

## EVOLUTION OF TECHNOLOGY IN THE BANKING SECTOR

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### Abstract

Ever since the nationalization of banks in India, this sector has been growing without Leaps and bounces and catering to the needs of various segments of the society. In recent times, the Banking Sector has been making rapid strides by using information technology as a platform and endeavouring to scale higher heights. Liberalization and Information technology has attracted many foreign banks to India, thereby opening up new markets, new products and efficient delivery channels for the banking industry. In the development of Indian Economy, Banking sector plays a very important and crucial role. With the use of technology there had been an increase in penetration, productivity and efficiency. It has not only increased the cost effectiveness but also has helped in making small value transactions viable. It also enhances choices, creates new markets, and improves productivity and efficiency. It has been noticed that financial markets have turned into a buyer's markets in India. Commercial Banks in India are now becoming a one-stop Supermarket. The focus is shifting from mass banking to class banking with the introduction of value added and customized products. Technology allows banks to create what looks like a branch in a business building's lobby without having to hire manpower for manual operations. The branches are running on the concept of 24 X 7 working, made possible by the use of Tele banking, ATMs, Online banking, Mobile banking and E - banking. These technologies driven delivery channels are being used to reach out to maximum number of customers at lower cost and in most efficient manner. The beauty of these banking innovations is that it puts both banker and customer in a win- win situation. Effective use of technology has a multiplier effect on growth and development. Therefore an attempt has been made in this paper to examine the evolution of technology and its current trends and challenges in the banking sector.

**Key Words:** Technology, Innovation, Automation, Customer-Centric and Direct banking.

### Introduction

The origins of banking can be traced to ancient times, starting with rudimentary money lending and bartering practices for agricultural and other commodities. But it gained great momentum only after the industrial revolution which commenced in Europe in the 17<sup>th</sup> century. Ever since banks started operating, their essential mode of operations remained much the same until late into 20<sup>th</sup> century. But the arrival of the internet in the 1990s changed all that. A plethora of possibilities emerged for worldwide commerce, which naturally impacted the functioning of banks as well. Even now, technology evolution shapes the nature and extent of global economic activity and continues to fundamentally alter the global banking landscape.

**Indian Banking Scene**

In India, banking as an institution originated in the late 18<sup>th</sup> century and primarily catered to the needs of the British. Post - independence, the nationalization of major private sector banks in 1969 - an important milestone in the Indian banking system- made banking accessible to the unbanked population in India.

The economic liberalization in the early 1990s ushered in the era of privatization where in maybe new private banks - the new generation tech- savvy banks - were launched. A few foreign banks commenced their India operations as well. All these banks were quick to leverage emerging technology, were competitive in wooing customers and winning them over by providing professional services. This helped infuse a sense of urgency in public sector banks and older private sector banks to mend their ways, which in turn completely revitalized banking operations in India.

**Impact of IT Revolution**

The opening up of the Indian economy in 1991 almost corresponded with the worldwide internet revolution which doubly impacted the Indian private and public sector banks that were still stuck in old ways of functioning. Once Indian IT services companies started booming, it was just a matter of time before Indian banks whole heartedly embraced technology. This paved the way for business process automation in banking, which enhanced customer service, reduced manpower costs and increased profitability. Apart from normal banking products, Indian banks started selling third party products such as mutual funds and insurance to their clients as well. This single window selling saved the customers time and enabled the bank to enrich the relationship.

The Reserve bank of India, India's central bank not to be left behind, played its part in this transformational journey, by issuing regulations and recommendations on banking mechanization and computerization. Establishment of computerized inter-connectivity across bank branches, introduction of MICR- based cheque clearing, modernization of payment services and settlements through Electronic Clearing Services (ECS), Real Time Gross Settlement System (RTGS), and National Electronic Funds Transfer (NEFT) were all significant landmarks in the banking technology revolution.

Continuing advances in technology rise in middle class income levels and increase in demand form a consumer-oriented financial market, soon catapulted the Indian banking sector to a customer centric, technology driven financial supermarket catering to the varied needs of its customers.

**Significant Milestones**

Over the years, there has been a noticeable shift from traditional to channel-based banking. Introduction of ATMs provided customers with anytime access to their money. The credit card by enabling cashless transactions, unleashed a revolution in the banking world. Affordable technology infrastructure like cheap, small but powerful computers and other

handheld gadgets and higher internet bandwidth at lower cost facilitated easy access to banking products and effortless banking transactions.

By directing banking transactions through different electronic channels and by providing customers direct access to their bank accounts, banks could now offer quick service and transparency as well. They even started offering incentives to customers for using non- branch channels. All this reduced the number of walk- in customers and improved the quality of customer service in branches.

### **Current Trends**

Virtual banking or direct banking, is now gaining ground. This model wherein banks offer products, services and financial transactions only through electronic delivery channels, generally without any physical branch. More and more customers are already moving to bob-branch banking and the direct banking trend will surely catch up in India as technology - savvy banks adopt this model.

Though it may appear to save the bank a lot of overheads, in reality, the customer never needing to visit a bank branch, either for completing the account opening process or the subsequent financial activities actually throws up new challenges. The power of technology makes it happen seamlessly and virtually, but customer satisfaction is something which calls for a human touch. For all their technological sophistication, virtual banking should be hassle free and a pleasurable experience for the user. The virtual banks need to be aware of this fact in letter and spirit and always ensure that the quality of user experience is paramount and leveraging technology is only an aid to enriching user experience.

As banks adopt more technology, two things stand out-using less paper and doing transactions wirelessly. Processing online applications for account opening and other services, transfer of funds without cheques, online account statements are all becoming part of the regular banking process. With digitization of all customer transactions and data, banks can improve productivity, optimize costs, provide quicker and better quality customer service. From the customers' point of view, paperless banking translates to easy handling, storage and retrieval of financial documents and account statements without the fear of misplacing them.

With customers demanding 'anytime and anywhere' access to their money and financial information, banks have no option but to implement wireless solutions in device independent and network- agnostic ways.

### **Challenges**

From the Indian perspective, the evolving banking paradigm presents unique opportunities and challenges. The reason is India is a country with huge population and the demographic growth of India is such that it is going to become the most populated country very soon. Channel technologies can bring about closer integration between the rural and

urban populace. Here, India needs to learn its lessons from China which has managed to rapidly urbanize its rural population and been able to harness technology to the fuller benefits of its newly urbanized populations.

Another challenge non-branch channels throw up is the lack of human touch that previously characterized banking transactions. The rather impersonal technology-enabled touch screen key presses and automated answering systems might intimidate and overwhelm newly urbanized users who are by and large technology illiterate. It is therefore imperative for banks to ensure that technology is tailored to the needs of different sections of people and is also backed by suitable “humane” yet quick measures in the event of failure or breakdown.

### **Way Forward**

There has to be a holistic approach to fulfil the demand for increased variety in deposit and investment products so as to grab a better market share of investments through banks. Development of sophisticated products with low - cost technology is key. This calls for an in-depth analysis of customer needs, the market and competitor trends. As the markets are very dynamic and customer needs ever changing, banks need to invest in advanced analytical tools for timely introduction of new products which will give them early mover advantage. The vendors who supply various banking solutions play a vital role in leveraging innovation and designing products, thereby enabling banks to achieve their goals.

### **Conclusion**

India’s transformational journey to modernity is on the cusp of revolutionary change. Banks would do well to realize their central role in enabling this transformation and should take conscious recourse to relentless adoption of technology. And the goal should be not just to satisfy but to engage with customers and enrich their experience.

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