

## Digital Banking – Empowering Customers on Technology Banking Platforms after demonetization

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### Abstract

India's flagship plan, Digital India, aspires to transform the country into a knowledge-based society and economy. Government had started numerous initiatives to drive the banking channel penetration in India. One of its kind is the direct benefit transfer for LPG subsidy, revamping the income tax and passport application systems etc. Citizens of India and Banking Channels are the beneficiaries of the Digital India program. Demonetization, which took place two years ago, saw the government withdraw currency notes worth 500 and 1,000 rupees on November 8, 2016, causing cash shortage that lasted for more than a year in various parts of the country. Based on information provided by the National Payments Corporation of India (NPCI) and the Reserve Bank of India (RBI), between September 2016 and June 2020, there was a significant increase in digital payments through popular channels including NEFT and mobile banking. Demonetization may now be a thing of the past. However, the trend of greater usage of alternative financial channels has continued. Additionally, SBI report alternative delivery channel share increased by 502 basis points from 78.45 percent in September 2017 to 83.47 percent in September 2018. Internet banking has grown at a greater rate in several segments.

**Keywords:** NEFT, Demonetization, NPCI, Digital India, Digital banking, Digital payment, Internet banking.

### Introduction

#### Digital India:

Digital India is a technological initiative that aims to transform India into a knowledge-based economy and a technologically empowered society. A system made up of numerous Ministries and government agencies, as well as efforts overseen by the Department of Electronics and Technology Information, has been established to achieve the program's objectives. (DeitY). An integral part of Digital India is the delivery of public services via the use of information technology, making it a technology-driven effort that empowers individuals. Prime Minister Narendra Modi introduced the Digital India programme on July 1, 2015.

Since the goal of the initiative is to turn the country into a knowledge economy and information society, there needs to be a lot of planning. Under Digital India, the three key areas for preparing for the knowledge economy are the development of the necessary physical infrastructure, the provision of essential government services to the people online, and the equipping of people with the digital technology skills necessary to use digital technology (digital literacy). Following is a list of the necessary steps and benchmarks for achieving these crucial objectives.

- A high-speed internet connection, mobile phones, bank accounts, access to a shared service centre, a web identity, a shareable private space on a public cloud, and a safe and secure cyberspace are all examples of digital infrastructure.
- Real-time web and mobile systems will offer seamless integration between departments and jurisdictions, on-demand access to governance, and services. All citizen paperwork will be available on the cloud platform, doing away with the requirement for physical document presentation. The proposal would involve GIS and cashless electronic transactions.(CET)
- Empower residents, particularly those in rural areas, by teaching them how to use computers.
- The economy and society are heavily impacted by digital technologies. As a result, the programme is more comprehensive in its goal of giving India digital empowerment. For Digital India, the government has designated nine pillars.

### **Broadband Highways:**

The government wants to connect a national optical fiber network to all 2,500,000 Gram panchayats. The project's overseeing organisation is the Department of Telecommunications (DoT). By 2018, all panchayats must have access to broadband internet.

To give government ministries and panchayats high-speed connectivity and a cloud platform, the National Information Infrastructure (NII) would connect the nation's network and cloud infrastructure. The State Wide Area Network (SWAN), National Knowledge Network (NKN), National Optical Fiber Network (NOFN), Government

User Network (GUN), and MeghRaj Cloud make up the infrastructure of broadband networks.

### **Universal Access to Phones:**

All of the country's remaining 55,619 communities will have mobile phone coverage. The nodal department would be the Department of Telecommunications, and the project will cost roughly Rs 16,000 crore between 2014 and 2018.

### **Public Internet Access Programme:**

The number of CSCs (Common Services Centers) increases to ensure that each Panchayat has one. (total 250000 CSCs). The delivery of government and commercial services would occur via CSCs, which would be viable and multifunctional terminals. The scheme would be implemented by DeitY, which would serve as the lead agency.

### **e-Governance:**

As part of a technologically-driven reform of the government, digital technology will be employed to enhance the delivery of government services. The government hopes that UIDAI, payment gateways, EDI, and mobile platforms will make operations and service delivery better. Voter identification cards and completion certificates will be accessible online. (Digi-locker). All databases and information should be stored electronically, as opposed to on paper.

### **Electronic Service Delivery (e-Kranti)::**

As part of a technologically driven reform of the government, digital technology will be employed to enhance the delivery of government services. The government anticipates improved operations and service delivery thanks to UIDAI, payment gateways, EDI, and mobile platforms. Certificates of completion and voter identification cards will be available online. (Digi-locker). Instead of storing data on paper, all databases and information should be saved online.

### **Information to all citizens:**

Through digital channels like social media, the public will have easy access to information regarding governance and public services.

## **Electronics and Manufacturing with Net Zero Imports as a goal:**

This pillar of Digital India intends to increase the country's output of digital technology products, especially electronics. Electronics production in India would be promoted with the goal of obtaining net zero imports by 2020. To achieve this, the National Electronic Policy will be implemented in phases. Tax incentives, removing financial barriers, supporting incubators, clusters, and talent development are a few of these.

## **IT for Jobs:**

This pillar focuses on equipping youth with the skills and training they need to find employment in the IT/ITES industry. This pillar consists of eight components, each with a distinct set of activities: educating one billion students in the IT/ITES sector, training three million service delivery agents, and emphasizing underserved areas including rural areas and the North East.

## **Programmes on Early Harvest:**

The government will implement this pillar's initiatives, including distributing eBooks to schools, setting up Wi-Fi in all colleges and public spaces across the country, making email the major form of communication, and implementing an Aadhar-enabled biometric attendance system in all central government offices.

## **Digital banking:**

It's not easy to become a digital bank. It necessitates tactics and goods that cater to the desires and needs of customers. Banks are increasingly focusing on producing customer-centric products and services in the current environment. There are also banks that collaborate with customers to produce products.

There may be mobile wallets that can be used to pay for a product that we purchase online or offline, therefore digital banking is not limited to banking activities alone. Banking transactions will soon be free, and banks will have to recoup their costs through services or Google AdWords on transaction pages. They may also be able to charge for services such as proactive personal financial management,

however even that is being delivered for free or at a cheap cost through technology. We have a mobile phone penetration rate of over 70% in India, and mobile phone channels will be the future of banking. The data presented below demonstrates widespread use of digital banking channels by the general public.

When we look at the data from two years ago, there were almost no mobile transactions; currently, everyone prefers to transact via mobile phone.

## **Potential of Digital Banking:**

If we can convert 80% of cash withdrawals/ deposits to ATM/CDM channels, or if a customer transacts using his mobile phone, or if a corporate account holder transacts his daily activities online and provides salary credit using the bulk upload facility, the work load on branches could be drastically reduced, resulting in higher customer satisfaction. Client satisfaction will undoubtedly rise as digital banking channels become more widely adopted, and branches will be able to devote more time to individualised customer service and cross-selling of additional banking products.

## **Social Media in Banking:**

Digital marketing isn't complete without the use of social media as a primary marketing tool. The potential of social media in the banking industry is enormous. When we asked who our competitors were, we got a lot of different answers. Previously, it was our peer banks. However, who will be our competition now? Our virtual banks, such as Paytm with Paytm Wallet and a plethora of new features, deals, and gift coupons, will be the focus.

The banking industry must go ahead and take advantage of social media outlets, which were previously overlooked as a source of leads. There are numerous social media platforms that, when properly employed, can increase our customer service, trustworthiness, and money generating. In today's world, customer involvement is critical. It's not just about having a big consumer base; it's about keeping them engaged. Our social media outlets have a wealth of prospects for the banking industry. Here are a few examples of how to make use of our various social media sites.

### **Social Media as a Tool for Customer Service:**

- E-mails and telephone services are no longer available. For providing real-time customer assistance, social media platforms have shown to be the most effective medium.
- Customers' questions can be answered through social media outlets. Customers and potential prospects can have their questions answered in real time through channels such as Facebook, Whatsapp, and Skype. Through hash tagging and offering comments, channels like Twitter may be leveraged to make our presence felt in the corporate social environment. LinkedIn and other social media platforms can be utilised for recruiting.
- Certain services, like as account opening, account transfer, social media wallets, and fund transfer, can also be done through these channels, making things easier for clients. It may lower footfall on our branches, but it will raise revenue. The hits on our pages and this would be the first sign of our improved online customer service.

### **Social Media as a Tool for Promotion:**

The most successful way to reach potential leads and consumers is through social media channels.

Promotional activities for various financial products conducted through these channels are more effective than television commercials, regardless of cost or reach.

When compared to TV commercials, animation and live videos are more cost effective and better at reaching the audience, and these videos are best marketed through our social media channels..

### **India's various digital payment options include:**

- Different types of Banking card
- U.S.S.D.
- Aadhaar Enabled Payment System
- Unified Payment Interface (UPI)
- Mobile Wallets
- Pre-paid Cards
- Point of Sale (PoS)
- Internet Banking
- Mobile Banking
- Bharat Interface for Money (BHIM)

### **Literature Review:**

According to (Golani, 2017), the financial services and banking system in India has undergone significant changes in the adoption of new technology over the past few years. As the government encourages and provides incentives for the digitalization of India's economy, this is undoubtedly the success mantra for the digitalization of India's banks. Customers have begun to actively utilize technology for banking transactions. Yadav (2017) emphasizes the digitization of banks and the improvement of the customer experience. The research also discusses the facilities and customer services offered by the bank to make it simple for customers to do business with the bank and vice versa by efficiently utilising technology. In their exploratory research on online banking, Malhotra and Singh (2010) went into detail on the existing state of Internet banking in India and the extent to which Indian banks provide Internet banking services. It also seeks to identify the variables that affect the availability of Internet banking in India, notably in nationalised banks. According to the findings, private and international banks have fared better than government banks at providing a wider range of goods. He also talked about the variables that affect how extensive Internet banking services are, such as bank size, security, previous experience providing Internet banking, financing patterns, and bank ownership. (Rathee, 2017) asserts that by removing or drastically decreasing paper-based transactions, Indian banks have experienced a revolutionary technology change that includes features like anytime, anywhere banking, Core banking solutions, ultra-fast response times, and digital channels.2019 (Trivedi) The study's goal is to give banks clear guidance on how to improve the customer-brand connection by offering chatbots that live up to customer expectations. The moderating impact of perceived risk on customer experience and the three quality criteria is also seen. Researchers in this study talk about how the underprivileged in India's developing economy are affected by digital financial services (Rao, 2018). The report also discusses the many digital services and platforms that the Indian bank provides to the nations impoverished.

## Research Work:

### Impact on the digital transaction of the banks:

Demonetization has a substantial impact on the digital banking by increasing digital transactions of scheduled commercial banks (SCBs), both in terms of financial transactions and non-financial transactions. After demonetization all types of digital transactions like internet banking, mobile banking, UPI based transactions, NEFT/RTGS increased. During this period, digital banking transactions were sharply increased. As per data obtained on October, 2016 (prior to demonetization), April

2017 (Just after the demonetization) and Feb, 2020 data, shows a total digital transactions increased by 5,549 billion after demonetization.

### End to End Digital banking:

Due to the extensive usage of electronic devices by clients to conduct banking activities, many banks have already started down the path of end-to-end digitization in an effort to offer all sorts of services online. As a result, paperless transactions are now the norm. India's use of plastic money has increased dramatically recently, particularly following demonetization. The primary tendencies are as follows:

### Progress in Digital Banking in India

Item	Rs. In Crore				Rs. In Billion		
	Number of Cards	Debit Cards	Credit Cards	Debit + Credit Cards No of Transactions at ATM (Volume)	Debit + Credit Cards No of Transactions at PoS (Volume)	Debit + Credit Cards Amount of Transaction at ATM (Rs. Billions)	Debit + Credit Cards Amount of Transaction at PoS (Billions)
Sept 16	75.5	72.8	2.7	74.27	20.3	2222.6	401.3
Nov-20	95.28	89.27	6.01	61.01	54.52	3139.81	1297.06
Growth	1.26x	1.23x	2.22x	-1.21x	2.68x	1.41x	3.23x

During Sep'2016 to Nov'2020, the number of debit cards will increase from 72.8 crore to 89.27 crore, a 1.2-fold increase, while the number of credit cards will increase from 2.7 crore to 6.01 crore, a 2.2-fold increase. In November of 2020, the total number of cards (credit and debit cards) increases from 75.5 billion to 95.28 billion. If we divide the total number of cards by the population of India (130 billion), we find that card penetration is approximately 73.29 percent. Additionally, both the volume and value of debit and credit card transactions at the PoS (Point of Sale) terminal increase. From merely Rs 401 billion in transactions in September 2016 to Rs 1,297.06 billion in November 2020, the volume of transactions tripled. Additionally, the number of Point-of-Sale transactions has increased from 20,3crore in September 2016 to 54,52crore in September 2020, which is

approximately threefold higher than September 2016.

### Analysis of the growth of digital transaction in India:

The volume of the payment and settlement systems increased significantly in 2019–20, by 44,1%, following a growth of 55,8% in the previous year. Due to slower growth in the large value system, specifically the Real Time Gross Settlement (RTGS) system, it increased in value by 5.4 percent over the previous year's 14.2 percent. The percentage of digital transactions in all non-cash retail payments increased to 97.0 percent in 2019–20 from 95.4 percent in 2018–19. But because of the extended COVID-19 lockdown, which restricted discretionary spending and hindered economic activity, there was a decline in digital transactions.

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### Payment System Indicators –Turnover Annually (April-March)

Item	Volume in Lakh			Value in Crore		
	2018-19	2019-20	YoY Growth(%)	2018-19	2019-20	YoY Growth(%)
A. Payment Settlement Systems						
Operated By CCIL	36	36	0.00	11,65,51,038	13,41,50,192	15.10
B. Types of Payment Systems						
1. RTGS(Bulk Payment)	1,366	1,507	10.32	13,56,88,187	13,11,56,475	-3.34
Retail Payment Segment						
(2)Credit Transfers	1,18,750	2,06,661	74.03	2,60,97,655	2,85,72,100	9.84
(2.1) Aadhaar Enabled Payment System (AePS)	11	10	-9.09	501	469	-6.39
(2.2)Aadhaar Payment Bridge System(APBS)	15,032	16,805	11.79	86,734	99,448	14.66
(2.3)Electronic Clearing SystemCr(ECS)	54	18	-66.67	13,235	5,145	-61.13
(2.4 ) Immediate Payment System IMPS	17,529	25,792	47.14	15,90,257	23,37,541	46.99
(2.5) National automated Clearing House(NACH) Cr	9,021	11,406	26.44	7,36,349	10,52,187	42.89
(2.6 ) National Electronic Fund Transfer (NEFT)	23,189	27,445	18.35	2,27,93,608	2,29,45,580	0.67
(2.7) Unified Payment Interface (UPI)	53,915	1,25,186	132.19	8,76,971	21,31,730	143.08
3. Debit Transfers and Direct Debits	6,382	8,957	40.35	6,56,232	8,26,036	25.88
3.1 Bharat Interface for Money(BHIM) Aadhaar Pay	68	91	33.82	815	1,303	59.88
3.3 National Automated Clearing House(NACH) Dr	6,299	8,768	39.20	6,54,138	8,24,491	26.04
3.4 National Electronic Toll Collection (NETC) (Linked to Bank Account)	6	97	1516.67	20	203	915.00
4. Card Payments	61,769	73,012	18.20	11,96,888	15,35,765	28.31
4.1 Credit Cards payments	17,626	21,773	23.53	6,03,413	7,30,895	21.13

## Conclusion:

It can be concluded that digital banking in India increased after demonetization and significantly reduced banks' operating expenses. This has allowed banks to reduce their service charges and increase their deposit interest rates while maintaining their spread. Lower operating expenses have resulted in increased profits for banks, as well as Digital banking has the potential to drastically alter the landscape of financial inclusion. Recently, Artificial Intelligence (AI), Machine Learning (ML), and Big Data have assumed a central role in the innovation of financial services.

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