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E-Banking Growth and Challenges in India

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Abstract*:*

Number of developments have taken place in the Indian banking industry since liberalization, privatization and globalization. With the advent of these changes, the banking industry in India has under gone tremendous changes. A Strong, healthy and sustainable banking industry is very important for the overall development of any economy.

Today banking is known as innovative banking.With the development of information technology, the whole world has now become a global village and it has brought tremendous changes in the banking industry. Since 1980s, Indian banking sector has undergone through technological advancement phase and most of the banks have countered their business as e-business. With these technological advancements, a brand new era of banking has developed, which is known as e-banking.

Today many people are moving towards e-banking as buy its use it becomes easy for customers to manage their account from any place and at any time and this charge very nominal cost. It is not wrong to say that e-banking is one of the most popular and latest technological wonders in the field of banking which has given the banking sector a new dimension for growth. E–banking has helped the banking industry to improving their customer relations. Further, new technology has changed the traditional way of doing banking business. Customers can view the accounts, get account statements, transfer funds, order drafts by using an electronic channel.

E-banking has enabled the Indian banking industry to not only come out with new products and services but also brought efficiencies in the backend processes.E-banking services are new and services for Indian customers. As a result Indian banks are investing heavily in the technologies such as branch automation and computerization, core banking, Tele-banking, mobile banking (M-banking), internet banking, automated teller machine (ATMs), data warehousing etc. The impact of automation in the banking sector is undoubtedly difficult to measure.The present paper mainly focused on the need for e-banking in India and alsoexamines thegrowth and challenges of E-banking in India.

Keywords:E-Banking, InformationTechnology, Internet Banking, Online Banking

INTRODUCTION:

E-Banking has become the backbone of the banking industry. In theglobally competitive world, it is impossible to survive for any bank without adopting the emerging technology. With more awareness of the customers and their changing preferences, e-banking is only the choice for long-term survival and growth.E-banking means providing banking services like loan applications, account balance enquiry, fund transfer etc., through the internet. Electronic banking generally means

banking online, through the personal computers and over theinternet or smartphones. E-banking is more or less bringing the bank to customer's personal computers at place and time of their choice. It removes the traditional geographical barriers and makes it possible the avoiding banking services even outside the banking hours.The need for e-banking raised on account of growth in organizations, technological complexities, diversificationsand fast expansion of business.

E-banking is progressively being a "must have" instead of a "nice to have" service. This is the most cost-effective method of providing banking services. E-banking has reduced transaction costs while increasing the productivity of banking services. It makes it easier to keep the clientele base. Customers no longer need to leave their homes to access banking services.

Today's banking is virtual banking. Virtual banking denotes thesolutions of banking and other related services through the extensive use ofInformation communication technology. The salient features of virtual banking are overhelming reliance on IT and the absence of physical bank branches to deliverbanking services to customers. The principle types of virtual banking includeATM's, shared ATM networks, Electronic Fund Transfer point ofsale (EFTPOS), smart card,Stored value card, E-wallets,Mobile banking, home banking,internet and intranet banking. Thus practice of banking had undergone asignificant transformation due to the adoption of e-banking. The rapidly advancinguniversal information infrastructure (includingcomputer networks such as the Internet and telecommunications systems and information technology)empowers the growth of e-commerce at a global level. The nearlyglobal connectivity which the web offers has made it avitalbusiness tool. These developments have created a new sort of economy, whichnumerouscall the'digital economy. This rapid-evolving economy is bringing with itfastadvancing technologies, hike theintensity of knowledge in all areas of business, and build virtual supply chains and trending forms of brand new businesses andservice delivery channels such as e-banking.

E-banking can be defined as the provision of information about a bank and its services through a home page on the World Wide Web in its most basic form (www). More sophisticated e-banking services give customers access to their accounts, the ability to transfer money between accounts, and the capacity to make payments or apply for loans through e-Channels. (Rout,Samarpita 2017)

The enormous technological advances and assertive infusion of information technology have resulted in a paradigm shift in banking operations for banks, with technology emerging as a strategic resource for achieving higher productivity, performance control, efficiency, and profitability. For customersit is the perception of their "Anywhere, Anytime, Anyway banking"intention. This has prompted banks to adopt technology in order to meet rising customer expectations and compete in the industry. Banks are utilizing electronic technology to compete with the ever-increasing competition in banking, which has resulted in the conversion of traditional brick and mortar banking to electronic banking. E-bankingis the use of technology in day-to-day operations, by customer accesstheir banking services electronically whether it is for payment of bills, transferof funds, retrieve information and provide services.

EVOLUTION OF E- BANKING

Finland was the world's first country to have adoptinE-banking Technology in banking industry. InIndia, it was ICICI Bank which E-banking as early as 1997 under the brandname 'Infinity' The induction of new technology is absolutely essential for theoverall progress of in the

banking sector, Indian banking industry, today in themidst of the IT revolution. An increasingly competitive banking environment ledto total automation in the Indian banking industry. New private sector bankshave an edge over the public sector banks have an edge over public sectorbanks the implementation of technological solutions is concerned.However, the public sector banks are in the process of making hugeinvestments in technology.

The government of India enacted the information technology act,2000 with effect from 17th Oct 2000 to provide legal recognition to electronictransactions.RBI has also setup a "working group on internet banking" toexamine different aspects of e-banking. The group has focused on major areas ofe- banking.

- Technology and security issues
- Legal issues
- Regulatory and supervisory issues

In India, e-banking has developed and programmed in five different phasesthese are:

Phase 1

During the first phase of the e- banking, the banks are focused onautomating the laborious accounting process and office functions likecalculations of interest, maintenance of deposits accounts, ledgers etc. thebanks are started Ledger Posting Machines(LPM's) and advanced LedgerPosting Machines(ALPM's) as the first step to introduce technology.

Phase II

The second phase of e-banking focused on the improvement of customerservice with a reduction in the processing time. The Total Branch Mechanization(TBM) was introduced to capture the entire data/ transaction of clients in astanding alone mode.

Phase III

With the opening of new private banks, who had advantages ofthe computerized environment from day to day of their operations, started in the thirdphase of e-banking? The core banking solutions (CBS) were introducedaggressively. The problem of decentralization network like maintaining thestand-alone server, various applications, databases etcwas avoided and bankswere able to take full advantage of centralization by improving their efficiencyfrom an administrative cost perspective.

Phase IV

The centralized operations provided the option to the customers tocarry out on their own required transactions through ATM's mobile bankingand internet banking. Operational costs for transacting through ATM's arecomparatively and also they provide flexible options to the customers. TheAAA mantra of Anytime, Anywhere and Anyhow is implemented throughATM's and internet banking.

Phase V

The Indian banking industry is passing through the fifth phase ofdevelopment wherein 'intrabank' connectivity is effectively extended as 'interbank' connectivity. The paperless online

banking interbank transactionsremittances have been through Real Time Gross Settlement (RTGS). Theconcept of ‘bank customer’ has further improved to ‘banking industrycustomer’.The cash tree consortium of networking ATM’s of various banks another customer-friendly development in E-banking.

REVIEW OF LITERATURE:

Ramesh and Dr.Muthumani (2017) investigated the challenges and opportunities associated with electronic banking in India. The aim of this paper is to research and analyse the Indian banking industry's progress in adopting technology.. The research is secondary based and analytical in nature.The advancementof e-banking in Indian banking industry is measured by various parameters such as Computerization of branches, Transactions through Retail Electronic Payment Methods,Automated Teller Machines, etc. Statistical and mathematical tools such as simple growth rates, percentages and averages etc. are employed. The paper also discusses the challenges that Indian banks face when it comes to technology adoption, as well as recommendations for how to overcome these obstacles. According to the paper, e-banking will become not only an acceptable but also a preferred mode of banking in the coming years.

Selvakumar (2017) investigated the role of electronic banking in Indian economic growth. According to the study, banks face numerous challenges in E-banking, but there are also numerous opportunities available. It was concluded that the banking industry will need to master a new business model by focusing on management and customer service.It also suggested that banks make concerted efforts to provide better services to their customers.

LekshmiBhai (2018) analysed the problems and prospectsof E banking in India. The study concluded that banks face numerous challenges while also offering numerous opportunities. ATMs, credit cards, RTGS, debit cards, mobile banking, and other financial innovations have completely transformed the face of Indian banking.However, more innovative solutions are required so that challenges can be solved and opportunities can be exploited efficiently by Indian banks.

Shualib Ahmed and Abdul Sajid (2019) study the impact of internet banking services on customer satisfaction at public and private sector banks in this research paper. The researchers created questionnaires. The primary data were collected using a structured questionnaire from 525 randomly selected respondents. SPSS was used to analyse the research tools for data analysis that were collected. For data analysis, statistical tools such as percentage, Chi-square, and independent Sample Test (Z Test) have been used. The survey tries to describe the various internet banking service methods that may result in customer satisfaction. This article shows that internet banking has a positive impact on customer satisfaction. According to the findings of this study, both sector banks should focus on increasing customer awareness of electronic banking services.This study found that electronic banking services are highly recommended, and that technical awareness should be spread among current and potential customers, as well as appropriate groundwork for electronic banking services for customer satisfaction.

Ali Nazaritehrani andBehzadMashali(2020),they investigated the impact of developing new channels for presenting bank services on bank market share. This study's statistical population consisted of Shahr Bank's central headquarters and its branches in Tehran, Iran. They formed questionnaires to collect data. EFA, CFA, expert opinion, and Cronbach's alpha were used to assess the scales' validity and reliability.They had to use linear regression to examine the effectiveness of

innovative channels on bank market share, such as internet banking, automated teller machines (ATMs), mobile banking, telephone banking (TB), and point of sale (POS). According to the findings, some of these channels, such as internet banking, POS, and TB, have a positive impact on a bank's market share.The impact of two other channels, mobile banking and ATM development, on bank market share was denied. The study's findings contribute to a better understanding of how bank executives can increase their market share by providing new e-banking channels.

IMPORTANCE OF THE STUDY:

Keeping into the view of developments in banking and its influence oftechnology in banking, it was desired to study growth of e-banking, challengesfaced to implement technical revolutionetc. as it is possible to cover the all aspects of e- bank it has been decided torestrict the study on growth, challenges of e-banking.

OBJECTIVES OF THE STUDY:

The study's objectives are outlined below.

- To analyse the necessityof E-banking inIndian economy.
- Be aware of on-going financial innovations and the implementation of various technological services in e-banking.
- To study the latest trends and growth of Indian E-banking
- To perceive the variouschallenges addressing the Indian E-banking sector in present scenario.

RESEARCH METHODOLOGY

The present study is descriptive in nature. The study based on secondary data gathered from RBI websites, annual reports, and RBI (Reserve Bank of India) bulletins, as well as a wide range of reputed and reliable journals and newspapers.

NECESSITYOF E-BANKING IN INDIAN ECONOMY

Banking has adoptednumerous innovations in most recent multi-decadeand one of the important among it is e-banking which a consequence of ICT revolution was. These information and communication technology revolutions changed the whole operations of the banking sector as e-banking deliver a new sort of financial services which was made by the intersection of customretail financial services with the internet. E-banking givesthe provision of executing basic banking services like fund transfers, account balance checks through web.

These services include

- Checking and savings accounts
- Consumer loans and mortgage financing
- Credit and debit cards

Implementation of e-banking made banking extremely convenientand effective.Major focus of e-banking is to impart a customer with timely and secure methods of doingonline transactions like automatic deposits, automatic bill payments,online loan procedures and much more. The proceeding use in e-banking is very easy andtransparent as in this process customercommunicates their bank and thenthey input their customer id and password at their internet banking sitesto acquireentire access to their account. Customers simplyrequiretohavesecure Web browsers that support 128-bit encryption,

which protects them by scrambling all the personal information sent between a consumer's computer and the bank. This eventually leads toimproved customer satisfaction and loyalty towards their banking services.

THE LATEST FINANCIAL INNOVATIONS IN THE INDIAN BANKING SECTOR

Development of innovation in the banking sector createsnew product designs, various modes of doing online fund transfers, and different electronic systems. This gave a most famous name to today's banking system which is Innovative banking. Innovation banking primarily weighs on customer comfort and customer satisfaction. The major reason for getting innovation in present banking system was to givethe customer greaterservices with the support of technology and in this race of technology advancement internet provides as the base for innovation banking. After the implementation of internet in the banking sector anextreme changes were noticedlike higher efficiency, cost reduction,control of operations, because of substitution of paper based and workintensive strategies by automated processes promote to increaseproductivity and profitability of banks. The necessity of innovations inFinancial sector was felt due to the challenges that were induced in the traditional banking system and after the implementation of technological innovation in banking products and services these challenges were overcome and this fullymodified the banking philosophy.

Following is a list of various innovative technologies that existed in E-Banking:

Automated Teller Machines (ATM):

Automated Teller Machine orAutomatic Teller Machine is known as ATM. In a basic sense it is an electronic computerized telecommunications device that grantscustomers to donefinancial transactions like cash depositsor cash withdrawals by utilizing their ATM cards and a statement of their account's balance can also be obtained that too without the assistance of any bank representative. In simple words, it is easy to utilizeself-servicesystem.

Mobile Banking:

Mobile banking is the next type of e-banking innovation as this service simplifies the bank's customer to perform a wide range of financial transactions over theirSmartphones, free from frequenting any bank branch or automated teller machine. Besides the timing of Mobile banking is extremely longer than bank branch timing, and in reality,some banks offer 24-hour operations for their customers. The different kindsof financial transactions which customers may execute through their mobile bankingare:-

- Acquiring account balances
- list of most recent transactions
- Electronic bill payments
- Funds transfers between a customers'accounts or inanother's accounts.

One of the significantadvantages of Mobile banking is that ithas reduced the cost oftransactions by diminishingthe necessity for customers to step into a bank branch for deposit transactions andnon-cash withdrawal.

Smart Card:

A smart card is also known integrated circuit card(ICC), orchip cardit is a pocket sized plastic card with a computer chip installed in it. On one side of the card, the microprocessor is concealed underneath a touch pad. Consider the microprocessor as replacement for the magnetic stripe on a credit card or debit card. The smart card'smicroprocessor serves as a security feature. The microprocessor is "talk" to by the host computer and card reader. Access to the data on the card is controlled by the microprocessor. Thesesmart card'schips are capable of variety oftransactions,including cash withdrawal, deposit and balance inquire among others.

Debit Card:

Debit cards are frequently referred to as check cardsor bank cards. Debit cards resemble credit cards or ATM (automated teller machine) cards.They are plastic payment card that can be used in place of cash when making purchases but they functionsimilarlyto cash or a personal check. However debit cards different from credit cards in that credit cardsallow customers to "pay later," whereasdebit card enables users to "pay now." When a customer uses a debit card, money is paid out of theiraccount instantly. Simply put,when a transaction is made with a debit card, money is taken immediately from the user's bank account.

E-Cheque:

E-Chequesare the most recent innovation in the domain of e-banking; they are new payment mechanism that helps customers who do not have a credit or debit card as a backup payment method. Payment is madeautomatically from the customer's bank account through the E-cheque mode. If ones bank account is the only payment optionlinked to their bank account, customers only can send an E-Cheque. Users will not be able to send e-Cheques, ifindeed the customer has a back-up payment method.

Direct Deposit:

A payer deposits money directly into a payee's bank account, known as direct deposit or direct credit. Direct deposits are most commonly used to pay salaries and wages, as well as other types of bills, straight into other people's accounts.Direct deposits are most typically performed by electronic funds transfers using online or mobile banking systems, but they can also be conducted by physically depositing funds into the payee's bank account.

Electronic Bill Payment:

Electronic bill is really a type of e-banking concept that allows a customer of a financial institution or bank to transfer money to a creditor or vendor, such as a public utility, department shop, or an individual, through a financial transaction or credit card account to be credited against a specified account.These payments are made electronically using direct deposit through a national payment system run by banks or in cooperation with the government.

Electronic Check Conversion:

The process of electronic check conversion involves using a check as a data source, such as the check number, account number, and the number that identifies your financial institution. The

information is then used to initiate an electronic fund transfer, which is a one-time electronic payment from a customer's account.

Cash Value Stored:

A stored-value card is a payment card with a monetary value saved on the card itself rather than in a financial institution's external account. Credit cards differ from debit cards in that the credit limit is set by the issuer, whereas stored-value cards do not have a monetary value because the money is on deposit with the issuer.Another contrast between stored-value cards and debit and credit cards is that debit and credit cards are typically issued in the name of individual account holders, whereas stored-value cards, such as gift cards, may be issued anonymously. Stored-value cards are prepaid money cards that can be discarded once the value has been utilized or topped up.

E-Wallets:

E-wallet is a form of electronic card that may be used to make online purchases using a computer or smartphone. E-wallets can be accessed over the internet and through smartphone apps.Money can be added to the application by using a debit or credit card or a net-banking account. The Aadhaar Payment app, the UPI app, and the Bharat Interface for Money (BHIM) app launched by the National Payments Corporation of India (NPCI) had been extensively promoted by the Indian government and private sector companies such as Paytm, Freecharge, Mobikwik,Paypal, Google pay, Android pay, Apple pay, Samsung pay, Amazon pay and PhonepeApp-based digital transfers have influenced behavior and aided in the uptake of digital payments. Wallets are constantly developing in popularity because they increase in transaction speed, specifically for ecommerce businesses, and all ecommerce marketplaces have partnered with such mobile wallets.

LATEST TRENDS AND GROWTH OF E-BANKING IN INDIA

Until the 1990s, banks preferred conventional banking to branch banking. The banking industry evaluated the innovative mobility of banking services after financial reforms. Since 1993, the Indian banking industry has recognised computerization, as much out of sheer impulse and necessity to deal with increasing overload and inconsistency of the manual process in order to retain further economic expansion. In 1993, the Employees' Association of Indian Banks (IBA) reached an agreement with bank management to implement computerized applications in banks. This agreement was a significant step forward in the implementation of computerized applications and the development of communication networks in banks. The first initiative in the field of bank computerization, on the other hand, emerged from the landmark reports of two committees chaired by former RBI governor Dr. C Rangarajan. Both reports endorsed for the computerization of banking operations at various levels, as well as the development of appropriate architecture. In 1994, the Reserve Bank of India established a committee led by W S Saraf, which strongly recommended for the use of electronic funds transfer (EFT), the introduction of electronic clearing services, and the expansion of Magnetic Ink Character Recognition (MICR) beyond metropolitan cities and branches. Industrial Credit and Investment Corporation of India was the first in India to use electronic banking by introducing online banking services in branches in 1996. Its initiatives were followed by HDFC Bank, IndusInd Bank, and Citibank, all of which started offering online banking services in 1999. The Reserve Bank of India and the Government of India had also taken several initiatives to promote

the growth and smooth operation of electronic banking in India. The Indian government passed the Information Technology Act of 2000, which legalizes e-transactions and e-commerce.

The following are the significant technological innovations seen in India's new age payment structures:

- In 1980 to 1990's - Debit and credit cardsfirst emerged
- From 1984 to 1988 -Banks began to use computers and MICR cheques were introduced.
- In 1987 -HSBC is the very first bankin India to launch the ATM concept
- In 1990 - The RBI introduced the ECS payment in India
- In 1991 -India joined the Society for Worldwide Interbank Financial Telecommunication.
- In 1997 -Shared payment network system was established
- In 1999, the Reserve Bank of India, IIT (Mumbai), and IDRBT, Hyderabad collaborated on a smart card pilot project.
- In 2000, the Information Technology Bill was passed;
- In 2002, SMS banking was introduced in India;
- In 2003, Special Electronic Fund Transfer was adopted; and
- In 2004, Real-time Gross Settlement was incorporated.
- In 2005, overall 11% of public sector bank branches were brought under core banking solutions, and national electronic funds transfer was implemented.
- In 2007, The Payment and Settlement System Act of 2007 was passed in 2007.
- In 2008, a cheque truncation system was implemented, as well as operational guidelines for mobile banking transactions.
- In 2009 - Free cash withdrawal from ATMs.
- In 2010, the Immediate Payment Service
- In 2016, the Bharat Bill Payment System and the Unified Payments Interface were announced, and banks across the country began to upload their configurations in August 2016.
- In 2016 - Bharat Interface for Money (BHIM) is a mobile app established by National Payments Corporation of India (NPCI), that is premised on the Unified Payment Interface (UPI).
- In 2017- Mobile walletscontinued to gain real momentum in smartphones and laptops across the world and dominating discussions about new ways to pay

GROWTH IN PAYMENT SYSTEMS

In line with previous years, large value credit transfers through RTGS dominated the overall digital payments landscape in the year 2019-20, accounting for 80.8 per cent of the total value of digital transactions. Credit transfers via multiple channels, such as the Unified Payments Interface (UPI), National Electronic Funds Transfer (NEFT), and Immediate Payment Service (IMPS), were the leaders in terms of volume.In terms of card payments, the value of debit card transactions increased by 35.6 percent compared to 21.1 percent for credit cards. Because of the social distancing requirements during the pandemic, digital transactions were preferred over cash, though the value and volume of the former were somewhat depressed due to the slowdown in economic activity preceding the outbreak.The growth trajectory of UPI-based transactions, as well as overall retail digital transactions, has been remarkable, both in terms of value and volume.

Table No:1.1

Volume and values of growth in Electronic payment system

Item	Volume(Lakh)			Value (RsCrore)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
Large value credit transfers-RTGS	1,244	1,366	1,507	11,67,12,478	13,56,88,187	13,11,56,475
Credit transfers	58,793	1,18,750	2,06,661	1,88,14,287	2,60,97,655	2,85,72,100
AePs	6	11	10	300	501	469
APBS	12,980	15,032	16,805	55,949	86,734	99,448
ECS Cr	61	54	18	11,864	13,235	5,145
IMPS	10,098	17,529	25,792	8,92,498	15,90,257	23,37,541
NACH cr	7,031	9,021	11,406	5,20,992	7,36,349	10,52,187
NEFT	19,464	23,189	27,445	1,72,22,852	2,27,93,608	2,29,45,580
UPI	9,152	53,912	1,25,186	1,09,832	8,76,971,	21,31,730
Debit Transfers and Direct debits	3,788	6,382	8.957	3.99.300	6.56.232	8.26.036
BHIM Aadhaar pay	20	68	91	78	815	1,303
ECS Dr	15	9	1	972	1260	39
NACH Dr	3738	6299	8768	3,98,211	6,54,138	8,24,491
NETC	15	6	97	39	20	203
Card payments	47486	61769	73012	9,19,035	11,96,888	15,35,765
Credit Cards	14,052	17626	21773	4,58,965	6,03,413	7.30.895
Debit cards	33,434	44143	51239	4,60,070	5,93,475	8.04.870
Prepaid payment instruments	34,591	46072	53318	1,41,634	2,13,323	2,15,558
Total digital payments	1,45,902	2,34,339	3,43,456	13,69,86,734	16,38,52,286	16,23,05,934

Source:https://m.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1293

CHALLENGES INDIAN E-BANKING SECTOR

Electronic banking is now the norm rather than the exception for banks. Despite the fact that it provides numerous services to customers to make banking easier and more convenient, there are numerous challenges that customers face when adopting electronic banking. Some of the majorchallengesare listed below

- Customers refuse to adopt Electronic banking service because of Security threat Electronic banking frauds like spyware, Phishing, internet theft Spamming etc. are still very much widespread.

- Customers are refusing to use electronic banking services due to security concerns. Electronic banking frauds such as spyware, phishing, internet theft, spamming, and so on are still very common.
- Customers face the risk of losing private information due to technical flaws.
- Inadequate knowledge of how to use electronic banking, as well as a lack of preparedness on the part of customers and banks in terms of technological adoption.
- Inadequate infrastructure for the establishment of electronic delivery networks
- The bank's management, supervisor, and governing authorities face a number of challenges in implementing E-banking.
- The risk of disclosing customers' financial information to others, causing customers to be concerned about their privacy.
- Communication only through the internet may not be the best foundation for bank and customer relations because trust may be lost in some cases.

The CPMI published a report titled 'Reducing the Risk of Wholesale Payments Fraud Related to Endpoint Security,' in which it emphasized the importance of a comprehensive approach to reducing the risk of fraud. The report emphasized the importance of a coordinated effort to ensure the safety of wholesale payments, which was necessary due to the interconnectedness of financial networks.

The following are the elements of the strategy to reduce risks in wholesale payments fraud related to endpoint security:

- Understand and identify the various risks associated to endpoint security that participants face individually and collectively.
- Establish endpoint security requirements for its participants in order to prevent, detect, and respond to fraud.
- Encourage conformity to the endpointsecurity requirements.
- Propagate and utilize information and tools toimprove fraud prevention and detection.
- There should be procedures and practices in placeto respond to actual or suspected scam in a timelymanner.
- Promote ongoing education, awareness andsharing of information.
- Assess and update endpoint security requirements, procedures, practices, and resources as endpoint security risks and risk controls evolve.

Traditional Banking Habits

This is primarily due to the fact that many people are accustomed to traditional banking, and it can take time for them to break bad habits. Accordingly, online banking marketers should concentrate on reassuring to use online banking services from traditional banking habits. These marketing efforts should emphasize the numerous advantages of online banking.They should prove to the public how online banking can fix traditional banking problems more effectively (having to actually go to bank branches, higher fees,etc.)

The Trust Issue: For the majority of customers, trust is the most significant barrier to electronic banking. Customers frequently use traditional banking due to a lack of trust in online banking transactions.They believe that there is a risk in online banking transactions, which leads to various frauds and scams (Ingle A and Pardeshi R, 2012). When consumers use online banking services, they always have a doubt or question in their minds about the successful completion of that transaction until they receive a confirmation message.

Security

One of the most significant challenges for online banking marketers is security. This is because, in the past, a robber would have to break into the bank vault and make a daring escape with the money if he or she wanted to steal a person's bank savings. This was a difficult prospect that was extremely dangerous and risk.Cyber criminals only need certain personal information to break into a person's account and steal their money when using online banking. It can be done anonymously and with far less physical risk than in the past.As a result, security remains a major concern for online banks and their customers. To overcome this challenge, marketing professionals in the online banking sector must focus on demonstrating and explaining the security of online banks.

Security Risk: Because of safety and security concerns, a large proportion of customers are hesitant to use e-banking services(Kuisma T, Laukkanen T and HiltunenM., 2007). According to the IAMAI Report, 43 percent of internet users in India still refuse to use internet banking due to security concerns. As a result, convincing consumers on this point is a primary challenge for banks, which may lead to an increase in online banking usage.

Privacy/ Confidentiality risk: One of the major reasons that consumers are reluctant to use electronic banking services is the risk of revealing non-public or confidential information, as well as the fear of identity theft. A large number of consumers believe that by using internet banking services, their identity will be jeopardized. According to the study (Andrews S and Shen A., 2000), consumers are concerned about their privacy in the sense that banks may violate their confidentiality by using their information for marketing and other consequential purposes without their consent.

Transaction Difficulty

Depositing and withdrawing funds from an online bank can be significantly more difficult and time consuming. Not only do online banks frequently have fewer ATMs than their traditional counterparts, but deposits can also take longer to process and deposit into a bank account.Deposits to PayPal, one of the largest online banks, for example, take about 3-5 days to appear in accounts. This is a problem that online banking marketers will most likely face until online banks improve their transaction times.

Technical Issues

Even though online banks focus exclusively on their online platforms, they can suffer significant losses if their systems fail or if there are viruses in their code. A single technical issue that shuts down a bank for a day could cost the bank millions in loss of income.It can really create issues for bank customers, who may be unable to make payments or conduct transactions while the site is unavailable. A mobile banking app is now used by 54% of consumers.As a result, it is critical for banks to have not only their online platforms but also their mobile apps running smoothly. A loss of funds or data as a result of a crash can be very concerning for bank customers. So, marketers should optimize assuaging this issue by explaining how account funds will not be lost if technical problems arise

Cost of Technology: The initial investment is high due to the cost of personal computers and other equipment required to conduct electronic banking transactions. The cost of maintaining all of these devices, such as modems, routers, and the entire IT setup, is also noticeable.

Sustainable competitive advantage

Among the most significant challenges that has been brought to light is the number of digital banking initiatives that have little to no impact on the economy. Our efforts must be centered on experience. Poor user experience leads to low adoption and, ultimately, failure of digital initiatives.

Understanding customer context

Another area where banks have suffered is when attempting to impose digital solutions on traditional customers. We were privileged to recognize this threat soon on and improve DISC(Digital Native, Intelligent, Social, Connected), a consumer segmentation approach centred on technology.This enabled us to devise new, agile, and relevant solutions that are assisting us in consolidating our digital leadership.

Customer Understanding: Consumers' knowledge or understanding of e-banking is still on the tough side in the Indian context. Banks are unable to publicize all of the information about the use, benefits, and features of online banking. As a result, one of the most significant barriers to the expansion of electronic banking is customers' lack of awareness of new technologies. (Karimzadeh M and Alam D,2012)

Customer Education: Mostly in case of private banks, e-banking services were made available to customers from the beginning. However, in the case of old public sector banks, convincing their customers of the program's utility is difficult.It is difficult to provide formal education to customers about e-banking. Regarding this, banks have opted to provide monetary inducements such as a free debit card, free net banking services, constant and timely information to customers regarding monthly statements of their accounts mostly through e-mail, and so on, in order to switch customers to these growing banking services.

Automation and the future of work

The impact of AI and Robotic Process Automation on traditional workforce is one of the most important sociological challenges that has been raised. It is everyone’s responsibility to understand the effect on jobs and assist the workforce in transitioning to newer roles. This will not only be responsible growth, but it will also have a massively positive impact in the future.

Less Internet diffusion in India: The online banking channel has evolved over time. As a result, it can be stated that awareness and accessibility of the internet is still one of the critical challenges that exist in the Indian context. All internet users are unaware of how to transfer money online. Thus, the major challenges are internet customer penetration and internet knowledge.

Poor Infrastructure: Internet banking requires consistent infrastructure support to ensure effective implementation and geographic expansion. Due to inadequate infrastructure in terms of decent set up, electric connection, poor satellite, internet, and broadband connectivity, e-banking has been hampered in its expansion to semi-urban and rural areas.

*Operating Conditions*India is a country with many cultures and languages, but this complicates online banking operations because displaying instructions or guidelines in different languages is a time-consuming task.However, technology has identified a solution to this problem; however, illiterate people are still not covered by this solution, and ATMs cannot assure identical operating levels from all users, resulting in high wear and tear.

Technological Illiteracy: In the case of mobile banking, many of the technical rules and regulations are incomprehensible to many lower-income mobile users, making it difficult for them to operate. Consumers typically purchase handsets based on their budget, and those handsets may include features that are unsupportive in terms of Mobile Banking, posing a limitation in the execution of e-banking.

Training the Employees: Training bank employees is a simpler task in the private sector because the employees are young and dynamic, whereas in the public sector, training the employees is a more difficult task because the current staff is comparatively less computer literate. Despite this, they have been able to achieve significant success after working on it for over a decade.

Restricted Business: Another barrier to e-banking is that not all banking transactions can be completed online or through other electronic means; for some services, such as deposits and withdrawals, one must visit a bank in person. Despite the fact that some banks have automated their methods and their customers (front end), many continue to use traditional methods (back end).Customers are hindered in some ways as a result of a lack of awareness and technical hurdles.

Conclusion

In India, the Concept of E-Banking has gainedpopularity with the progression of time. Both public and private sector banks have successfully launched E-Banking services because it is efficient forConsumers as well as banks. Information and communication technologies have played a significant role in endorsement of e-banking. Most of the financialinnovations like ATMs, RTGS, debit cards,credit cards, mobile banking, E-wallets etc. havefully changed the face of Indian banking. However there will be a need for more new approachesbecause e-banking is still facingmany challenges to implement such as security issues, privacy issues, and trust as well as lack of customer awareness about e-banking, unsupportive infrastructure and a low level of computer literacy among existing bankers. The Government of India in collaboration with many public banks & financial Institutions is attempting to developan E-banking facilitiesthat is more safe, transparentand secured. This paper also discuss the opportunities for e-banking growth in India. This paper examines and presents the fundamentals of E-Banking in India. Consumers in India accept internet banking,according to previous studies, but development will obviously take time. Advance studies may be performed in this context to explorethe different forces thatleadconsumersto intend to choose internet banking services.

References:

1. Andrews, S., and Shen, A. Public comment on barriers to electronic commerce. Response to call by U.S. Department of Commerce (65 Federal Register 15898). *Electronic Privacy Information Center*, U.S. Department of Commerce, Washington, DC, March 17, (2000).https://www.epic.org/privacy/internet/Barriers_to_E-commerce.html
2. Annual reports of RBI,accessed on April 28, 2021
3. https://m.rbi.org.in/Scripts/AnnualReportPublications.aspx?Id=1293
4. Ingle A and Pardeshi R, Internet Banking in India: Challenges and Opportunities. *IBMRD's Journal of Management and Research*, Vol. 1, (2012). pp. 13-18.

5. Karimzadeh, M., &Alam, D. Electronic banking challenges in India: an empirical investigation. *Interdisciplinary Journal of Contemporary Research In Business,* 4(2), (2012). 31-45. https://journal-archieves19.webs.com/31-45.pdf

6. Kuisma, T &Laukkanen, T &Hiltunen, M..Mapping the Reasons for Resistance to Internet Banking: A Means-End Approach. *International Journal of Information Management. 27.* (2007)75-85. 10.1016/j.ijinfomgt.2006.08.006.
7. Dr.LekshmiBhai.P.S E-Banking in India - Problems and Prospects. *International Journal of Current Engineering and Scientific Research (IJCESR*),*5*(1), (2018). 77-81.retrived from troindia.in/journal/ijcesr/vol5iss1part7/77-81.pdf
8. Nazaritehrani, A., Mashali, B. Development of E-banking channels and market share in developing countries. *FinancInnov* 6, 12 (2020). https://doi.org/10.1186/s40854-020-0171-z
9. Ramesh, L., Dr.Muthumani, A. Electronic Banking in India: Challenges and Opportunities. *International journal of science technology and management*, *6*(2), (2017). 219-225. jstm.com/images/short_pdf/1486215092_S208_IJSTM.pdf
10. Rout, B., &Samarpita, S. Technology of e-Banking: Customer Perception and Satisfaction towards Public Sector Banks in Bhubaneswar City. IOSR Journal of Business and Management. 19(05) (2017) 29-38. 10.9790/487X-19 05042938.
11. Selvakumar,T. A Study on Role of Banking in Indian Economic Growth. *International conference on recent trends in engineering science, humanities and management,* (2017) *560-566.* data.conferenceworld.in/SRNM/70.pdf
12. Shuaib Ahmed, M., &Dr. Abdul Sajid. S. Technology Impact On E- Banking Towards Customer Satisfaction In Public & Private Sectors Bank [With Special Reference To Vellore District Of Tamil Nadu- India]. *International journal of scientific & technology research, 8*(12), .(2019)255-259.www.ijstr.org/final-print/dec2019/Technology-Impact-On-E-Banking-Towards-Customer-Satisfaction-In-Public-Private-Sectors-Bank-with-Special-Reference-To-Vellore-District-Of-Tamil-Nadu-India.pdf