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Digitalize or Die – The Road Ahead for Indian Banking

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ABSTRACT

Digital Banking is the use of internet to make traditional banking services available to all through ATMs, Computers, mobile phones, etc. This effectively brings a bank into the hands of the customer and hence delivers services with ease and convenience. With greatly reduced scope for errors digital banking is proving to be more effective than traditional banking. Though India adopted digital Banking late, due to its late adoption of broadband services in the last millennium, the last decade have seen unprecedented growth in electronic banking due to availability of broadband and more recently the 4G services at dirt cheap rates. Though the evolution of digital banking was slow, it was definite and gathered pace in this decade. As the number of customers adopting digital banking is on a steep raise, even the much traditional and conservative banks are forced to digitalize and offer more and more services through digital platforms. The article discusses the pre requisites for growth of digital Banking and the major concerns to be addressed along with critically examining the digital banking scenario in India. The article examines the scope of future developments in the digital banking sector and how the banks have to compete to offer services through this platform to survive, remain relevant and thrive. Digital banking, for its ability to be done, anytime, anywhere and any channel, is going to remain the most favored form of banking for many years to come.

Keywords: Digital banking, India, internet banking, Adoption

Digital Banking is offering banking services on the online platform through computers and mobile phones than through traditional bank branches. It provides the ability for users to access financial data through desktop, mobile and ATM services.

Though the shift from traditional banking to Digital banking is gradual, it is definite and of late gathering pace. Digital Banking is rapidly gaining adaptability across the states as it is more convenient and faster. It is making cross banking services easier and faster for the banks and customers as well. With steady growth in reach of broadband connectivity even to the rural India, Digital Banking is suddenly high on adoption. With availability of 4g services at minimum tariffs, mobile banking has become one of the most favored forms of payment for the educated in urban and semi-urban areas.

Definition: *Digital Banking is the application of technology to ensure seamless end-to-end (STP in the 'old' jargon) processing of banking transactions/operations; initiated by the client, ensuring maximum utility; to the client in terms of availability, usefulness and cost; to the bank in terms of reduced operating costs, zero errors and enhanced services.*

- Stanley Epstein – Citadel Advantage Limited

In simple terms Digital Banking is the digitization of all the traditional banking services/ activities that were once only available to customers when physically inside of a bank branch. This includes activities like:

- Money Deposits, Withdrawals, and Transfers
- Checking/Saving Account Management
- Applying for Financial Products
- Loan Management
- Bill Pay
- Account Services, etc.

Phases of Development of Digital banking in India

Time line	Important Developments
1980s : Mechanization	• Mechanization of transactions and processes. • Introduction of encoders, standard cheques and cheque processing through MICR
1990s : Automation	• Computerizing of branches improved the productivity resulting in more products and services being offered to customers. • Connectivity between branches, post computerization, facilitated cross branch transactions and eventually paved the platform for anywhere banking. • Electronic Funds Transfer (EFT) facilitated seamless transfer of funds between customers, branches, banks and other institutions. • Implementation of Core Banking solutions improved the overall efficiency of banking operations. • ATMs were introduced changing the entire paradigm of customers' experience in banking for cash transaction and few other services. • Private Sector Banks which were more tech-savvy threw open challenge to the established big banks in the Indian Arena
2000s : Internet explosion	• Adoption of internet by Banking Sector • Introduction of ECS and later NEFT and RTGS facilitated quick transfer of funds. Cross location funds transfer became much faster • Online banking and tele banking started gaining popularity even in semi-urban areas

2011 Onwards	• Mobile Banking started becoming popular. For all major OS platforms of Mobile phones, Banks started developing apps for Banking. With screens of mobile phones becoming bigger and bigger, the apps started becoming more and more convenient to use. • Mobile wallets started posing competition to banking apps. But with Banks also starting wallet type payment apps, the thin line between wallets and banking apps is fast disappearing. • Chip based credit cards and debit cards started replacing magnetic strip based cards • Dual authentication of card transactions with CVV and mobile OTPs • Cheque Truncation: Physical cheques are converted into electronic form for transmission to the paying bank to reduce time and cost of processing.
The Future	• Improved Authentication: Behavior biometrics, finger scan, Iris scans • Artificial intelligence & Data Analytics • Virtual reality banking • Automation of Structured Finance (Personalized products and services developed through automation)

Prerequisites for Growth of Digital Banking in India

- **IT Infrastructure:** Two things matter most for Internet Banking. 1. The availability of internet with acceptable speeds even in the remote areas and 2. The cost of internet service. For operating ATMs, availability of proper satellite communication becomes essential.
- **Ease of the Site navigation:** Till very recently the websites of certain banks were so clumsy and slow that it was pain doing a digital transaction through them. Though many banks restructured their sites recently, still the sites of different banks are so dissimilar that navigating through every bank website makes one feel so unfamiliar with the process of transacting digitally.
- **Digital & Financial Literacy:** Lack of knowledge among the older generation about operating computers or smartphones is a great hurdle. Even when some of them can use them they are not proficient and confident enough to use e-banking/ mobile banking on their laptop or mobile phone. Without proper digital and financial literacy, digital banking is going to leave the older generation behind. Unless the rural population are familiarized with the concepts of digital banking, it shall remain an urban phenomenon.
- **Training needs –** It is not just the customers but also the employees who need to be more proficient in the digital technologies. Lack of fluency in digital use can act as a major deterrent for employees to deal with the innovative and changing technologies in banks. Training at all levels about the emerging trends and technologies in IT not only smoothens the work process but also makes banking more secure.

Benefits of Digital Banking

Benefits to the bank:

The operating cost of many banks will come down due to

- the elimination of costly back-office processing operations,
- fewer or even no errors,
- Smaller branch footprint necessitating a minimum number of actual staff being required.

- Evolution of concentrating banking, where business specialists located in a central space, shall be available to clients via a technology link.

At the time of initiating digital banking in various banks, 20% to 40% savings in operating costs were expected/ estimated. But due to digitalization, banks have benefitted in several ways by adopting newer technologies. E-banking has resulted in reducing costs drastically and has helped generate revenue through various channels. According to information collected around 2014-15, the cost of a bank transaction on Branch Banking is estimated to be in a range of Rs.70 to Rs.75 while it is around Rs.15 to Rs.16 on ATM, Rs.2 or less on Online Banking and Rs.1 or less on Mobile Banking.

Benefits to the customer:

- **Round the Clock Availability**: Unlike the fewer hours of availability for banking at the physical branch earlier, digital banking services are available round the clock and all days the week, even on national and bank holidays.
- **Time Saving:** Instant money transfers save lot of time to customers. They need not stand in queues now and wait for their turn. Everyone who is banking digitally is saving time of other customers of the bank, who bank physically, by not adding to the queue at the branch.
- **Convenience of Banking:** One important motivator for digital banking is the ease of doing these transactions. With availability of internet, digital banking can be done, anytime, anywhere and any channel.
- **Reduced risk:** Transferring money through digital transaction is safer than direct payment as the digital footprint remains as a proof of payment. Using digital wallet reduces the risk of losing your physical wallet or it getting stolen.
- **User-friendly:** The banks run 24/7 support services where a team of well-trained staff are ready to help and deal with any queries.
- **Track of payments:** As the accounts contain the history of all transactions representing the money that has been spent, one can track his/her payments anytime.
- **Discounts on E-commerce:** Every now and then the E-tailers offer various discounts on various bank cards on their websites.

The Digitalization Scenario in India

In the last decade, banks were finding it very difficult to reach out to customers in the rural districts. Opening and operating a branch at a rural place is not lucrative for the costs involved in remunerating at least one teller, one front desk employee, one specialist in mortgages and loans, one branch manager and security. In spite of opening and running some non-profit making branches in the rural areas, banks were still not very reachable to the customers. According to RBI, customers of SBI, for instance, have to travel 8 to 20 km to reach their nearest branch.

Agent Banking, which contains a network of banking agents acting as physical bank branches, emerged as a solution. Banking agents could be telcos, e-wallet providers, retailers, etc. Through agent banking banks started to expand their customer base by onboarding new customers who were previously out of their reach. By engaging banking agents, instead of operating bank branches, infrastructure and manpower costs were saved, while revenues started to rise.

The banking agents, now having associated with established banks not only earned respect for themselves but also additional incomes for additional walk-ins. The rural population also benefited with easy and cheaper access to banking services readily available in their localities. Thus agent banking started to create a win-win situation for all.

Even though agent banking reduced the costs of banking and brought the banking services into the reach of rural population, financial inclusion of the poor from the rural society, remained a far-fetched dream for the Indian Administration. The Federal Government realized that still a large chunk of Indian population don't even have Bank

Accounts.

The central government through its financial inclusion drive — the Pradhan Mantri Jan-Dhan Yojana (PMJDY) — has directed banks to push transactions through agents. As a result, the fiscal year to March 2015 saw a 45% rise in the number of transactions at agents to 477 million and a 64% increase in the value of transactions at agents to Rs. 859.8 billion (US $13.2 billion). With government extending digitalization of its direct benefit transfer schemes — building on the success of "Pahal", the program for liquid petroleum gas subsidies — the banking sector was forced to reinvent itself to adopt to the surge in transactions.

With availability of internet even at remote areas, existing websites of banks started struggling to handle the number of hits on their websites. Many Public Sector Banks had to reconstruct their websites and move to better platforms to handle the increased traffic and to offer more variety of services to its customers. And then two phenomena lead to the expediating of digital banking in India.

The two major catalytic phenomenon:

1. **Demonitization:** To curtail the shadow economy and crack down on the use of illicit and counterfeit cash used to fund illegal activity and terrorism, the federal government cancelled the legal tender of Rs. 500 and Rs. 1000 notes in November 2016. This resulted in an acute physical cash shortage in the following days. This step resulted in upsurge of the use of digital currency in the following months. Banks though not well equipped with cash supplies to immediately replace the cancelled notes were prepared with various digital channels to let the economy run smoothly.
   This step has effected a surge in the digital banking sector which is only second to the digital wallets. While a 35% growth is recorded in the use of digital wallets, digital banking grew by 13.5%.

2. **Launch of Jio:** Airtel was the first to launch 4G services on mobile in India, i.e. from February 2014. Airtel reportedly had 1,20,000 4G subscribers as of May 2014. By March 2016, Airtel provided 4G coverage in 350 cities in 15 circles. The major problem was that the coverage was very limited and the data rates (prices) were very high.

   On 5 September 2016, Reliance Jio Infocomm Limited, launched its services. Within a month, the company gained 16 million subscribers. This is the fastest ramp-up by any mobile network operator anywhere in the world. Jio crossed 50 million subscriber mark in 83 days since its launch, and subsequently crossed 100 million mark on 22 February 2017. The biggest reason for this stupendous success is not just that it was the first service provider to offer VOIP in India, but it also offered VOIP at very nominal rates. The company had put a benchmark to itself by operating only through VOIP. That means, its phones work only if there is 4G coverage in that area, whether rural or urban. So, it effectively brought 4G to those areas where other existing service providers have not yet launched even 3G. The company also offered lightning fast internet data at nominal prices. The competitors like Airtel, Idea and Vodafone in order to survive, had to upgrade their services to 4G and VOIP, in many semi-urban areas and had to slash their data charges too, to match those of Jio's. For instance, a GB of data which costed Rs.175/- earlier, is effectively costing around Rs. 3 in 2018. This can be termed as the 'Jio-effect'. Most of the plans offered by the service providers now include huge internet data at very low cost. The data costs are ridiculously low compared to data costs in the developed West. These low data costs have provided a very strong platform for digital banking, particularly for the mobile banking to prosper.

In the last few years, banks are investing in and using technology more and more. Technology is being used in baking at various levels such as, back-office processing, convergence of delivery channels, IT-enabled business process reengineering as well as communication with customers. It is estimated that Indian banks allot around 15% of their

total spending on technology.

With the increasing scope and ease of online banking more and more customers are adopting the online banking effecting a paradigm shift of platform from traditional branch banking to net banking. According to certain estimates around 44 per cent people are using Net banking, for whom, it is the most favorite mode of payment. More and more facilities such as fund transfer, account maintenance & bill payment through browser and app banking have taken away a lot of burden of branch banking.

In March 2016, ICICI Bank launched Host Card Emulation (HCE) for its debit & credit card holders, to make contactless payments at stores by waving their phones across NFC enabled machines. Similarly State Bank of India unveiled 'SBI Mingle', as social media banking platform for Twitter & Facebook users. State Bank of India is also planning to launch SBI Digi Bank, where end to end digitalization of all products and services would take place. This digital-only bank, which will be device-agnostic, will use the Aadhaar infrastructure for not only onboard customers but also provide them services online. Microsoft corporation is planning to launch Skype with Aadhaar authentication to allow access to bank accounts using webcams. Thus the Indian Banking arena has become a launching pad for the revolution of digital banking in Asia.

The concerns

- **Security Risks -** Threats such as hacking, sniffing and spoofing have posed security risks to banks quite often. We have also seen recently how frauds by employees in collusion with customers from lowest to the highest levels in banks have exposed banks to great perils.
- **Customer Gullibility:** Fake phone calls to customers asking them for debit/ credit card information posing as bank employees have made even many educated fall victim to phishing gangs.
- **Apprehensions of few–** Apprehensions about the reliability of technology in the minds of older generation, mostly people from the rural areas has been a blockade for digitalization move of the banks.

The Road Ahead

In the times to come, there is no doubt that digital banking will become the most preferred banking for the people. With even kids getting very fluent with laptops and mobile phones, physical banking will soon, more or less, play the role similar to that of a wholesaler in the distribution channel. With E tailing already fast eating the chunk of retail space, digital payments are ought to reach the numero uno position among all the payment modes, making Digital banking indispensable.

Business Analytics and Artificial Intelligence (AI) is providing deeper insights into customer needs & enabling banks to offer highly targeted products & services; this is likely to pick up pace in the coming years. With the help of Data Analytics personalized banking services and products will be automatically developed for and offered to customers based on their banking history and habits. By offering such pre-approved services and products through data mining and analyzing customer behavior patterns and credit worthiness, intelligent banking is on the horizon of Indian Banking arena. New channel-integration technologies that enable a more seamless end-to-end experience of banking for customers will ensure that Digital banking remains the most preferred form of banking for the years to come.

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