

# Increase in number of Online Services and Payments through Mobile Applications Post Demonetization

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## Abstract

*Post demonetization, digital payments can be held responsible for the change in the buying and selling behavior of Indian society. Demonetization in the year 2016 resulted in faster adoption of technology to streamline quicker execution of digital transactions. Government of India demonetized all Rs. 500 and Rs. 1,000 banknotes of the Mahatma Gandhi Series in the year 2016. This was the third time in the Indian history where economy saw the phase of demonetization. It left people with no other option but to move slowly towards cashless transactions.*

*A rapid growth can be seen in the internet usage for using online services. Businessmen, be it on any scale (small/medium/large) are opting for cashless transactions. Online services and payment applications are gaining tremendous popularity these days. The study attempts to understand changes in number of online services and usage of mobile applications post demonetization. The way consumer remarks digital transaction after demonetization, it affects a lot in the society. An online survey has been conducted to provide validity to the study.*

**Keywords:** E-commerce, Mobile applications, online services, demonetization, internet awareness, cashless economy, digitization, payment Apps, E-wallets,

## Introduction

In every country its national currency plays the lead role for the financial transaction. As stated earlier by many researchers, demonetization is the act of removing a currency unit of its status as legal tender. That is, the current form of money is pulled from circulation and retired and substituted with new notes or coins for the betterment of the economy. For any exchange of good and services, currency forms the basis for any trade. Economy faced scarcity of currency during and post demonetization which left people with no other options but e-payments/e-transactions. Post demonetization, e-banking became a necessity. The E-commerce industry is incredibly growing in India.

Even small merchants are using e-wallets very conveniently these days. Some of the e-wallets are even backed by the Government also. All scheduled commercial banks have their own financial apps. These apps also use the medium of UPI (Unified payment interface) to make the transfer of

payments. These apps are rapid and robust option for making payments. Mobile applications and online services are gaining tremendous popularity these days. According to a report of Hindustan business line, "If one includes all digital transactions, there has been a 440 per cent increase since demonetization. This growth has been driven by tier II and tier III markets which mostly stayed away from digital transactions before demonetization.

One can conduct any number of transactions without standing in long queues or going anywhere any time. Digital payments have made inroads into consumer-facing businesses with large presence of organized players. Big ecommerce players such as Amazon and Flipkart have a larger share of digital pay-ins, and declining cash pay-ins. Over 60% of Amazon India's pay-ins is via bank cards, net banking or mobile wallets. People can earn reward points, cash back offer, discounts, earn interest etc. As a part of paving the path of Indian economy – "A cashless economy", various modes of digital payments and mobile applications are accessible.

**Plastic Cards:** Plastic cards are no new thing. Banks provide various types of cards to their customers. These are also termed as plastic money. Reasons behind using these cards post demonetization are security, convenience etc. Also they are the oldest form existing in Indian society which replace cash transactions. Several choices are offered to clients like debit card, credit card and pre-paid card. Transaction through these card gives authentication for secured payments e.g. secured PIN and OTP. MasterCard, RuPay, Visa are a number of the instance of card payment systems. Payment cards deliver individuals the capability to purchase things in stores, on the internet, through mail-order catalogues, on the various mobile applications and over the phone also.

**Internet Banking:** Internet banking is also known as online banking, e-banking or virtual banking. It is an electronic payment system that enables customers to do various financial transactions through the bank's website. It is a secured platform as each user has their unique ID and password through which they perform several transactions. Post demonetization people are showing confidence in using internet banking as they are now much more educated on internet usage. As per a report of Hindustan business line - the value of NEFT transactions had gone up from Rs. 988,000 crore in September 2016 (just two months before demonetization) to Rs.14,182,000 crore in September 2017 and to Rs.18,015,000 crore in September 2018.

**Mobile Banking:** It is a facility provided by a bank or other financial institution that permits its customers to perform different types of financial transactions using a mobile device such as a mobile phone or tablet. It uses software, usually called an app, provided by the banks or financial institution. User can download the app and use it by providing their login credentials. Each Bank provides its own mobile banking App for Android, Windows and iOS mobile platform(s). Again as per report -the value of NEFT transactions had gone up from ₹988,000 crore in September 2016 (just two months before demonetization) to Rs. 14,182,000 crore in September 2017 and to Rs. 18,015,000 crore in September 2018.

**Mobile Wallets (Applications):** A mobile wallet is a technique to carry cash in digital form. People can link their credit card or debit card information in mobile device through mobile wallet application. Instead of using physical plastic card to make purchases or avail online services, they can pay with smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it. Private companies and most of the banks have their e-wallets e.g. Paytm, BHIM, Freecharge, Mobikwik, momoe, city masterpass, mRuppee, Airtel Money, Lime, Jio Money, SBI Buddy, Citrus Pay, Vodafone M-Pesa, ICICI Pockets, etc. Possibilities of using e-wallets are easy accessibility, simple load money, auto payment option, multiple usage facility and many more.

### Objective

The objective of this paper is to study the changes (increase or decrease) in the usage and adaptation of online services and payments through mobile application post demonetization (2016) in India. This study will also help in mapping the internet awareness and usage in our country. Though India is a developing country, it is still lacking in spreading awareness of internet and its usages, so it may be one of the challenges towards making India –A cashless Economy. This study will be helpful for the Indian citizen, government and business men of India as they will be able to gauge the future condition of the economy and can take wise decision to generate more revenue. More likely everybody will be able to evaluate the impact of demonetization on digital payments and usage of mobile applications.

### Review of Literature

“E-payment is fetching a daily part of our life. Ramsay and Smith<sup>8</sup>, witnessed consumer’s preferences and ranked the banking channels accordingly. They rated physical branches as their most preferred service channel while Internet banking was the least preferred. Jayawardhena and Foley<sup>4</sup> in their study recorded the advantages of e-banking. These comprise cost savings, increased customer base, innovation, and development of non-core business. However, some concerns were raised such as privacy and security issues.

Research findings of Moutinho and Smith<sup>6</sup> suggested that ease of banking and convenience is preferred by the

customer and, hence, banks should find alternative routes to improve service delivery (either human-based or technology based). E-banking provides higher degree of convenience that enables customers to access internet banking at all times and places. Apart from that, the accessibility of computers is perceived as a measure of relative advantage.

Therefore, it is hypothesized that convenience and accessibility have positive effect on consumer adoption of e-banking. According to a study by Mali<sup>7</sup>, successful online retail stores in India like Flipkart, Amazon, Snapdeal, Shopclues and other online retailers temporarily stopped offering cash-on-delivery services. Such a move temporarily impacted their profits because cash-on-delivery is the most popular method of payment for shoppers in the country. Instead, they encouraged consumers to adopt payments through debit and credit cards, thereby inculcating the card culture or ‘plastic money’.

### Research Methodology

This Research is Descriptive Type Research. The research study is based on secondary data. Basically, the required information has been derived from various books, articles from newspapers, magazines and journals, and from the various web-sites which deal directly or indirectly with the topics related to. Primary data is collected through a well-structured questionnaire which includes questions regarding demographic profile of about the participants like Age, Gender, Marital status, Education qualification and their responses on various questions asked on usage of digital payments and various mobile applications post demonetization.

### Limitation of the Study

The study is restricted as it is conducted in the limited geographical boundaries with small sample size (406 respondents) and is time bound (2016-2018). All limitations of primary and secondary data are applicable to this study.

### Data Analysis and Findings

The tables presented were generated through survey monkey (website), from which the online survey was conducted. Questionnaire was sent to around 500 people out of whom useable responses were 406. The questions/statements are given with multiple choices as well as Likert scale ranging from 1 to 5 i.e., from strongly disagree to strongly agree. The collected data were processed with the help of statistical tool-Simple Percentage Analysis. The intention of the survey was to provide an overview of the thought process of the respondents about the digitalization and a step taken by government to make India a cashless economy and also, to validate that there is a positive growth in the number of online payments (modes and methods) and usage of mobile applications.

**Results:** The demographic analysis is always vital for any research, and if we talk about digital payment and usage of mobile applications, then it is the most essential element. So

in this research a demographic analysis (Table 1) was conducted through well-structured questionnaire, the demographic analysis like age wise classification was divided into 6 groups below 18, 18 years to 23 years, 24 years to 30 years, 31 to 40 years, 41 years to 50 years and above 50 years. Gender Wise Classification was divided into two groups Male and Female, Marital status is divided into three groups Married, Divorced/ widowed and Single, Educational Qualification was divided into five groups, Primary Secondary, Technical college ,University Degree and Others (please specify) Income Wise Classification was divided into four groups: Below 50,000, 50,001 to 3,00,000, 3,00,001 to 5,00,000 and 5,00,001 to 10,00,000 .

Percentage analysis deals with the demographic factors such as age, educational qualification, marital status, occupation and monthly income of the respondents. It can be inferred from table 1 that majority of the respondents 25.86% of the respondents belong to the age group 18-23years 54.18% respondents are male, 45.81% of the respondents are single, 44.33% respondents are having university degree and 43.10% respondents belong to the income group 3,00,000-5,00,000.

According to the table 2, “Convenience” is the most preferred reason for people to adopt cashless payment system. The comfort, ease of use and immediate completion are the key factors in making convenience a preferred choice.

**Table 1**  
**Demographic Characteristic of Respondents**

	Categories	Count	Percentage
Age Wise Calculation	<18	58	14.28
	18-23	105	25.86
	24-30	95	23.39
	31-40	83	20.44
	41-50	45	11.08
	>50	20	4.92
Gender Wise Calculation	Male	220	54.18
	Female	186	45.81
Marital Status	Married	180	44.33
	Divorced/Widowed	40	9.85
	Single	186	45.81
Educational Qualification	Primary	30	7.38
	Secondary	85	20.93
	Technical College	105	25.86
	University Degree	180	44.33
	Other(pls specify)	6	1.47
Income Wise Classification	Below 50,000	108	26.60
	50,000-3,00,000	100	24.63
	3,00,001-5,00,000	175	43.10
	5,00,001-10,00,000	23	5.66

**Table 2**  
**Reason for adopting cashless payment system**

Choices given	Count	Percentage
Convenience	225	55.4
Shortage of currency notes	80	19.7
Discount/cash back	50	12.3
Easy tracking of spends	51	12.5

According to table 3, “Debit/Credit Cards” are the most used mode of payment people use post demonetization. These cards are well secured and remove the hassles and risk of carrying cash all the time, especially after limited and chance availability post demonetization. According to table 4,

“PayTM” is the most widely used E-Wallet used by people. PayTM was pre-existing, but gained widespread acceptance and usage post demonetization. There are many e-Wallets introduced since then, but PayTM is also involved much since then and is most widely used e-Wallet.

According to table 4, “Net Banking” is the most used mode of payment that people use for high value transactions. For high value transactions, people generally choose Net-Banking as it provided all the security measures ensured by the Bank, also, it is auditable and trustable.

According to table 6, “Security” is the biggest concern for people when performing cashless transactions. People yet are suspicious or do not show complete trust when doing cashless transaction owing to the fear of security suspecting e-Frauds or phishing, hacking and other reasons.

**Table 3**  
**Preferred mode of payment post demonetization**

Choices given	Count	Percentage
Cash	40	9.8
Plastic cards(debit/credit)	150	39.3
Net Banking	100	24.6
e-Wallets	110	27.1
Cheques	46	11.3

**Table 4**  
**E-Wallet preferred most of the time**

Choices given	Count	Percentage
PayTM	120	29.5
FreeCharge	40	9.8
MobiKwik	30	7.3
Google Pay	90	22.1
BHIM	70	17.2
PayUmoney	15	3.6
Jio money	21	5.17
PhonePe	20	4.9

**Table 5**  
**Preferred mode of payment for high value transactions**

Choices given	Count	Percentage
Cash	20	4.9
Plastic cards(debit/credit)	90	22.1
Net Banking	150	39.3
e-Wallets	60	14.7
Cheques	86	21.1

**Table 6**  
**Biggest concern while using cashless payments**

Choices given	Count	Percentage
Security	140	34.4
Poor internet	100	24.6
Add on cost	61	15.0
Lack of technology knowhow	25	6.15
Merchant acceptance	80	19.7

### Conclusion, Suggestions and Findings

Study states that due to sudden demonetization, small sized commercial establishments were highly and adversely affected for a short period of time but have come on the track now through the help of online services and various modes of e-payments options. Indian market is flooded with numerous mobile applications, be it any mobile payment app or any service providing apps, you name it and it is there at your one touch. The number of mobile internet users in India is estimated to touch 478 million by June 2018, lifted by

cheaper smartphones, faster connectivity and affordable services, according to an IAMAI report. It also estimates 291 million urban mobile internet users, with 187 million rural users by June 2018; Urban India witnessed an estimated 18.64 per cent year-on-year rise, while rural India witnessed an estimated growth of 15.03 per cent.

A drastic change that has been noticed these days is common man using a lot of net banking and other modes of payment and is now less dependent on cash transactions. Still cash

continues to be the preferred mode of payments, more so is in rural India. This may be because digital payments still have not reached smaller cities and villages. In digital payments, there is a cost attached to the final bill. To avoid this cost, people used to pay in cash rather than opting digital payments. So we can conclude that record rise is seen in the number of online services and payment applications in urban areas while rural area is still crawling and struggling as they suffer due to lack of knowledge and internet illiteracy.

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