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TECHNOLOGY IN BANKING: ISSUES AND CHALLENGES

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Introduction

The need for computerization was felt in the Indian banking sector in late 1980s, in order to improve the customer service, book-keeping and MIS reporting. In 1988, Reserve Bank of India set up a Committee on computerization in banks headed by Dr. C. Rangarajan. Banks began using Information Technology initially with the introduction of standalone PCs and migrated to Local Area Network (LAN) connectivity. With further advancement, banks adopted the Core Banking platform. Thus branch banking changed to bank banking. Core Banking Solution (CBS) enabled banks to increase the comfort feature to the customers as a promising step towards enhancing customer convenience through Anywhere and Anytime Banking. Different Core Banking platforms such as Finacle designed by Infosys, BaNCS by TCS, FLEXCUBE by i-flex, gained popularity.

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. As per last available information, 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. The number of customer base has also increased because of the convenience in 'Anywhere Banking'. Digitization has reduced human error. It is possible to access and analyze the data anytime enabling a strong reporting system. RBI has been a guiding force for the banks in forming regulations and giving recommendations to achieve various objectives. Commercial Banks in India have moved towards technology by way of Bank Mechanization and Automation with the introduction to MICR based cheque processing, Electronic Funds transfer, Inter-connectivity among bank Branches and implementation of ATM (Automated Teller Machine) Channel have resulted in the convenience of anytime banking. Strong initiatives have been taken by the Reserve Bank of India in strengthening the Payment and Settlement systems in banks.

Technological Milestones in Indian Banks

Current status in the digital space

Indian Government is aggressively promoting digital transactions. The launch of United Payments Interface **(UPI)** and Bharat Interface for Money **(BHIM)** by National Payments Corporation of India **(NPCI)** are significant steps for innovation in the Payment Systems domain. UPI is a mobile interface where people can make instant funds transfer between accounts in different banks on the basis of virtual address without mentioning the bank account.

Today banks aim to provide fast, accurate and quality banking experience to their customers. Today, the topmost agenda for all the banks in India is digitization.

According to the RBI Report in 2016-17 there are 2,22,475 Automated Teller Machines (ATMs) and 25,29,141 Point of Sale devices (POS). Implementation of electronic payment system such as NEFT (National Electronic Fund Transfer), ECS (Electronic Clearing Service), RTGS (Real Time Gross Settlement), Cheque Truncation System, Mobile banking system, Debit cards, Credit Cards, Prepaid cards have all gained wide acceptance in Indian banks. These are all remarkable landmarks in the digital revolution in the banking sector. Online banking has changed the face of banking and brought about a noteworthy transformation in the banking operations.

National Electronic Funds Transfer **(NEFT)** is the most commonly used electronic payment method for transferring money from any bank branch to another bank in India. It operates in half hourly batches. At present thereare 23 settlements. Real Time Gross Settlement **(RTGS)** is primarily used for high-value transactions which are based on 'real time'. The minimum amount to be remitted through RTGS is Rupees Two Lakhs. Immediate Payment Service **(IMPS)** is an instant electronic funds transfer facility offered by National Payment Corporation of India which is available for 24X7. The usage of prepaid payment instruments **(PPIs)** for purchase of goods & services and funds transfers has increased considerably in recent years. The value of transactions through PPI Cards (which include mobile prepaid instruments, gift cards, foreign travel cards & corporate cards) & mobile wallets have jumped drastically from Rs.105 billion and Rs. 82 billion respectively in 2014-15 to Rs. 277 billion and Rs. 532 billion respectively in 2016-17.

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Year	Volume (Million)				
	RTGS	Retail Electronic Clearing (ECS,NEFT,IMPS)	Cards (debit, Credit)	Prepaid Payment Instruments (m-Wallets, PPI cards, Paper Vouchers)	Mobile Banking
2015-16	98 4	3,141 5	10,038 7	748 0	389 5
2014-15	92 8	1,687 4	8,424 0	314 5	171 9
2013-14	81 1	1,108 3	7,219 1	133 6	94 7
2012-13	68 5	694 1	6,174 5	66 9	53 3
2011-12	55 1	512 4	5,731 6	30 6	25 6

Source: RB data and Dun & Bradstreet Research

Issues in banking technology:

The evolution of the Internet continues to raise questions about the continued viability of brick and mortar establishments in retailing and financial services. They are masters of data management and analytics. To all intents and purposes they define agility, both from a technology and a business model point of view. They are extremely adept at extending their value chain analysis beyond the core offering, with an eye to identifying new opportunities for business and highlighting specific customer needs that they might address. They have the ability to define – and then redefine – the business models that they deploy while their focus on what partners can bring to their propositions stands as an equally strong differentiator.

Security remains paramount for all banking applications, and while for many of these new entrants, security and privacy of customer data is important, it's not at the level of priority that would be needed to support a banking proposition. Performance challenges will also be key – failures of key banking systems can be catastrophic, and availability of all systems must normally exceed 99 percent. This may test the technical and economic models of many of the new entrants. Regulatory compliance will also prove taxing – while legal teams can help with applying the letter of the law, this is more about an entire organization that must increasingly subvert itself to the rule of the regulator.

Challenges

Security Risks - External threats such as hacking, sniffing and spoofing expose banks to security risks. Banks are also exposed to internal risks especially frauds by employees / employees in collusion with customers

- **Financial Literacy / Customer Awareness** - Lack of knowledge amongst people to use e-banking facilities is the major constraint in India.
- **Fear factor** - One of the biggest hurdle in online banking is preference to conventional banking method by older generation and mostly people from the rural areas. The fear of losing money in the online transaction is a barrier to usage of e-banking.
- **Training** - Lack of adequate knowledge and skills is a major deterrent for employees to deal with the innovative and changing technologies in banks. Training at all levels on the changing trends in IT is the requirement of the day for the banks.
- **Way Forward-** Business Analytics and Artificial Intelligence (AI) has a potential to bring a major change. Robotics, enabled by AI, is expected to be the future game changer in the banks. Many private banks are planning to deploy Robots for customer service, investment advisory and credit-approval process to improve the services and be cost effective in the long run. Digital Banking will be the most preferred form of banking in the coming years.

Conclusion

Nowadays, each and every bank has technology. Banks are providing online services to the customers. Each and everything is having positive and negative effects. If the person use digital technology in banking transactions he has to be secure about his mobile no, password of online transaction, code of his ATM if he lost this things somewhere he can lose his money and if rural peoples are using they don't know how to use it. So everything has some good and bad things.