information and technology is a Phillip in evolving efficient and user friendly banking operations. Electronic Banking (E-banking) services are the outcome of the development and diffusion of these technologies by banks resulting in efficient banking operations. E-banking refers to the delivery of banking services and products through delivery channels, such as ATM, Internet Banking, Mobile Banking, PoS, core banking solution etc. The concept and scope of E-banking is though still evolving, it is successful in cultivating for an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably.

What are Delivery Channels?

Delivery channels are various technology based means through which the customers can transact their business with the Bank at their convenience anywhere and at anytime of the day or night. Thus, the customers will have choice of transacting business through ATM, Internet Banking, Tele-banking, Mobile banking or through plastic cards such as Credit Card, Debit Card Smart Card etc., choice of his convenient time, ATMs, Telebanking, Internet Banking and mobile banking are round the clock available - and choice of his place, these can be accessed at multiple locations, including overseas locations.
In tune with various needs of the customers, different means or channels have been evolved. Following delivery channels have largely been operational in banking industry.

Automated Teller Machines (ATMs):

ATMs offer the convenience of withdrawing /depositing cash and performing other banking transactions without having to visit the branch during pre-fixed business hours. These machines work round the clock, are safe to transact in a isolated and secure environment. With the inter-connected ATMs, the convenience becomes much more acceptable as the customer can transact from any ATM most convenient to him/her. Thus ATM network gives the card holder freedom to choose his day, time and place to transact in his account. A customer of "X" bank can very well go to "Y" bank ATM and does the transaction.

Tele-Banking Services:

Undertaking a host of banking related services including financial transactions from the convenience of customer chosen place anywhere across the GLOBE and any time of date and night, Banks have introduced on-line Telebanking services. By dialing the given Telebanking number through a landline or a mobile from anywhere, the customer can access his account and by following the user friendly menu, entire banking can be done through Interactive Voice Response (IVR) system. The system facilities are being offered by Banks.

a. Automatic balance voice out for the default account
b. Balance inquiry and transaction inquiry in all
c. Inquiry of all term deposit account
d. Statement of account by Fax, e-mail or ordinary mail.
e. Cheque book request
f. Stop payment which is on-line and instantaneous
g. Transfer of funds with CBS which is automatic and instantaneous
h. Utility Bill Payments
i. Renewal of term deposit which is automatic and instantaneous

Internet Banking:

Internet Banking, from customer point of view is a very simple and user friendly facility. It can be accessed through bank's website. The convenience and ease of operations through Internet Banking make it a unique value proposition for the customers. Most of the Tele-banking facilities are being made available in Internet Banking also.

Mobile Banking:

Mobile banking applications involve using a mobile phone to carry out financial transactions-this usually means making a payment for goods or transferring funds electronically. As content delivery over wireless devices becomes faster, more secure, and scalable, there is wide speculation that mobile banking will surpass wire-line e-commerce as the method of choice for digital commerce transactions.

The Indian banks perceived delivery channels as strategic tools for business development. India is also in the verge of major banking revolution with technology based products having already been unveiled. All the nationalized banks and most of the private sector banks in India adopted E-banking system and provided banking facility through delivery channels. The introduction of innovative core banking schemes in Indian banks like Real-Time Gross transfer (RTGS) and National Electronic Funds Transfer (NEFT), which enabled fund transfers among account holders of the same bank as well as inter-bank transfers, attracted many customers towards the use of E-banking system.

RESEARCH PURPOSE:

Though IT enabled technologies have been prevalent in the Indian banking sector for over a decade, very few studies have been carried out regarding the Indian bank consumers' usage patterns and their experience in using them. The few published studies done in India deal with only aspects pertaining to any one of the technology enabled banking self-services such as ATM (Thamaraiselvan and Raja, 2007) or internet banking (Singh and Malhotra, 2005; Mukherjee and Nath, 2003). Therefore there is a need to understand the usage behavior of the bank consumers using multiple electronic banking channel services as well as the challenges in using different banking channels in a complimentary manner.

Due to the advent of the globalized world, liberalization and free economy, the Banks underwent a re-structuring process in its operations to cope up with the onslaught of competition. E-banking adoption is one of the re-structuring strategies adopted by Indian banks to have a switch over from the traditional patterns of bank operations to introduce technology. However the Indian banks are constantly upgrading their websites, software's, safety measures, privacy option, etc to enable the customers actively use the E-banking. The banks have also issued the user manuals at regular intervals to make the customer comfort in using the facility. Banks are also not lagging behind in encouraging customers to use the facility. Despite all their efforts aimed at better and easier IT enabled services, these systems remain unnoticed and under utilized by many of the customers. Therefore there is need to understand customers acceptance/ perception of delivery channels and the reasons behind the under utilization of the facility. This study will help the bankers to understand the reasons for under utilization of the facility and evolve suitable marketing and motivational strategies to popularize the IT enabled banking.

OBJECTIVES:

- To understand the role of IT in banking
- To analyze the spending in IT
- To evaluate the IT enabled products reaching customer
- To document the perception of customers/ IT staff/ Top Management

IT Spending / Budget:

Currently, the IT spending of banks in India, is about 62 per cent of the total spending on technology by all banks. The increase in IT spend is likely to benefit them in the long term. This IT spend includes capital expenditure, operational expenditure and specialist skilled manpower. The major areas of thrust will be automated data storage, compilation, upgradation and analysis, along with automated decision making that will involve loan sanctions as well.

As Indian banks gear up for the second wave of technological enhancement, their spending is likely to shoot, a little over fifty per cent, to Rs 10,000 crore annually. Banks need to work towards the Client Relationship Model (CRM) strategy and implement it. The advantage of CRM is that it allows comprehensive data analysis and decision making without manual intervention. Once banks fully migrate to the CRM model, they will be able to increase the customer base by 30 per cent through comprehensive customer profiling and servicing. This helps banks to improve customer satisfaction.

Return on Investment:

The major areas of benefit of e-banking offering included:

Additional revenues from transaction and user fees for on-line bill payment lending, cash management and e-commerce portal offerings.
Cost savings and improved operational efficiency.
Opportunities for acquiring new customers and cross-selling new services to existing customers.
Improved ability to retain customers

The key drivers of profitability for banks are:

- ✓ Increase revenues
- ✓ Minimize operational and transactional cost
- ✓ Cross – selling of products like insurance, bill collection
- ✓ Retaining customers

The drivers of profitability for e-banking institutions, in order of significance, are increased revenues, operational and transactional cost savings, ability to generate cross sales by encouraging traffic to the Web site, and the ability to retain customers through target marketing and maximizing the site's "stickiness value." Indeed, the expense of offering Internet banking is difficult to justify for smaller institutions on the basis of cost savings alone. Much depends on banks implementing lending, cash management and ecommerce applications on top of simple reporting and transaction capabilities. Banks hoping to achieve significant profitability by simply providing customers with the ability to view their balances online are likely to simply break even on their investment.

Achieving profitability in Internet banking requires banks to not only offer simple Internet banking services, such as reporting and bill payment, but to also use the time the customer spends on the bank's web site for cross selling and marketing.

Institutions that have put services on-line have seen cost savings in back-and-front-office operations - from deposits, to statement processing, to loan application processing and customer service. The Internet helps an institution to streamline operations across the board. Cost savings is achieved primarily through less reliance on manual operations and call centers. Profitability is further enhanced by lower customer service costs realized through greater efficiencies in setting up new accounts, servicing consumer loan applications, handling balance and payment activity inquiries, answering requests for copies of checks, stop payments and address changes.

Market Perception regarding percentage of use of different banking channels:

The average usage of ITeS and delivery channels is not much encouraging the banks with respect to return on investment as well as attracting new generation customers. The following table shows the average percentage of usage of banking channels, namely branch banking, ATMs, internet banking, Tele-banking and mobile banking.

Challenges:

Though banks are in race for introducing new products and garnering customer base, there is lack of co-ordination among products. The integration across various delivery channels is always a concern. Integration with back-end to deliver a "one-bank" experience to the customers is need of the hour. There is an urgency to integrate products viz., Banking, Credit cards, auto loan, home loan, bonds, web trade to delivery channels like Internet Banking, Branches, ATMs, Cyber Centers, Call centers, m-banking, banking agents etc.,

Given their dependence on technology for conducting their day-to-day operations, banks are up against huge challenges such as technology obsolescence, depending on vendors due to outsourcing of IT services, vendor-related concentration risk, external threats leading to cyber frauds / crime.

Technology risks not only have a direct impact – operational risks – on a bank but can also exacerbate other risks such as credit risks and market risks. Inadequate technology implementation can also induce strategic risk as decisions could be based on inaccurate data/information.

Banks should also trade off between security, convenience and cost.

Conclusion:

In conclusion, the key drivers to achieve profitability for an institution implementing Electronic banking are:

• The ability to increase cross-selling of various services as well as products adoption of target marketing tools and data mining techniques

• Migrating simple, but labor-intensive banking activities to the web viz., funds transfer, account balance and rate inquiry, stop payment, check ordering, address change requests, etc.

• Increasing on-line bill payment penetration

• Streamlining the loan application and fulfillment process

• Cost-effective target marketing

• Lower customer acquisition costs

Improving customer retention.

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Annexure

Usage of Banking Channel (%)	Avg. percentage of transactions (%)	Internet Banking (%)		Tele Banking (%)		Mobile Banking (%)	
		Users	Non-users	Users	Non-users	Users	Non-Users
Branch Banking	24.1	19.04	34.91	16.8	27.62	17.9	26.43
ATM	54.55	51.41	61.57	48.92	57.4	46.47	57.72
Internet Banking	15.02	22.03	0	18.85	13.18	19.17	13.46
Tele Banking	3.51	3.99	2.49	10.66	0	8.11	1.79
Mobile Banking	2.21	2.98	0.57	4.13	1.29	8	0
Other means	0.61	0.55	0.46	0.64	0.51	0.35	0.6