



The Banking Revolution: Navigating a Shift in Digital Era

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Abstract:

E-banking plays a vital role in the present banking functionality. Technology has reduced everything to a click of a button and people can transfer money from one account to another account even without standing in long queues for hours. The customer can access it with easy from anywhere in the world. It has made possible to conduct some banking transactions from anywhere like making payments and transfer funds to third party, open new account, details of new account, details of accounts, credit card and home loan balanced There are numerous of options available to people ranging from debit cards, credit cards, e-wallets, internet banking, and mobile banking and so on which have replaced the traditional methods of transactions.

Keywords: *E-banking, Internet, Electronic Payment, Benefits, Challenges, Opportunities.*

Introduction:

E-banking, also known as online banking or virtual banking or internet banking is a system that enables banking transactions like transfer of funds, payment of loans and EMIs, deposit, and withdrawal of cash virtually with the help of the internet. Banking today has become easier and it has led to a secure way for people to keep their hard-earned money in their bank accounts. The present study has been undertaken to describe the present status of e-banking in India and examine the challenges & opportunities of e-banking. The research method of this study used the secondary data listed in different databases of books, research papers, and related articles of e-banking available on the Internet. E-banking is a system that uses the internet and a telecommunication network to provide consumers with a variety of online banking services. This is a service that allows

consumers to log into their bank accounts and do various financial activities over the internet. It's sometimes referred to as online banking, virtual banking, or internet banking. E-banking is a secure, simple, and quick electronic service that allows consumers to do banking transactions from any location without having to visit a bank branch. Customers can use the e-banking service at any time, 24 hours a day, and seven days a week. Instead of exchanging numerous conventional documents such as cash, cheques, and so on, money is exchanged through the transmission of electronic signals.

Literature review:

E-banking is a new way in which new information technology integrates with traditional banking services. Reducing operating costs and increasing revenue are the main factors that enhance e-banking

services (Sannes, 2001; Reibstein, 2002).

The E-banking service is actually a self-service customer service, so for banks, it requires less resources and lower transaction and production costs (Southard and Siau, 2004; Witman and Poust, 2008). Research on e-banking over 1999-2006 shows that the use of e-banking can improve the performance of banks in terms of asset growth, reduced operating costs and improved portfolio (Dandapani et al., 2008). Even in the 1990s, Sraeel (1996) emphasizes that creating a virtual banking will not only create a new service delivery channel, but will also lead to value building for both banks and customers (Hwang et al., 2007; Murphy, 2007).

AmatoMcCoy (2005) further states that customers will be drawn to the e-bank where advanced e-banking services such as e-transfer and e-bill are available. By interviewing banks on a small island and checking their banking websites from 2004 to 2006, Jenkins (2007) points out that those banks used e-banking as a guarantee for them customers to maintain competitive quality of service.

Durkin et al. (2008) notes that the simplicity of online banking products facilitates online banking acceptance by consumers. Calisir and Gumussoy (2008) compared online banking perceptions with other banking channels and reported that online banking, ATMs and telephone banking are intertwined. Maenpaa et.al. (2008) examine consumers' perceptions of online banking in Finland and their findings show that familiarity plays a role in modelling.

Objectives of the Research:

1. To know the concepts of e-banking.
2. To study the current status of financial innovations in the Indian banking sector.
3. To study the challenges faced in e-banking.

4. To study the various opportunities available in e-banking.

Benefits of E-banking:

- 1. Convenience:** E-Banking provides customers with the flexibility to conduct banking transactions at their convenience.
- 2. Cost Savings:** E-Banking reduces the need for physical bank branches, resulting in lower operational costs for banks.
- 3. Increased Efficiency:** E-Banking enables faster transaction processing and reduces the risk of human error.
- 4. Improved Customer Service:** E-Banking provides customers with real-time access to their account information and enables them to track their transactions.
- 5. 24/7 availability:** You can access your accounts and conduct transactions at any time, without having to visit a bank branch.
- 6. Activity Tracking:** Users can track their account activities in real-time, gaining visibility and control over their finances with features like transaction history and account balance updates.

Challenges faced by E-banking:

- 1. Traditional banking habits:** 51% of adults participate in online banking, however, in the hindsight, 49% of them still don't. A majority of such people are susceptible to change and are well versed in traditional banking. Such aversion to change is usually due to a lack of trust in the online system or the inability to operate online portals. As a result, banks are struggling to convince people to adopt online banking.
- 2. Security and fraud instances:** Security and protection against fraud and hacking are some of the most significant problems for banks promoting online banking.
- 3. Technical Issues:** Failed connectivity and lack of consistent and accurate data is a major concern with banks. Banks are working towards pre-empting the problems with greater demand load rising from digital technologies. Relying on technically

upgraded systems as customer expectations are rising and improved and speedy banking is the minimum expectation.

4. Lack of Personal Relationships:

Customer service is an important factor through which banks retain and gain their new client base. A bad experience with the service provider not mitigated at the right time by the relationship officer can be a damper on the bank's reputation.

5. Deposit limitations: Most banks limit mobile deposits to prevent fraud and money laundering. Online-only banks may not be able to handle large checks.

6. Disputed transactions: If you can't find details about the person using your money, you may not be able to file a complaint or get a refund.

Types of E-banking:

1. Online Banking: Online banking empowers customers to manage their accounts seamlessly. With online platforms, users can easily access their accounts, view activities, make payments, and do transactions.

2. Mobile Banking: Designed for on-the-go convenience, mobile banking brings banking to customers' fingertips. With smartphones or other mobile devices, users can access accounts, view activities, make payments, and transfer funds effortlessly.

3. ATM Banking: ATM banking extends the reach of e-banking. Customers can access accounts, view activities, make payments, and transfer money conveniently through automated teller machines (ATMs).

4. Direct Deposit: Direct deposit simplifies income management. Users can have salaries, government subsidies, or other income directly deposited into their bank accounts, streamlining financial transactions.

5. Electronic Funds Transfer (EFT): It is helpful for electronic payments and money transfers, providing a fast and secure means for customers to manage their finances.

6. Electronic Bill Payment: This e-banking

branch enables customers to settle bills electronically, offering a convenient and efficient way to manage financial obligations.

7. Online Investing: For those venturing into financial markets, online investing within e-banking allows customers to conveniently purchase stocks, bonds, and mutual funds through online platforms.

Future Prospects of E-Banking:

1. Artificial Intelligence (AI): The integration of AI in E-Banking can enhance customer experience, improve risk management, and increase operational efficiency. The future of E-Banking is set to be heavily influenced by **Artificial Intelligence (AI)**, transforming how banks operate and interact with customers. AI will enable personalized banking services, improve fraud detection, and automate routine tasks, making banking faster and more efficient. Through advanced predictive analytics, AI will help banks make better decisions and offer tailored financial products. Additionally, AI-powered chatbots and virtual assistants will enhance customer support, while AI-driven security systems will strengthen data protection and fraud prevention. As AI continues to evolve, it will redefine the banking experience, creating more secure, efficient, and personalized services for customers.

2. Block chain Technology: The adoption of block chain technology in E-Banking can enhance security, transparency, and accountability. **Blockchain technology** is poised to revolutionize E-Banking by providing secure, transparent, and decentralized solutions for financial transactions. It ensures tamper-proof record-keeping through distributed ledgers, which reduces the risk of fraud and increases trust between parties. In E-Banking, blockchain can streamline processes like cross-border payments, reduce transaction fees, and enhance the efficiency of clearing and

settlement systems. Its ability to offer secure, real-time transaction verification makes it a valuable tool for improving the overall security and transparency of banking operations. As blockchain technology matures, it is expected to play a critical role in the future of digital banking.

3. Mobile Banking: The growth of mobile banking is expected to continue, with more customers accessing banking services through their mobile devices. **Mobile Banking** is rapidly transforming the way customers access and manage their finances. Through mobile apps, users can perform a wide range of banking activities, such as checking balances, transferring funds, paying bills, and even applying for loans, all from the convenience of their smartphones. Mobile banking offers enhanced accessibility, allowing customers to manage their financial needs anytime, anywhere. As mobile technology continues to evolve, the future of mobile banking will likely include more advanced features like biometric authentication, personalized financial insights, and seamless integration with other digital services, further enhancing user experience and convenience.

4. Open Banking: The emergence of open banking is expected to enable customers to share their financial data with third-party providers, promoting innovation and competition. **Open Banking** is a system that allows third-party financial services providers to securely access banking data, with customer consent, to offer innovative products and services. By using APIs (Application Programming Interfaces), Open Banking enables consumers to share their financial data with other institutions, fostering greater competition, personalized services, and better financial management tools. This approach encourages transparency, providing customers with more control over their financial information, while promoting innovation in areas like payment solutions, budgeting

apps, and credit scoring. As Open Banking evolves, it is expected to drive a more interconnected and customer-centric financial ecosystem.

Methodology:

This research conducted research using second-hand data listed in different databases of books, research papers, and related articles on the Internet on e-banking.

Electronic Banking Products in India:

In the recent past, a large number of banking services shifted from Traditional banking to E-Banking. The present study focuses on the important forms of E-banking such as ATM, Debit cards, Credit cards, RTGS, Mobile Banking.

1. Automated Teller Machine: An ATM is a computerised machine that provides the customer to make a financial transaction without the help of a bank employee. For using ATMs, the customer has to obtain an ATM card or debit card from his bank. Using ATMs a customer can avail various service like withdrawal of cash, depositing money, check the balance inquiries etc. The system is recognised as “Any Time Money” or “Anywhere Money” as it permits the customers to withdraw money from the bank from any of its ATMs without any constraint of time. ATMs is also beneficial for the customer who regularly visits foreign countries. They can withdraw money in foreign nations

2. Debit Cards: A debit card is a plastic card, which delivers an alternative payment system to cash when we make purchases. Customer need not carry paper cash, instead of using paper cash, they can use their cards to cash withdrawal and make purchases. In India, the majority of the banks provide debit cards whenever a customer opens a saving bank account. As and when cash is a required customer can withdraw money with the help of Debit card. It also enables customers to use ATM machines. The

customer can withdraw the money if he has sufficient balance in his account with the bank. Although many debit cards are of the Rupay card, Visa or

Master card kind, there are many other forms of a debit card, each recognised only within a particular country. Customer needs to be most careful when they are making transactions.

3. Credit Cards: A credit card is also known as plastic money which permits its customer to buy goods and services on credit bases. The credit cards are given by the banks, and when customers sweep the card for their purchases a line of credit is granted by him, as he can make purchases on credit bases which are to be repaid later to the bank. A credit card transaction is often more secure than other forms of payment such as cash payments or cheque payments. Customers have a fear to use credit cards because it leads to more spending than required. It also involved a high risk of fraud if in case the card gets stolen or if the card's information is shared unknowingly.

4. National Electronic Fund Transfer: National electronic fund transfer is a nation-wide payment system enabling one to one fund's transfer. Under this system individuals and corporates can electronically transfer funds from any bank branch to any individual, corporate having an account with any other bank branch in the country participating in the scheme. For being a part of the NEFT funds transfer network, a bank branch has to be National electronic fund transfer enabled. Any individuals, firms who holds saving bank accounts with a bank branch can receive or send funds through the NEFT scheme hence it is necessary for the customers to have an account with NEFT enabled bank branch. There is no maximum limit on the number of funds that could be transferred using NEFT. From July 10, 2017 onwards the settlements of fund transfer requests in the NEFT system is done on a half-hourly basis.

5. Mobile Banking: It is the act of performing banking transactions on a mobile device like cell phones, tablet etc. mobile phones as a medium for covering banking services, and have reached greater significance because of their pervasive nature. Banks are allowed to offer mobile banking services through SMS, USSD or mobile banking application after obtaining necessary permission from the department of payment and settlement systems. Mobile banking services are to be made available to bank customers irrespective of the mobile network. Banks which are licensed and have a physical presence in India, only banks who have implemented Core banking solutions are permitted to offer mobile banking service for the customer, to enable mobile banking service the customer should fulfil.

Present Status of E-banking in India:

E-banking has become an integral part of the banking system in India. Before the 90's, the traditional model of banking i.e. branch-based banking was prevalent, but after that non-branch banking services were started. The credit of launching internet banking in India goes to firstly ICICI Bank. After that Citibank and HDFC Bank followed with internet banking services in 1999. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000, which provided legal recognition to electronic transactions and other means of e-commerce. The Reserve Bank is monitoring and reviewing the legal and other requirements of ebanking on a continuous basis to ensure that e-banking would develop on sound lines and e-banking related challenges would not pose a threat to financial stability. According to a report of RBI in Jan. 2016, there are 196079 ATMs and 1337310 points of sale devices in India. To cope with the pressure of growing competition, Indian commercial banks have adopted several initiatives and e-banking is one of them. The competition has been

especially tough for the public sector banks, as the newly established private sector and foreign banks are leaders in the adoption of e-banking. Indian banks offer to their customers the following ebanking products and services viz.

Automated Teller Machines (ATMs), Internet Banking, Mobile Banking, Phone Banking, Tele banking, Electronic Clearing Services, Electronic Clearing Cards, Smart Cards, Door Step Banking, and Electronic Fund Transfer.

According to the RBI in its Annual Report 2020-21 stated that the payment systems recorded a robust growth of 26.2% in terms of volume on top of the expansion of 44.2% in the previous year. Here some of the major key facts are as follows:

1. Private sector banks represent about 67% of the POS terminal market while public sector banks account for 27%. Payments banks accounted for 5% market share, and foreign banks represented 1%.
2. The total number of cards in circulation stood at 960.25 million as of March 2021. Out of which, there were 898.20 million debit cards and 62.05 million credit cards, up by 8% and 7% YOY respectively.
3. There were 2.20 billion prepaid payment instruments in the country. Out of which, 189.93 million comprised of prepaid cards and over 2.01 billion comprised of mobile wallets.
4. The number of transactions through mobile wallets in Q1 2021 was 1.13 billion and the value was INR 411.75 billion. This includes the purchase of goods and services and fund transfer through wallets. Transactions through wallets are growing steadily.
5. Consumers made 8.32 billion mobile-based payments whereas Net Banking / Internet browser- based transactions were over 937.60 million. In terms of value, INR 31.98

trillion was transacted through mobile while INR 131.34 trillion was transacted through the internet.

6. Out of total UPI volume, 55% of transactions were P2P (Person-to-Person) while 45% were P2M (Person-to Merchant). It clocked over 2.73 billion transactions in volume and breached INR 5 trillion in terms of value.
7. The transactions volume passing through Bharat Bill Payment Central Unit (BBPCU) in Q1 2021 stood at 90.71 million while the value of the transaction was INR 134.70 billion. It registered a growth rate of 99% and 129% in volume and value respectively against Q1 2020.
8. AePS transactions (Offers, BHIM Aadhaar Pay) in Q1 2021 recorded a substantial volume of over 449.45 million transactions, registering about 120% growth over Q1 2020. It processed transactions worth INR 633.38 billion, an increase of 93% over Q1 2010.

Conclusion:

E-Banking has revolutionized the banking industry, providing customers with convenient, efficient, and cost-effective banking services. While there are challenges associated with E-Banking, the benefits far outweigh the risks. As technology continues to evolve, E-Banking is expected to become even more sophisticated, secure, and customer-centric. Digitalization has become conclusive for the banking sector in India, which plays a major role in providing better services to customers. Internet banking is one of the most significant banking channels that allow consumers to do many transactions, either financial or non-financial through a bank's websites. The various services offered are Internet banking, SMS banking, ATMs, and mobile banking, e-cheques, UPI, and debit/credit cards. In today's world of globalization, e-banking is a

significant aspect of the development of the banking sector by solving major issues, challenges faced by e-banking. The Indian banking industry can develop customer loyalty towards the banking sector. This can be done through training and development and by making the banking process easier and familiar to the customers. The younger generation is beginning to see the convenience and benefits of e-banking. In the years to come, e-banking will not only be an acceptable mode of banking but will be preferred mode of banking in India. Private sector banks represent more of the POS terminal market as compare to public sector banks. The prepaid payment instruments in the country are mostly paid through mobile wallets. The Government of India and various government agencies are making an effort to make e-banking more safe, secure, and reliable with the convenience of digital channels. Most of the customers are visiting branches less often and they use online and mobile technology for their banking needs more often. Online and mobile banking are rapidly growing. Nowadays most of the people of India using e-banking for their transactions and make them stand with the current scenario of the country.

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