

The Impact of Demonetization on frequency of using Internet Banking Services with reference to selected cities of Gujarat

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Abstract

India has demonetized before: First time on 12th Jan 1946 (Saturday), second time on 16th Jan 1978 (Monday), Third time on 8th November 2016 (Tuesday). Globally, information technology has brought about far-reaching changes in banking industry. With cash transactions facing a reduction, alternative forms of payment have been seen a surge in demand. Digital transaction systems, e wallets and apps, online transactions using e-banking, usage of Plastic money (Debit and Credit Cards), etc. are definitely having substantial increases in demand during demonetization. This should eventually lead to strengthening of such systems and the infrastructures required. The objective of the present paper is to examine and analyze the progress made by Internet Banking in Gujarat during Demonetization.

Keywords: Demonetization, Internet Banking, Internet Banking Services, Benefits, Semantics etc.

Introduction

PM Modi has announced a war against black money and corruption. In an emboldened move, he declared that the 500 and 1000 Rupee notes will no longer be legal tender from midnight, 8th November 2016. This measure has been taken by the PM in an attempt to address the resolve against corruption, black money, terrorism and counterfeit notes. At present just 1% of the total country's people are paying income tax. This move is expected to cleanse the formal economic system and discard black money at the same time.

Demonetization is the act of stripping a currency unit of its status as legal tender. The old unit of currency must be retired and replaced with a new currency unit.

In the west, many would likely think that the revocation of certain bank notes, though inconvenient, would be no problem. After all, the large majority have bank accounts and debit and credit cards to use. But in India, it is a different story-banking is still considered to be a luxury for the majority of people who are below the poverty line. 7% account holders in India uses net banking (2011). When it comes to digital banking, the survey said, "India leads growth in Asia in mobile and Internet usage for banking." Despite current government attempts to ensure financial inclusion, many still use only notes and coins to pay for the goods and services. In fact, it is estimated that 95% transactions in India are made using cash, and for those squirreling money away, it is a necessity to survive.

Significance of Study:

The Demonetization has brought India's first "digital and cashless village", Akodara, which is 60 miles from the northern city of Ahmedabad, into the limelight. Most of the 1,200 people living in Akodara buy everything from wheat flour to potato chips through mobile banking and have little to worry about when it comes to the demonetization.

Digital banking companies have also risen to the challenge, setting up shop in more convenient places to allow people to sign up and use their money as they wish. Paytm, an e-wallet firm, has seen a huge surge in transactions, for example – even the roadside stalls have started to accept payments through e-wallet.

The Reserve Bank of India has also been encouraging citizens to make use of internet and mobile banking at least in the short term as it works to "alleviate the pressure on the physical currency". True though it may be that demonetization has brought with it an inevitable slowdown, the act could be the start of a new economy for India. One that is far more inclusive, and helps to educate the people of India on the benefits of transactions in a digital world.

In the context of banning bank notes, financial inclusion is crucial. People who have access to credit cards and operational bank accounts are much better prepared for a demonetization crisis than those marginalized people whose money is all in cash, primarily in the form of these decommissioned notes. But smart phone and internet access is yet to reach the majority of Indian households.

Growth in the number of valid credit and debit cards from January 2014 to August 2016 was 85%; much higher than the 55% growth rate in the previous corresponding period. But when it comes to transaction value, there's a slowdown in the growth of the cashless economy. Between January 2014 and August 2016 it was 35%, down from 61% in the previous period.

According to a report by Boston Consulting Group (BCG), In India, out of 1.2 billion s, only 200 million people having bank accounts, which is only 17 % of Indian. Out of which 7% account holders in India uses net banking (2011)

Semantics of Current Demonetization:

Demonetization is the mechanism by which the government states to withdraw the money which is current legal tender. The government being sovereign can take such decision. The effect of this announcement is that the currency notes in circulation will now cease to be valid tender and can only be exchanged at the banks. Demonetization of higher denomination notes as an idea has been around.

There are three important issues with respect to the present demonetization. First, that the notes ceased to be legal tender

from midnight of 8th November, 2016 just 4 hours after announcement. So in effect the only places where they will be accepted will be banks. Second, even the banks have been given time until when they can accept the notes – 30th December, 2016. Third, the cash swap carries restriction. Thus, in effect the announcement forces these notes into the banks deposits within a short period of time.

Semantics of Internet Banking:

The introduction of latest technologies along with the deregulation of the banking sector has attracted new players to make a foray into the industry rapidly and competently. Online banking has made things much easier and has saved lot of time of bank employees as well as general public. The traditional way of waiting in a queue and filling up all the forms manually, is no hassle now for transacting with any bank. Banks in India are offering wide range of their services and their products through internet banking.

Some of the major services and products in India are:

Statements: Provide account statement (account info), Balance enquiry, balance statement and transaction reports used. Customers can even download and print the statement of accounts.

Online Fund Transfer: Transfer funds between accounts, even if they are in different branches or cities. Customer can also transfer funds to any person having an account with the same bank anytime, anywhere, using third party funds transfer option.

Bill Payment Service: Banks Bill Payment is the easiest way to manage bills. Account holder can pay their regular monthly bills i.e. telephone, electricity, mobile phone, insurance etc. at anytime, anywhere for free. Saves time and effort. Make bill payments at customer's convenience from their home or office. Lets account holders check their bill amount before it is debited from their account.

Requests and Intimations: Can electronically submit a request for Cheque-book, Stop payment instructions, Opening a fixed deposit, Opening a recurring deposit, Intimate for the loss of ATM card, Register online for phone and mobile banking, Cheque status, Online application for debit card, Issue a DD or a Banker's Cheque form account at special rates.

Trading Demat Account: Demat is commonly used abbreviation of Dematerialization, which is a process whereby securities like share, debentures are converted from the material (paper documents) into electronic data and stored in the computer of an electronic Depository. A depository is a security banks, where dematerialized physical securities are held in custody, and from where they can be traded. This facilitates faster, risk-free and low cost settlement.

Debit Card & Credit Card: Debit cards allow bank customers to spend money that they have by drawing on funds that they deposited with the card provider. Credit cards allow consumers to borrow money from the card issuer up to a certain limit in order to purchase items or withdraw cash.

Mobile Banking: Mobile banking is a service provided by a bank or other financial institution that allows its customers to conduct financial transactions remotely using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the financial institution for the purpose.

Benefits of Using Internet Banking

Using Internet banking is beneficial for both i.e. Customers as well as banks. The benefits of adopting internet banking are mentioned below:

A. Benefits for costumers

Less waiting time: It offers less waiting time and more convenience as compared to the traditional banking system and significantly lowers the cost structure than traditional delivery channels. It also reduces the time and place limitation and it provides various benefits to consumers so that they feel convenient while doing banking activities.

Ease and Convenience: Internet banking is considered as more efficient in term of ease of use and access. It allows the consumers to make transactions on internet provide them comfort of home or office without going outside. It also enables consumers to keep an eye on their transactions or account activities from their home, office or elsewhere so they can feel satisfied and convenient. Even non transactional facilities like ordering check books online, updating accounts, inquiring about interest rates of various financial products etc. have become much simpler on the internet.

24*7 Availability: With the help of internet banking, customer can access their banking facilities and services all around the clock i.e. 24 hours and 365 days from anywhere anytime. They don't need to wait for timing of bank branches.

Self service channel: Internet banking provides their customer a self service channel for various banking services they have not to depend on the bank's staff and other depending process to avail their services. Internet banking is one of the most popular self-service banking technologies. Continued use of self service technology is positively affected by buyers' perceived usefulness.

Save time and money: Now customers don't have to go to branch to avail banking services it consist various advantages such as: it will save time, save fuel, do away from traffic, save the environment in term of reducing the use of motor vehicles and reduce waiting time.

B. Benefits for banks

Increased Profitability: Adoption of internet helps the banks to increase their profitability. Banks with Internet banking have better operating efficiency ratios and profitability as compared to banks, which are not using internet facilities. The banks can provide banking services to the consumers using internet banking at a far lower cost as compared to the traditional banking.

Cost effective mechanism: The internet banking provides an opportunity of self service channel to the consumers. This help the banks to cut their workforce up to a particular extent that results in reducing the administrative costs bear by the banks. Compared to traditional banking system, internet banking is cost-effective as it reduces the administrative costs and paperwork needed for the bank transactions. Many studies show that electronic banking has successfully reduced operating and administrative cost and fees.

Reach where there is no branch: Internet banking has expanded their geographical reach and may increase customer base through deploying electronic delivery channels at lower cost. Actually, some banks are doing in that way, they are providing banking services exclusively via the Internet in some areas because they do not have bank branches in these areas. Whereas many financial institutions are using the Internet banking as a branchless banking to satisfy their existing customers and attract new customers in the perspective of convenience and cost effectiveness.

Improve Customer relationship: Maintaining the relationship with consumers has become a strategic priority for most of the banks. Using the internet banking technology and facilities can provide a means for banks to develop and maintain a good relationship with their customers by offering easy access to a wide range of products and services. Managing a good relationship with the customers may help to make customer loyalty, customer retention and improve cross-selling. Internet banking facilities have become a useful tool for improving customer satisfaction and increasing cross-selling opportunities.

Eco-friendly image: Another important benefit of internet banking is that it is eco-friendly is nature. Internet banking cuts down the paper usage and reduces pollution as people do not have to travel physically and also does not add carbon emissions. Implementing the e-banking facilities in the banks show the concern of the bank towards the environment, which further, will help the banks to create an eco-friendly image.

Literature Review

Jayshree Chavan (2013) paper discusses some challenges in an emerging economy. Paper concluded that one of the benefits that banks experience when using ebanking is increased customer satisfaction. This due to that customers may access their accounts whenever, from anywhere, and

they get involved more, this creating relationships with banks. Banks should provide their customers with convenience, meaning offering service through several distribution channels (ATM, Internet, physical branches) and have more functions available online.

The numbers based on estimates by various agencies, the first demonetization took place in 1946 and Rs 1000 and Rs 10,000 notes were demonetized. Later in 1978, Rs. 1000, Rs. 5000 and Rs. 10,000 were demonetized. This is the third time demonetization has taken place. The critical difference is in the quantum however. The first and second demonetizations affected really high value notes which formed a small part of notes in circulation. We can arrive at the estimates by comparing the denomination of the note with the annual per capita GDP. In 1960, India's per capita GDP was Rs. 400 (then currency), in 1978 per capita GDP was Rs. 1722/- whereas today it is Rs. 103,000/- (today's currency). Thus in 1960, a 1000 Rupee note was 2.5X and in 1978 it was 0.5X per capita GDP, considerably easy to withdraw. The second aspect is that today the 500/- and 1000/- currency notes represents ~85% of physical money in circulation. At that time, it was considerable less.

Miss. Sejal M. Vithalani (2015), compared to developed nations, quite less number of Indian female is availing banking services independently which can be due to lack of awareness or dependency. Internet Banking: Internet banking is an improvement over PC banking and it is done over a highly accessible public network. It is accessible to anyone using the Internet not just the bank's customers. Banks get the ability to deliver products and services to consumers at a cost that is lower than any existing method of delivery. The study shows that the most popular mode of advertisement among women is Television which is outstripping as 52.40% of women who get influenced by it for opening a bank account or availing banking services. It can be said that there is an influence of various modes of advertisement on women of Saurashtra region for accessing Internet Banking service. One of the best targeted customer for the bank can be female due to noticeable increase in percentage of female education and remarkably high cost of living, more and more females have started getting involved in commercial activities, and to reach this prospective customer, the best means is Television advertisement which influences them most to get the knowledge about banking products and services.

Mr. Mihir B. Chavda & Dr. Ashvin Solanki (2014), Internet banking adoption become popular in the year 2000 and started peaking up from the year 2012 onwards. Most customers who have adopted internet banking services believes that it has got lot of advantages while on the other side some believes that because of security and privacy issues innovative banking has disadvantages. Necessity of information and communication technology infrastructure

as well as poor knowledge about the innovative banking technology restricts users from using innovative banking products. Radical innovation is about the creation of a new product from scratch, while incremental innovation is about improving the existing product. Challenges for the E banking being awareness, adaption of technology, trust, speed of service, internet use, and privacy of service. It has observed that beyond technology there are other factor that is to be considered like education to the customer and staff. Customers are satisfied with very few services offered by the banks. Public sector banks have to train staff regarding technology acceptance and better understanding of the product.

Laukkanen, P., Sinkkonen, S. & Laukkanen, T.(2008) the purpose of this paper is to further the understanding of innovation resistance by dividing internet banking non-adopters into three groups based on their intentions to use the innovation. Thereafter, the aim is to identify how the resistance differs in these customer groups. This study identifies three groups of internet banking non-adopters, namely postpones, opponents and rejecters. The data were collected by conducting an extensive postal survey among the retail banking customers in Finland who had not adopted internet banking. The measurement development was based on consumer resistance theory and the earlier literature on internet banking. Principal component analysis was used to analyze the statistical differences in resistance to internet banking between the three groups. Significant differences were identified between the groups explored. The resistance of the rejecters is much more intense and diverse than that of the opponents, while postpones show only slight resistance.

Arunachalam & Sivasubramanian (2007) discussed the future of Internet Banking in India. They discuss the latest trends in Indian Banking Industry and new initiatives planned by RBI.

Problem Statement

The present paper is undertaken to examine and analyze the progress made by Internet Banking in Gujarat during Demonetization.

Objectives of the Study

Internet banking offers its own benefits and challenges to both the customers and organizations. The study has been undertaken to determine:

1. To know the frequency of visiting bank branch per month before and after announcing demonetization.
2. To know the level of knowledge regarding Internet Banking facilities among respondents of Gujarat.
3. To know the ratio of people associated with Internet Banking services.

4. To know the impact of Demonetization on the usage of internet banking services by knowing the frequency of the usage of different internet banking services before and after announcing Demonetization.

Limitations of The Study

The study is also conducted under certain limitations such as, the sample has been taken only from three more specified regions of Gujarat and the respondents are drawn by using convenience sampling. Thus, the data collected may not perfectly represent the entire population. The data is collected through structured questionnaire; it may restrict the opinion of the customers.

Data Analysis and Interpretation

The survey is conducted on the individuals; educated having

various beliefs belongs to the three districts Gujarat Region i.e., Rajkot, Ahmedabad and Baroda. Questionnaire is used as the research instrument, which contains 2 sections: demographical profile of customers, and frequency of using major aspects of internet banking. Five points multiple choice grid is used ranging 1. Daily 2. Weekly 3. Monthly 4. Yearly 5. Never. A sample of 1200 customers is drawn by using convenience sampling technique. The questionnaire is distributed through e-mail to all the respondents and 246 filled questionnaires are received. Thus the response rate is 21 percent. Chi-Square test of independence is employed to analyze the collected data to determine whether the frequency of using online banking services is independent or dependent of the demonetization with using the following equation.

Table-1 Data Analysis

		Respon dents (246)	%
Age	18-25	179	72.76
	26-35	39	15.85
	36-45	18	7.32
	>45	10	4.07
Gender	Male	162	65.85
	Female	84	34.15
Education	SSC	8	3.25
	HSC	8	3.25
	Graduate	30	12.20
	Post graduate	193	78.46
	Doctorate	7	2.85
Occupation	Business	29	11.79
	Service	86	34.96
	Professional	47	19.11
	House wife	1	0.41
	Student	83	33.74
Income	0-15000	103	41.87
	15000- 25000	57	23.17
	25001- 35000	37	15.04
	35000 or above	49	19.92
City	Ahmedabad	72	29.27
	Rajkot	108	43.90
	Baroda	66	26.83

1. Do you have your bank account with any of banks in India?	Yes	246	100.00
	No	0	0.00
2. Before demonetization announced, how frequently you were visiting your bank branch per month?	1 to 4 times	170	69.11
	5 to 8 times	28	11.38
	9 to 12 times	8	3.25
	More than 12 times	5	2.03
	Never	35	14.23
3. After demonetization announced, how frequently do you visit your bank branch per month?	Never	47	19.11
	1 to 4 times	131	53.25
	5 to 8 times	46	18.70
	9 to 12 times	12	4.88
	More than 12 times	10	4.07
4. How much knowledge do you have about Internet/Online Banking Services?	Well known	172	69.92
	Partial Information	54	21.95
	Just known	19	7.72
	Unknown	1	0.41
5. Are you associated with Internet Banking Services provided by your bank?	Yes	211	85.77
	No	35	14.23
6. Which Internet Banking Services you were using before Demonetization announced? (Please mark your frequency)	Payment of bills/fees/taxes		
	Daily	23	10.90
	Weekly	30	14.22
	Monthly	97	45.97
	Yearly	23	10.90
	Never	38	18.01
	Balance inquiry		
	Daily	25	11.85
	Weekly	74	35.07
	Monthly	65	30.81
	Yearly	11	5.21
	Never	36	17.06
7. Which Internet Banking Services you are using after Demonetization announced? (Please mark your frequency)	Payment of bills/fees/taxes		
	Daily	33	15.64
	Weekly	62	29.38
	Monthly	78	36.97
	Yearly	11	5.21
	Never	27	12.80
	Balance inquiry		
	Daily	50	23.70
	Weekly	85	40.28
	Monthly	48	22.75
	Yearly	4	1.90
	Never	24	11.37

Fund transfers/ RTGS/ NEFT		
Daily	15	7.11
Weekly	34	16.11
Monthly	78	36.97
Yearly	21	9.95
Never	63	29.86
E wallets and apps		
Daily	25	11.85
Weekly	65	30.81
Monthly	36	17.06
Yearly	15	7.11
Never	70	33.18
Debit card (ATM)		
Daily	46	21.80
Weekly	89	42.18
Monthly	45	21.33
Yearly	10	4.74
Never	21	9.95
Credit Card		
Daily	15	7.11
Weekly	30	14.22
Monthly	40	18.96
Yearly	10	4.74
Never	116	54.98
Retrieving bank statements		
Daily	11	5.21
Weekly	36	17.06
Monthly	66	31.28
Yearly	32	15.17
Never	66	31.28
Email/text alerts		
Daily	59	27.96
Weekly	50	23.70
Monthly	43	20.38
Yearly	21	9.95
Never	38	18.01

Fund transfers/ RTGS/ NEFT		
Daily	40	18.96
Weekly	50	23.70
Monthly	63	29.86
Yearly	15	7.11
Never	43	20.38
E wallets and apps		
Daily	50	23.70
Weekly	72	34.12
Monthly	30	14.22
Yearly	10	4.74
Never	49	23.22
Debit card (ATM)		
Daily	68	32.23
Weekly	98	46.45
Monthly	35	16.59
Yearly	6	2.84
Never	4	1.90
Credit Card		
Daily	32	15.17
Weekly	45	21.33
Monthly	24	11.37
Yearly	7	3.32
Never	103	48.82
Retrieving bank statements		
Daily	29	13.74
Weekly	51	24.17
Monthly	49	23.22
Yearly	22	10.43
Never	60	28.44
Email/text alerts		
Daily	82	38.86
Weekly	64	30.33
Monthly	33	15.64
Yearly	11	5.21
Never	21	9.95

	Trading Demat Account			Trading Demat Account		
	Daily	21	9.95	Daily	43	20.38
	Weekly	23	10.90	Weekly	36	17.06
	Monthly	36	17.06	Monthly	26	12.32
	Yearly	16	7.58	Yearly	10	4.74
	Never	115	54.50	Never	96	45.50
	Ticket booking (Air/Railway/Bus/Movie)			Ticket booking (Air/Railway/Bus/Movie)		
	Daily	13	6.16	Daily	31	14.69
	Weekly	36	17.06	Weekly	52	24.64
	Monthly	72	34.12	Monthly	55	26.07
	Yearly	40	18.96	Yearly	32	15.17
	Never	50	23.70	Never	41	19.43
	Other			Other		
	Daily	17	8.06	Daily	35	16.59
	Weekly	25	11.85	Weekly	37	17.54
	Monthly	27	12.80	Monthly	20	9.48
	Yearly	32	15.17	Yearly	17	8.06
	Never	110	52.13	Never	102	48.34
8. If no (w.r.t Que.5), then how do you prefer to adopt Internet/Online Banking Services?	Within a month	22	8.94			
	Within a year	7	2.85			
	May be in future	3	1.22			
	Never	3	1.22			
	Not applicable	211	85.77			

Formulation Of Hypothesis

H1: Frequency of online payment of bills/fees/taxes is not independent of demonetization.

H2: Frequency of online balance inquiry is not independent of demonetization.

H3: Frequency of online fund transfers/ RTGS/ NEFT is not independent of demonetization.

H4: Frequency of using E wallets and apps is not independent of demonetization.

H5: Frequency of using Debit card (ATM) is not independent of demonetization.

H6: Frequency of using Credit Card is not independent of demonetization.

H7: Frequency of Retrieving bank statements is not independent of demonetization.

H8: Frequency of using Email/text alerts is not independent of demonetization.

H9: Frequency of Trading Demat Account is not independent of demonetization.

H10: Frequency of online ticket booking (Air/Railway/Bus/Movie) is not independent of demonetization.

H11: Frequency of using other online banking services is not independent of demonetization.

Table-2 Application of Chi-square Test

Criteria	Chi-square calculated value	Chi-square critical value	Decision
Online payment of bills/fees/taxes	21.08	13.28	H1 is accepted
Online balance inquiry	17.32	13.28	H2 is accepted
Online fund transfers/ RTGS/ NEFT	20.78	13.28	H3 is accepted
E wallets and apps	13.94	13.28	H4 is accepted
Debit card (ATM)	18.49	13.28	H5 is accepted
Credit Card	14.45	13.28	H6 is accepted
Retrieving bank statements	15.34	13.28	H7 is accepted
Email/text alerts	14.81	13.28	H8 is accepted
Trading Demat Account	15.14	13.28	H9 is accepted
Online ticket booking (Air/Railway/Bus/Movie)	14.33	13.28	H10 is accepted
Other	14.49	13.28	H11 is accepted

Findings:

1. There is increase in number of visits in bank branch after demonetization announced.
2. Out of 246 respondents, 70% are well knowledgeable about the internet banking services, whereby, 22% respondents have partial knowledge for the same.
3. Out of 246 respondents, 211 are associated with any of the internet banking facilities, whereby 35 respondents are still not associated with any online banking services.
4. At the end by applying chi-square test of independence, we found that there is increase in the usage of internet banking services after announcing demonetization by government. That means that online banking services are significantly related with demonetization.

Conclusion:

The results shows that there is an impact seen on frequency of using different internet banking services as of the result of demonetization. Most of the respondents are having good knowledge about online banking services, whereby some respondents still have partial knowledge about the same. Some respondents who are not associated with any of the online banking facilities also have positive view to get associated with the same within a shorter period of time. Internet banking services are providing more benefits than the traditional banking. As the customers have knowledge about the internet and they are willing to adopt the internet banking in future, it is the responsibility of the bankers to create awareness about internet banking and to provide some training to the customers to encourage them to adopt.

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