



DIGITAL BANKING: AN INDIAN PERSPECTIVE

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Abstract: A bank is a financial institution licensed to receive deposits and make loans. Banks also provide financial services such as wealth management, currency exchange and safe deposit boxes etc. Now banks become more advanced in modern times as converted into digital banking. Digital banking is a part of the broader context for the move to online banking, where banking services are delivered over the internet and our door steps. The shift from traditional to digital banking has been gradual and remains ongoing and is constituted by different degrees of banking service digitization. An effective digital transformation begins with an understanding of digital customer behavior, preferences, choices, requirements and aspirations. The present study is based on secondary data. The data has been collected from the various published sources such as articles, publications of Government, banks and websites. The study found that digital banking has reduced operating costs of the banks and leads to more profits for the banks.

Key words: Digitization, transformation, operating cost.

1. INTRODUCTION

Digital Banking is the automation of traditional banking services. Digital banking enables a bank's customers to access banking products and services via an electronic/online platform. Digital banking means to digitize all of the banking operations and substitute the bank's physical presence with an everlasting online presence, eliminating a consumer's need to visit a branch.

Advancing to a more technologically sophisticated way of doing things, it goes without saying that the benefits long outweigh the costs. Similarly, digital banking as a technological by-product aims to make life easier for the customers of a bank. Digital banking has the following benefits:

- Digital banking enables consumers to perform banking functions from the comfort of their homes, be it an elderly person who is tired of waiting in lines or a working-class professional who is caught up with work, or a regular person who does not want to visit the bank's branch to run a single errand. It also **offers convenience**.
- Elaborating on the convenience offered, digital banking lets a user carry out banking work around the clock, with **24*7 availability of access** to banking functions.
- One of the biggest drawbacks of traditional banking was the overly placed importance on paper. Banking has become **paperless** with the development of digital banking as a service. A user can log into their account at any point in time to monitor records.

- Digital banking allows a user to **set up automatic payments** for regular utility bills such as electricity, gas, phone, and credit cards. The customer no longer has to make a conscious effort of remembering the due dates. The customer can opt for alerts on upcoming payments and outstanding dues.
- Online shopping has become a cakewalk with payment channels becoming well-integrated with the online shopping portals. Internet banking has significantly contributed to **online payments**.
- Digital banking extending **services to remote areas** is seemingly a step toward holistic development. With smart phones at affordable prices and internet access in remote areas, the rural population can make the most out of digital banking services.
- Digital banking-enabled fund transfers **reduce the risk of counterfeit currency**.
- With the help of digital banking, a user can report and block misplaced credit cards at the click of a button. This benefit greatly **strengthens the privacy** and security available to a bank's customer.
- By promoting a cashless society, digital banking **restricts the circulation of black money** as the Government can keep a track of fund movements. In the long run, digital banking is expected to lower the minting demands of a currency.

II. OBJECTIVES OF THE STUDY

The various objectives of the study are;

1. To study the role of digitization in Indian banking.
2. To study the technological development in Indian banks.
3. To study the digital banking trends in India.

III. RESEARCH METHODOLOGY

The present study is based on secondary data. The data has been collected from the various sources like research articles, publications from Government of India, various bulletins of Reserve Bank of India and authenticated websites.

IV. REVIEW OF LITERATURE

E-banking is an innovation when new information technologies merge into traditional banking services. Operating costs minimization and revenue maximization are the major drivers that boost e-banking services (Sannes, 2001; Reibstein, 2002). E-banking service is basically a self-service by customers, so for banks, it requires less resources and lower transaction and production costs (Southard and Siau, 2004; Witman and Poust, 2008). A study about the e-banking over 1999–2006 shows that the application of e-banking can improve banks' performance in terms of the growth in assets, reduction in operating expenses and portfolio enhancement (Dandapani et al., 2008). AmatoMcCoy (2005) further argues that customers will be attracted to e-banking when the advanced e-banking services like e-transfer and e-bill options are available. Through interviewing banks in a small island and examining their e-banking websites from 2004 to 2006, Jenkins (2007) indicates that those banks were using e-banking as an assurance to their customers to maintain a competitive quality of service. To continually improve the performance of e-banking services, several core-capacities are critical: Planning new IT infrastructure, enhancing transaction security, Providing value-added content, Delivering differentiated services, managing customer relationships. The retention and expansion of relationships with relative older and lower IT awareness customers

Digital banking services are a form of a virtual bank that provides all banking activities online. It helps banking customers enjoy the comfort of accessing and performing all traditional banking activities at their convenience. Money deposits, withdrawals, transfers, account management, applying for financial products, loan management, bill payment and other integrated services like an investment in mutual funds or share market are some of the key forms of digital banking services. India is a country with a boom in technological aspects and a rapidly growing financial economy.

V. ROLE OF DIGITIZATION IN INDIAN BANKING

“Digital Banking” refers to digitalizing the traditional methods of banking to conduct banking transaction more smoothly. Contrary to traditional banking, digitalized banking aims to make versatile computerized products and services to fulfil the requirements of their digitalized clients. The introduction of digital banking has revolutionized the banking sector and modified the entire procedure bank transfers, it has facilitated the purchasers assisting them to see their account details, pay online bills and transfer money from one account to the opposite during a faster way. This has helped the end-user to enjoy a methodical financial life, further embracing hassle-free online banking.

The need for computerization was felt within the Indian banking sector within the late 1980s, where there was a need to enhance the customer service, book-keeping and MIS reporting. In the late 1980s, India was marred by various financial reforms and therefore the banking sector felt a requirement to enhance customer services and computerization of recording and accounting of knowledge. A committee was found out in 1988 by the Federal Reserve Bank of India which was headed by Dr C. Rangarajan to review Computerization within the Banking Sector. After the introduction of the Liberalization, Privatization, and Globalization (LPG) policy, the method of digitalization picked up the pace alongside the change within the Indian Economy. Today banks aim to provide fast, accurate and quality banking experience to their customers. Today, the topmost concern for all the banks in India is digitization.

The Indian Government is at a high rate is promoting digital transactions. The launch of the United Payments Interface (UPI) and Bharat Interface for Money (BHIM) by National Payments Corporation of India (NPCI) are the 2 major significant steps for innovation within the Payment Systems domain in India. Artificial Intelligence has acted as a backbone in the E-Banking and has continuously been contributing to the banking industry for a very long time to provide a greater level of value to us, reducing the risks, providing better opportunities as the financial engines of our modern economy. Better performance, higher profitability, and risk reduction are the three main goals which banking and financial sectors are trying to achieve at the moment to keep up with the competition in the world. In this data-driven world, performance is dependent on those big data technologies which can store and manage data in real-time. Banks even have to mandatorily lend loans at a lower rate of interest to priority sectors like agriculture, housing, education. Data Analytics has played an important role in reducing cost, development and increasing client base for the banks.

VI. FACTORS AFFECT THE SCOPE OF DIGITAL BANKING IN INDIA

Financial Literacy: A lack of knowledge about banking in itself is a hurdle. Many parts of India still struggle with very low literacy rate. The lack of knowledge about computers and the use of the internet is a challenge.

Trust: There are a number of unfounded fears individuals have about the use of the internet. Cases of fraud are often increases and this adds to the fear factor, resulting in a number of ill-informed customers being nervous to use digital banking.

Training: There is much resistance from within the banking industry itself. Employees are not trained in the use of innovative technology. They are unable to utilize different features of digital banking.

VII. DIGITAL BANKING TRENDS IN INDIA

Digital India in the banking sector has grown sharply in recent times. Some trends in digital banking in India are:

➤ **Increase in Customers:** The government’s encouragement to use electronic wallets has contributed much to people adopting the use of technology in financial transactions. There is a rapid increase in the use of credit/debit cards as well as electronic wallets and the trend will continue.

➤ **Chat bots:** A number of banks have already employed chat bots in their customer care operations. There is steady increase in the number of chat bots employed as well as improvements in their speed of response, quality of interaction and the quality of services rendered.

➤ **Merge Physical and Digital Process:** Many banks today offer a mixed physical and digital process to their customers. The customers could walk into the bank and then use devices there to carry out their transactions. In the Indian context we will certainly see a steady increase in this kind of service especially in the rural areas.

➤ **Mobile Technology:** The proliferation of mobile phones and the easy and cheap availability of internet have meant that the banking sector had to provide digital services via mobile phones. A number of banks have developed apps to help customers handle banking transactions on their mobile phones. This trend will only continue.

➤ **End to End Digital Banking in India:** A number of customers are already using devices to handle their banking tasks. Banks have come to realize that digitization is the only way forward. Hence a number of banks have already started on the path of end-to-end digitization in their effort to provide all kinds of services over the internet resulting in paperless transactions.

Table 1: Technological Milestones in Indian Bank

S.N.	1980	1990	2000	2010	2020
1.	MICR	ATMs	IMPS	Bio Metrics	NGSFMS
2.	Standard Cheques	Electronic Funds Transfer	RTGS	Mobile Banking	CBS
3.	Encoders	Branch Connectivity	NEFT	Cheque Truncation	TIN2.0
4.		Computerization	NECS	UPI	OLTAS
5.			Online Banking	USSD	PFMS
6.			Tele Banking	E-Wallet	e-kuber
7.					BSS

Source: ICMAI

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. Now a day the topmost agenda for all the banks in India is digitalization. As part of encouraging cashless transactions and transforming India into less cash society, various modes of digital payments are available.

➤ **Debit/Credit Card:** Suitable for online/offline merchant sale. Transaction limit set by card issuer. Card number details required.

- **RTGS/NEFT:** Suitable for high value online transactions. Transaction limits minimum 2 Lakh, no upper limit. Account number, password, beneficiary registration, IFSC code are required.
- **Immediate Payment Service (IMPS):** Suitable for instant transfer. Transaction limits up to 2 Lakh per day. Account number, password, beneficiary registration, IFSC code are required.
- **Unified Payment Interface (UPI):** Suitable for instant transfer. Transaction limits up to 1 Lakh. Virtual payment ID (VPA) of recipient is required.
- **Unstructured Supplementary Service Data (USSD):** Suitable for feature phones without internet connectivity. Aadhar number, IFSC or code allotted by banks on registration is required.
- **E-Wallet:** Suitable for small ticket transactions. Transaction limits 20,000 per month (1 Lakh for KYC compliant wallet holders. Login ID is required.
- **SFMS:** The Reserve Bank of India upgraded the Structured Financial Messaging System (SFMS) in August 2020. SFMS is the messaging system used for both NEFT and RTGS managed by the Reserve Bank. The upgraded SFMS version offers simplified architecture, best industry practices in application framework, modular approach for much needed flexibility for any future changes, and enhanced security features, to name a few.
- **BSS:** The Betaar Sanchar Seva (BSS) Sanchar project was successfully implemented during the COVID-19 induced lockdown at Central office Building (COB) and other selected office locations (including four metros) of the Reserve Bank. This has improved the overall operational efficiency, visibility and reliability of internet service across offices. The platform also provides an alternate channel to meet day-to-day business requirements and acts as a backup for the wired internet network in case of any exigencies.
- **e-Kuber:** e-Kuber is performing key financial services and operations of the Reserve Bank with/for various stakeholders such as government, banks and other market participants. The system is being refreshed to improve the functionalities by leveraging on technological developments and will facilitate enhanced automation of processes, flexibility of integration with external and internal systems, ease of change management, enhanced modularity, reporting with comprehensive real time dashboards, front end improvements for enhancing productivity and robust controls.
- **TIN2.0:** The Central Board of Direct Taxes (CBDT) is implementing a new payment system, i.e., Tax Information Network (TIN2.0), while subsuming the erstwhile Online Tax Accounting System (OLTAS) in the new system. The new system in e-Kuber will facilitate the Reserve Bank's functions both as the collecting bank and as an aggregator for amounts received by the authorised agency banks.
- **NGSFMS:** Next Generation Structured Financial Messaging System (NGSFMS): The proposed NGSFMS will revamp the existing Structured Financial Messaging System (SFMS) platform and simplify the architecture, bringing in scalability and flexibility and at the same time promoting enterprise framework of message communication among internal applications such as RTGS, core banking solution (CBS) of banks and NEFT.

VIII. CURRENT STATUS IN THE DIGITAL BANKING

Indian government is aggressively promoting digital transactions. The launch of Unified 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 virtual address without mentioning the bank account. Today banks aim to provide fast, accurate and quality banking experience to their customers. Now a day, the top most agenda for all the banks in India is digitalization. Online banking has changed the face of banking and brought about a noteworthy transformation in the banking operations. *With rapid advancement of technology and advent of new developments and innovations in the payments ecosystem, the Reserve Bank enhanced its focus on safety and security of payment systems. In addition, the Reserve Bank continued its efforts to nurture efficiency, innovation, competition, customer protection and financial inclusion. Implementation of round-the-clock RTGS within a short timeline was a momentous milestone in this journey. Going ahead, the Reserve Bank's endeavour would be to promote innovation in the financial sector by leveraging on technology for a sustainable Information and Communication Technology (ICT) infrastructure designed for operational excellence with focus on resilience, reliability, security, integrity and cost efficiency.* During the year, the Department of Payment and Settlement Systems

(DPSS) continued to work towards the planned development of payment systems as guided by the Reserve Bank's Payment and Settlement Systems Vision 2019-2021 document. The Reserve Bank's primary focus was to

- (i) facilitate digital penetration;
- (ii) introduce innovative payment options;
- (iii) ensure smooth operations notwithstanding the disruptions caused by the COVID-19 pandemic; and organise consumer awareness campaigns on digital payments, which are the building blocks to achieve the objective of a "less-cash" society.

The Department of Information Technology (DIT), in its swift response to unprecedented challenges due to COVID-19 pandemic and to keep pace with the fast-changing technology landscape, adopted a proactive approach by leveraging on technology. The Reserve Bank continued its efforts to graduate its ICT infrastructure to next generation applications with an inbuilt architecture for operational excellence, resilience, scalability and security. Against this backdrop, the following section covers developments in the sphere of payment and settlement systems during the year and also takes stock of the implementation status of the agenda for 2020-21. Section 3 provides various measures undertaken by the DIT during the year vis-à-vis the agenda set for 2020-21. These departments have also set out an agenda for 2021-22.

Guided by the Reserve Bank's Payment and Settlement Systems Vision 2019-2021 document, various initiatives were undertaken by the department during the year in the payment's ecosystem with continued emphasis on safety, security, efficiency, innovation, competition, customer protection and financial inclusion. The focus was to facilitate digital penetration by enhancing acceptance infrastructure across the country and introducing innovative payment options to deepen the reach of payment systems. Efforts were also directed towards ensuring smooth functioning of all the payment systems notwithstanding disruptions in movement of resources and access to infrastructure caused by the COVID-19 lockdown with varying intensity and duration across various locations in the country. A few initiatives were customised keeping in view social distancing and minimal-contact requirements of the pandemic while making digital payments. The Reserve Bank undertook focused campaigns to improve consumer awareness on digital payments and put in place measures to ensure that the consumer grievances are addressed seamlessly in a time bound manner. The journey towards "less-cash" continued during the year with a rapid growth in digital payments observed with the gradual relaxation in lockdown imposed due to COVID-19. The payment systems recorded a robust growth of 26.2 per cent in terms of volume during 2020-21 on top of the expansion of 44.2 per cent in the previous year. In terms of value, the contractionary trend which started in the previous year (-1.2 per cent) got further amplified and witnessed a drop of 13.4 per cent, mainly due to lower growth observed in the large value payment system, viz., Real Time Gross Settlement (RTGS) system and decrease in transactions of paper-based instruments. The decline in value of transactions in RTGS is largely attributable to the subdued economic activity. The share of digital transactions in the total volume of non-cash retail payments increased to 98.5 per cent during 2020- 21, up from 97.0 per cent in the previous year.

Table 2

Payment System Indicators – Annual Turnover (April-March)						
Item	Volume (Lakh)			Value (₹ Crore)		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
1	2	3	4	5	6	7
A.Settlement Systems						
CCIL Operated Systems	36	36	28	11,65,51,038	13,41,50,192	16,19,43,141
B.Payment Systems						

1. Large Value Credit Transfers – RTGS	1,366	1,507	1,592	13,56,88,187	13,11,56,475	10,55,99,849
Retail Segment						
2. Credit Transfers	1,18,481	2,06,506	3,17,852	2,60,90,471	2,85,62,857	3,35,22,150
2.1 AePS (Fund Transfers)	11	10	11	501	469	623
2.2 APBS	14,949	16,766	14,373	86,226	99,179	1,12,747
2.3 ECS Cr	54	18	0	13,235	5,145	0
2.4 IMPS	17,529	25,792	32,783	15,90,257	23,37,541	29,41,500
2.5 NACH Cr	8,834	11,290	16,450	7,29,673	10,43,212	12,32,714
2.6 NEFT	23,189	27,445	30,928	2,27,93,608	2,29,45,580	2,51,30,910
2.7 UPI	53,915	1,25,186	2,23,307	8,76,971	21,31,730	41,03,658
3. Debit Transfers and Direct Debits	4,914	7,525	10,456	5,24,556	7,19,708	8,72,552
3.1BHIM Aadhaar Pay	68	91	161	815	1,303	2,580
3.2 ECS Dr	9	1	0	1,260	39	0
3.3 NACH Dr	4,830	7,340	9,630	5,22,461	7,18,166	8,68,906
3.4 NETC (Linked to Bank Account)	6	93	650	20	200	913
4. Card Payments	61,769	72,384	57,841	11,96,888	14,34,814	12,93,822
4.1 Credit Cards	17,626	21,773	17,641	6,03,413	7,30,895	6,30,414
4.2 Debit Cards	44,143	50,611	40,200	5,93,475	7,03,920	6,62,667
5.Prepaid Payment Instruments	46,072	53,318	49,392	2,13,323	2,15,558	1,97,695
6.Paper-based Instruments	11,238	10,414	6,704	82,46,065	78,24,822	56,27,189
Total – Retail Payments (2+3+4+5+6)	2,42,473	3,50,147	4,42,229	3,62,71,303	3,87,57,759	4,15,12,514
Total Payments (1+2+3+4+5+6)	2,43,839	3,51,654	4,43,821	17,19,59,490	16,99,14,234	1471,12,363

Total Digital Payments (1+2+3+4+5)	2,32,602	3,41,240	4,37,118	16,37,13,425	16,20,89,413	14,14,85,173
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Note: 1. RTGS system includes customer and inter-bank transactions only.

2. Settlements of CBLO, government securities and forex transactions are through the Clearing Corporation of India Ltd. (CCIL). Government Securities include outright trades and both legs of repo transactions and triparty repo transactions. With effect from November 5, 2018, CCIL discontinued CBLO and operationalised triparty repo under securities segment.

3. The figures for cards are for payment transactions at point of sale (PoS) terminals and online.

4. Figures in the columns might not add up to the total due to rounding off of numbers.

Source: RBI.

Amongst the electronic modes of payments, the number of transactions undertaken using RTGS increased by 5.7 per cent during the year, with value amounting to ₹1,056 lakh crore, resulting in a decline in value by 19.5 per cent from the previous year, mainly on account of reduction in large value transactions of corporates in line with slowdown in economic activity. At the end of March 2021, the RTGS facility was available through 1,75,947 branches of 227 banks. Transactions through National Electronic Funds Transfer (NEFT) system rose by 12.7 per cent during the year. At the end of March 2021, the NEFT facility was available through 1,75,283 branches of 225 banks. During 2020-21, the number of card payment transactions carried out through credit cards and debit cards decreased by 19.0 per cent and 20.6 per cent, respectively. This resulted in a decrease in value of credit card transactions by 13.7 per cent and debit card transactions by 5.9 per cent during the same period. Prepaid Payment Instruments (PPIs) recorded contraction in volume by 7.4 per cent during the year as against a growth of 15.7 per cent a year ago, while the transaction value at 1.97 lakh crore was lower by 8.3 per cent vis-à-vis last year. The number of Points of Sale (PoS) terminals increased by 6.5 per cent to 47.20 lakh and the number of Bharat Quick Response (BQR) codes deployed increased by 76.0 per cent to 35.70 lakh as at end-March 2021. Further, the number of ATMs marginally increased by 2.0 per cent from 2.34 lakh at end-March 2020 to 2.38 lakh at end-March 2021. Unified Payment Interface (UPI) had over 22 billion transactions registered during 2020-21, a four-times growth over the last three years. There has been a substantial increase in digital transactions over the last three financial years, with volume growth of 88 per cent since 2018-19, the Ministry of Finance informed the Lok Sabha. In 2018-19, the volume of transactions was 23.26 billion, which increased to 34 billion in 2019-20. According to the data shared by the Ministry of Finance in 2020-21, the volume of transactions surged to 43.7 billion. Unified Payment Interface (UPI) had over 22 billion transactions registered during 2020-21, a four-times growth over the last three years. "India's own payment platform UPI has emerged as country's favourite digital payment choice," said Nirmala Sitharaman, Minister of Finance, in a written reply. Further, Aadhaar Enabled Payment System (AePS) inter-bank transactions during 2020-21 registered 9-fold growth over the past four years.

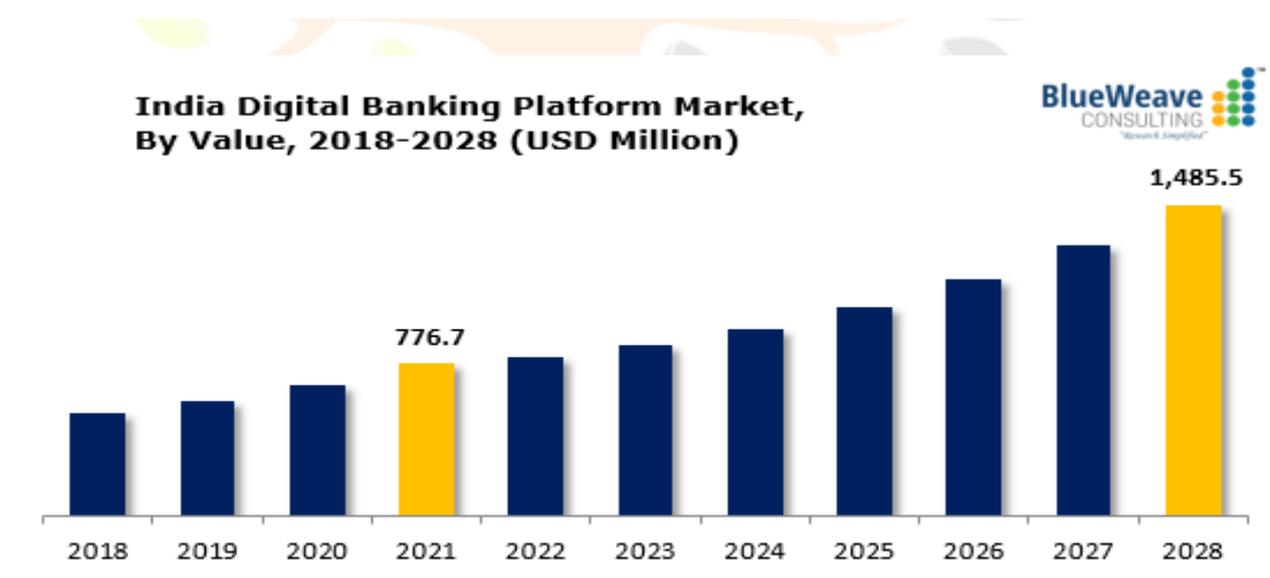
The Ministry further said that the Reserve Bank of India (RBI) conducted a pan-India financial literacy and inclusion survey based on financial knowledge, attitude and behaviour. On a total score of 21, the average urban and rural score in the North zone and East zone was 11.5 and 12.1, respectively. In the East zone, both urban and rural score was 12.1. In the Central zone, urban score was 12.5, while the rural score was 12.1. Further in the West zone, the urban score was 12.6, and the rural score was 12.5. While in the South zone the urban and the rural score was 11.2 10.3, respectively. Further, the Ministry said that the government initiated the Digital Finance for Rural India: Creating Awareness and Access (DFIAA) scheme in November 2016 under the Digital Saksharta Abhiyan (DISHA) for conducting awareness sessions on digital finance options available for rural citizens as well as enabling various mechanisms of digital financial services. Under this programme, more than 2 crore beneficiaries and more than 27 lakh Merchants were trained. In addition, sensitisation drives were carried out at 650 Districts and 5,735 Blocks throughout the country.

India digital banking platform market is growing at a high CAGR because of the rapid digitization and growing adoption of advanced technologies. Also driving the market's growth is the increasing use of these platforms by small and medium-sized businesses. A recent study, conducted by the strategic consulting and market research firm BlueWeave Consulting, revealed that India digital banking platform market was worth USD 776.7 million in the year 2021. According to the study, the market is estimated to grow at a

CAGR of 9.8%, earning revenue of around USD 1,485.5 million by the end of 2028. The growth of the India digital banking platform market can be attributed to rapid digitization and growing adoption of advanced technologies, such as cloud computing, the Internet of Things (Internet of Things), Artificial Intelligence, and so on. Additionally, government initiatives, such as Digital India, are also playing a crucial role in boosting internet accessibility among its citizens, expanding the consumer base for the digital banking platform market. However, high data-security concerns and risks of cyber attacks and fraudulent activities may act as a restricting factor for India's digital banking platform market.

Rising Adoption of Digital Banking Platform Among SMEs is Driving Market Growth

The growing number of small and medium-sized enterprises in India and the growing adoption of advanced technologies, such as cloud computing and business efficiency tools, such as digital banking platforms, are among the major factors driving the market's growth. These platforms increase business efficiency in various ways, such as facilitating automatic payments for regular utility bills, enabling better accessibility and flexibility while managing transactions, as well as better security. As a result, digital banking platform adoption is soaring among SMEs in the country, boosting the overall growth of the India digital banking platform market.



Source: [BlueWeave Consulting](#)

Increasing Number of Neobanks in India is Expected to Drive the Growth of the India Digital Banking Platform Market During the Forecast Period

Neobanks are dubbed as the "banks of the future" as these banks operate completely online without any physical branches. Neobanks are also known as "digital banks" and are fast emerging as a suitable and futuristic alternative to the brick-and-mortar banks. Since the Reserve Bank of India (RBI) does not allow banks to be 100% digital yet, neobanks in India rely on their partner banks to offer their services. Moreover, customers of Neobanks are offered lucrative offers with higher interest rates and several other benefits that are not offered by conventional banks.

The number of neobanks is growing rapidly in India. For instance, Paytm launched its own bank, Paytm Payments Bank, in November 2017 and is arguably the largest neobank in India. The company has received approval from RBI to operate as a scheduled bank. Since then, many neo banks have emerged in India, including Razorpayx, Airtel Bank, Jupiter, Niyo, Open, to name a few. The emergence of neobanks in India has created a growing demand for digital banking platforms in the country, which is expected to drive the growth of the Indian digital banking platform market during the forecast period.

Growing Mobile Banking Sector is Driving the Growth of India Digital Banking Platform Market

Based on banking modes, India digital banking platform market is grouped into online banking and mobile banking. The mobile banking segment accounts for the largest market share because of the increasing number of smartphones in India. The Millennial customers, who prefer instant gratification, demand one-click solutions for everything, including payments and other banking services, which is driving the growth of mobile banking across the country. Mobile banking also provides a variety of services, such as instant transfer of funds, bill payment, access to transaction history, etc., which prove to be very beneficial, especially for small and medium-sized businesses. Thus, the increasing popularity of mobile banking is favoring the growth of India's digital banking platform market.

India Digital Banking Platform Market - By Deployment Type

Based on deployment types, the India digital banking platform market is grouped into on-premises and cloud segments. Due to improved efficiency, faster data access, and better traffic monitoring in the cloud, cloud deployments account for most market shares. In addition, cloud deployment enables companies to expand beyond their physical capacity while meeting their financial goals. Moreover, cloud-based deployment allows for faster tracking and rectification of issues, reducing the risk of reputation damage caused by service interruptions.

India Digital Banking Platform Market - Regional Insights

Geographically, the India digital banking platform market is segmented into North India, South India, East India, and West India. Among these, the Western region of the country dominates the India digital banking platform market. North India is, however, likely to become the potential market with a high CAGR over the forecast period. The growth of the market is being driven by the emergence of Fintech companies. Furthermore, increasing internet access is also providing lucrative growth opportunities to the market, thereby positively impacting the India digital banking platform market.

Impact of COVID-19 on India Digital Banking Platform Market

The India digital banking platform market witnessed tremendous growth after the COVID-19 pandemic outbreak. As the government imposed a nationwide lockdown to mitigate virus spread across the country, it restricted the accessibility of customers to banking services, hindering their activities. As a result, both customers and businesses rapidly shifted towards digital banking platforms, which significantly boosted the market growth.

Therefore, the COVID-19 pandemic has been a blessing in disguise for the India digital banking platform market, as it has accelerated the adoption of advanced technologies, such as cloud computing and machine learning. According to the Union Minister of State for Finance, Pankaj Chaudhary, India's digital payments reached ₹4371.18 Crore (USD 585.88 million) in FY2020-21. Moreover, in August 2021, Razorpay announced that digital payment transactions have grown up 76% in the last 12 months. The growing volume of digital payments and the Indian government's push towards becoming a cashless economy is projected to drive India digital banking platform market during the forecast period.

India Digital Banking Platform Market - Competitive Landscape

The leading players in the India digital banking platform market are EdgeVerve Finacle, Oracle FLEXCUBE Core Banking, Tata Consultancy Services BaNCS, Wipro Core Banking As-a-Service, SAP Banking, and Financial Services, Temenos T24 Transact, C-Edge Technologies Ltd., NCR Corporation Digital Banking Solutions, Finastra Fusion Core Banking Software, Fiserv Banking Platform, and other prominent players.

The market is highly fragmented and competitive due to the presence of multiple technology giants as well as digital banking services startups. Due to increased investment and niche technology offerings, startups are giving industry giants a tough time. These

companies consistently embrace advanced technologies, such as artificial intelligence (AI) and the Internet of Things (IoT) to analyze consumer behavior and expand their market reach. Furthermore, the adoption of competitive strategies, such as partnerships, mergers, acquisitions, joint ventures, etc., is also prominent in this market.

India Digital Banking Platform Market-Recent Developments

In December 2021, Indipaisa, a member of the Nexxo Network, an international network of Fintech companies operating in Middle East Asia and Europe, partnered with NSDL Payments Bank to launch a new Fintech platform targeting India's flourishing 63 million SME sector. Indipaisa is also part of the Government of India and the Reserve Bank of India's drive to digitize payments.

In December 2021, Jupiter, a Mumbai-based financial technology startup, raised USD 86 million funding in its latest funding round led by Tiger Global, QED and Sequoia Capital India. The largest bank in Japan, MUFG Bank Ltd., also participated in the latest funding round. Jupiter's valuation has more than doubled to USD 711 million in its latest funding round. The company also announced that it has a customer base of more than half a million users, and that it is onboarding around 5,000 new users every day.

The in-depth analysis of the report provides information about growth potential, upcoming trends, and statistics of India digital banking platform market. It also highlights the factors driving forecasts of total market size. The report promises to provide recent technology trends of the India digital banking platform market and industry insights to help decision-makers make sound strategic decisions. Furthermore, the report also analyses the growth drivers, challenges, and competitive dynamics of the market.

IX. FINDINGS OF THE STUDY

1. Digital banking has drastically reduced the operating costs of banks. This has made it possible for banks to charge lower fees for services and also offer higher interest rates for deposits. Lower operating costs have meant more profits for the banks.
2. With the increased convenience of anytime, anywhere banking, the number of customers has increased for banks. Human error in calculations and recordkeeping is reduced. With records of every transaction being maintained electronically, it is possible to generate reports and analyze the data at any point and for different purposes.
3. The benefits of digital banking stress its importance by themselves. However the socio-economic conditions we face add to the importance of digital banking in India. With a high rate of crime and corruption, digital banking is a safe way to handle financial transactions.
4. Many cities are known for pickpockets who eye bulged wallets and hence the option of paying by credit or debit card or through online wallets is a much safer option.
5. With more digital data available with banks, they can take data driven dynamic decisions by using digital analytics. This benefits the both the customers and bank.
6. Digital banking is having enormous potential to change the landscape of financial inclusion. Easy use of digital banking can accelerate the integration of unbanked economy to the mainstream.

X. SUGGESTIONS

1. Technical defaults should be evaded by employing well trained and expert technicians in field of computers, so that loss of data can be avoided.
2. Seminars and workshops should be organized by the banking professionals on the salubrious utilization of e-banking services especially for those who are ATMs or computer illiterate.
3. E-banking services should be customized on basis of age, gender, vocation etc. so that needs and requisites of people can be rewarded accordingly. Government should magnify investments for the construction of well furnished building and infrastructure.
4. It is important for banks to work on not only good website, social media connect and mobile banking etc.
5. Banks must be careful regarding cyber threats; Banks should be prepared to handle cyber attacks. Design with user success as focus, content understandable by anybody, supported with demos and help to reduce intimidation.

6. New regulations constrain banks to adopt their digital offerings, widening the competition form new players.

XI. CONCLUSION

With the increasing usage of smart phones, digitalization of banking sector is inevitable to catch up the increasing expectations of the world. It indeed reduced human errors and increased convenience. With the help of digital banking, most businesses do not have to rely on the bank operation timings. Now the transactions can be made even in the odd hours. There are some transactions like paying bills or making regular payments that can be automated in the digital banking platform. As a result, the businesses are able to save a lot of time on the manual processes and this has a great impact on their productivity. 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. Digital banking is converting the brick-and-mortar banks into more greener and efficient places to operate. There are a plethora of options that people can opt for when it comes to banking. In the present scenario, people can check their bank account details, pay their bills online, transfer money to other accounts and all these can be done very comfortable at their residence. For this the only requirement is the internet connection.

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