

## Demonetization: A Push towards Digitalization- A Study of Udaipur City

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### Abstract

As Ambedkarji suggested that demonetization should happen after every 10-15 years. When there is a need to change in the national currency demonetization becomes necessary. In process of demonetization the old unit of currency is retrieved and replaced with new currency unit. Before 8th Nov 2016 Rs. 500 & Rs. 1000 currency note constitutes 86.4% of economy. This percentage of currency in circulation was invalidated by Prime Minister Narendra Modi on 8th November 2016. One of the main reasons of demonetization was to make India a cashless economy which is to be done through digital payments. The purpose of this study is to compare and analyze the impact of demonetizations on digitalization. There is a huge surge in the usage of E-wallet and mobile payments have been observed. This paper analyses the demonetization, and it's after effects on the digitalization of Indian economy. The paper examines, varying trends, strategies, and challenges by the study of primary data and secondary data for demonetization and digitalization of Economy with special reference to Udaipur city. This paper gives a clear picture of changing scenario from swapping of currency to swiping of cards. The study shows that the attitude of people changed towards online transactions.

**Keywords:** Demonetization, Digitization, E-wallet, Cash crunch, Cashless Economy

### Introduction

In India cash is the King. Before demonetization 95% of all transactions in India were conducted in cash and even 85% workers were paid exclusively by cash and almost half of the population didn't even have bank account. India's demonetization scheme was a unilateral initiative that was planned in a secret. The strategy was to cease 86% of the currency in circulation to become legal tender after the midnight of 8th Nov. 2016. The main reasons behind demonetization were:

- To include digitalization and boosting the number of tax payers.
- To fight corruption
- To fight counterfeiting
- To remove black money

But this surprise demonetization also pushed millions of new users onto the digital economy grid. After the strict exchange limits that prohibited people from exchanging the banned currency notes from

banks because banks didn't have enough to distribute, the people of India were left in limbo and thus demonetization transitioned India to a cashless economy. Now after one year of demonetization, there's still plenty of cash in use. As per RBI the amount of cash in circulation is just nine percent under the level before demonetization. Only 12-15 per cent of the transactions are done digitally but hopefully it will increase during the next decade.

### Review of literature

Shukla & Bose (2017) they analyzed that there is a positive impact of digitalization on demonetization. Digitization and cash lessens will clearly increase the banked population in the economy, and along with that it will lead to higher banking transaction intensity and revival of dormant bank accounts in the existing banked population.

Chauhan (2017) studied acceptance of mobile-money (m-money) among target populations, i.e. below-poverty-line citizens in India, using the technology acceptance model (TAM). The researcher insights on the acceptance of m-money among poor Indian citizens which is currently a weakly addressed and empirically less explored area of research. This research also provided possible explanations for the significant relationships between the constructs and discussed how this information could be used to enhance the acceptance of m-money among poor Indians.

Kaur (2017) with the secondary data she analyzed the cashless payment system in India. She defined that there are five best cash-less payment systems in India i.e. E-Wallet, UPI, Plastic Money, Net banking and Aadhaar Card. She further suggested that the cashless transition are not only safer than the cash transaction but is less time consuming and not a trouble of carrying and trouble of wear and tear like paper money.

Munjal (2017) in her paper tells about how demonetization effects on businessman, shopkeeper, retailer etc. and with lack of money how consumer pay without cash and digital payment, internet banking. The researcher studied the impact of demonetization on digitalization. She analyzed that most of the transactions are still made in cash. Inadequate digital technology infrastructure, poor internet access, and lack of access to smart phones to large number of people are the major constraints of digital technology.

Balaji & Balaji (2017) attempted to study the demonetization process in India and its impact on cashless transactions. They suggested that proper and complete awareness must be kept by people to keep their debit and credit cards safe and to use the internet banking and the digital wallet in a most secure way. In order to punish the cyber criminals, the properly structured cyber police force with high end forensic labs and technology must be created.

Das & Agarwal (2010) studied the cashless payment system in India. They suggested that the cash payment is an expensive proposition to the government and so the nation must step towards the cashless payment system which reduced the track transactions, currency management cost, eliminates tax avoidance, fraud etc. Moreover, it widens and encourages financial inclusion and integrates the parallel economy to the main stream.

### Objectives of the Study

1. To study impact of demonetization on digitalization.
2. To analyze the change in mode of digital payment before and after demonetization.
3. To analyze the change in use of credit cards and ATM/debit cards before and after demonetization.
4. To investigate the online payment system for purchasing different products.
5. To find the attitude of consumers towards digital payments.

### Hypothesis

1. There is no significant effect on different mode of payment before & after demonetization.
2. There is no significant difference in usage of credit card before and after demonetization.
3. There is no significant difference in use of ATM and debit card before and after demonetization.
4. There is no significant difference in digital payment for purchasing different products before and after demonetization.
5. There is no significant relationship between income, gender and age with consumers' attitude towards digital payments.

### Research Methodology

- The descriptive methodology has been used to collect primary data
- Secondary data has been collected from various published source and various websites.
- Closed Ended Structured Questionnaire was distributed to 220 people including various income groups, age groups of both the Genders from Udaipur, Rajasthan India.
- Non-probability convenience sampling technique has been used to collect data.

### Data Collected

- Primary Data was collected from the people of

Udaipur city. Initially 220 questionnaires were sent and received 207 filed questionnaires and out of which 200 questionnaires were found useful for data analysis.

- Secondary data was collected from the published reports of RBI and websites.

### Analysis & Interpretation

#### On the basis of Secondary Data

**Table 1: Different Modes of Payments (Volume in millions)**

Different Modes	Before Demonetization (Oct 2016)	After Demonetization (Aug 2017)
RTGS	9.01	9.46
NEFT	133.21	151.61
IMPS	42.09	75.66
Mobile Banking	78.12	99.64
Credit Card	89.49	115.99
Debit Card	942.65	981.81
ATM	.62	.66

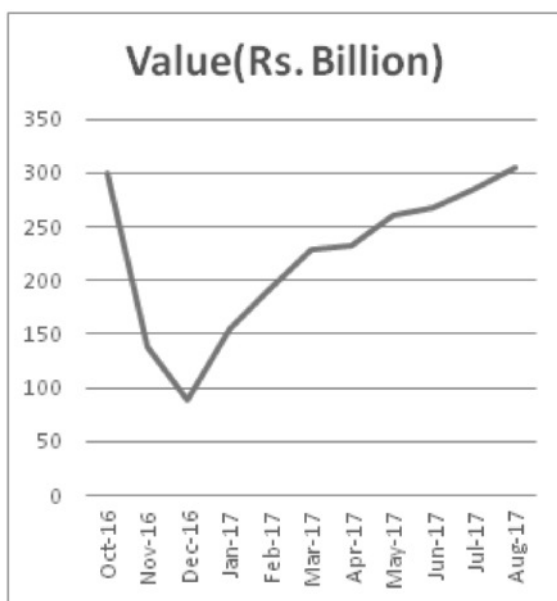
Source: RBI, India macro advisers

From the publish annual report of RBI in September 2017, the usage of different modes of payment has been collected in terms of volume and it is found that RTGS which stood at 9.01 million on October 2016 – grew by 4.99% (9.4 million) by end of August 2017. NEFT has grown 13.81% (133.21 million) in volume terms; IMPS has increased by 79.76% in volumes. As compared to other digital payment

One of the important reasons of demonetization was to transfer India's cash intensive economy to cashless Economy through digital payments method like mobile and internet banking, e-wallet, UPI etc. Now a year has been passed of demonetization, we have analyzed the project of digitalizing payment system of India. The following results are shown in following table.1.

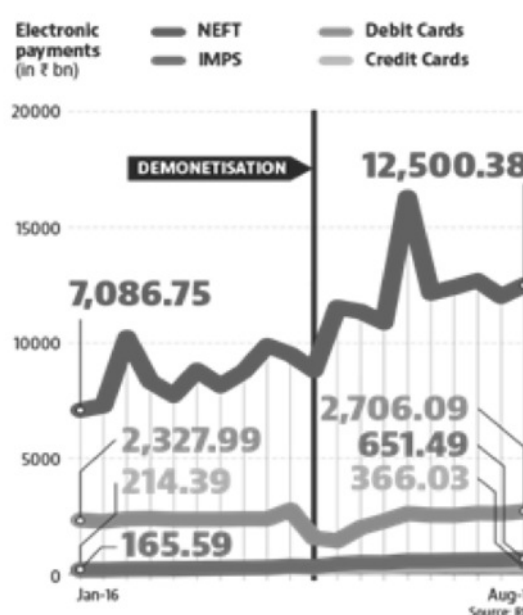
mode, mobile banking transaction grew by 27.55% in volume terms, credit and debit card usage grew by 29.61% and 4.15% respectively and in ATM there was sharp decline in the cash withdrawals in November due to the cash shortage but from November 2016, we see a sharp rise in the amount of cash withdrawal till August 2017 and a much steadier rise since then as shown in fig below:

#### Debit card usage at ATMs



Source: RBI

#### Usage of Electronic payments



Source: RBI

### Hypothesis testing:

H01: There is no significant effect on different mode of

payment before & after demonetization.

**Table 2: t-Test: Paired Two Sample for Means**

Different Modes of payment	N	Mean	SD	T	Df	Result
Different Modes	7	185.027	337.30	-3.48	6	(p<0.05)
Different Modes	7	204.98	346.90			

Table 2 shows the results of t test on different modes of payment used before and after demonetization period. On the analysis of the above result it is found that p value of t test is less than the test of significance at 5%. It, therefore, show the highly significant difference in different mode of payment before & after demonetization.

### On the basis of responses

#### a. Demographic profile of respondents

A brief demographic profile of respondents for this paper is given in the following table.

**Table 3: Demographic profile of respondents**

(A) Gender Wise				
Male		Female		
116 (58%)		84 (42%)		
(B) Age Wise				
Below 20 year	20- 30 years	25-30 years	30- 35 years	35 & above
16 (8%)	44 (22%)	56 (28%)	54 (27%)	30 (15%)
(C ) Income Wise (Monthly)				
Below15000	15000-30000	30000-60000	Above 60000	
34 (17%)	50 (25%)	62 (31%)	54 (27%)	

On the analysis of the above table it is found that out of 200 respondents 58% are male respondents. 28% respondents are of age 25-30 years and 31% respondents are from income group of 30000-60000.

#### a. Respondents attitude towards digitalization

In this paper an attempt has been made to study the attitude towards digitalization before and after demonetization. Tables below show the details:

- Information about use of credit cards before and after demonetization.

**Table 4: Credit Card Usage before & after demonetization**

Before Demonetization			After Demonetization		
Response	N	%	Response	N	%
Yes	80	40	Yes	44	36.67
No	120	60	No	76	63.33
Total	200	100.00	Total	120	100.00

On the analysis of above it is found that out of 200 respondents 40% were using credit card before demonetization and out of 60% non users' respondents 33.67% have started using credit cards after

demonetization.

H02: There is no significant difference in usage of credit card before and after demonetization.

**Table 5: Proportion of respondents using Credit Card before and after demonetization**

Period	Use of Credit Card	Z	Result
Before	40%	3.11	HS
After	62%		

Table 5 shows the results of Z test on credit card usage before and after demonetization period. On the analysis of the above result it is found that p value of Z test is less than the test of significance at 5%. It, therefore, show the highly

significant difference in usage of credit card before and after demonetization.

- Information about use of ATM/Debit Card before and after demonetization

**Table 6: Use of ATM/Debit card before and after demonetization**

Frequency	Before Demonetization		After Demonetization	
	N	%	N	%
Weekly	66	32.98	81	40.66
Monthly	64	31.91	86	42.86
Quarterly	43	21.28	20	9.89
Half Yearly	16	8.51	11	5.49
Yearly	11	5.32	2	1.10
<b>Total</b>	<b>200</b>	<b>100.00</b>	<b>200</b>	<b>100.00</b>

Table 6 shows that 32.98% respondents used ATM cards weekly before demonetization and this proportion increased to 40.66% after demonetization.

H03: There is no significant difference in use of ATM and debit card before and after demonetization.

**Table 7: Test Results – Use of ATM/Debit card before and after demonetization**

Use of ATM/Debit Card	N	Mean	SD	t	Df	Result
Before Demonetization	5	18.80	12.07	0.166	4	NS
After Demonetization	5	18.20	18.31			

Table 7 shows the results of t test on ATM card usage before and after demonetization period. On the analysis of the above result it is found that p value of t test is more than the test of significance at 5%. It, therefore, show that there is no

significant difference in usage of credit card before and after demonetization.

iii. Information about convenience on mode of payment

**Table 8: What is more convenient?**

Mode of Payment	N	%
Cash payment	34	17.00
Digital Payment	60	30.00
Both	106	53.00
<b>Total</b>	<b>200.00</b>	<b>100.00</b>

Analysis of table 8 shows that 53% respondents are convenient in using both types of payment that is cash and digital.

iv. Information on using online payments for purchase before and after demonetization

**Table 9: Digital Payment for purchasing different products before and after demonetization**

Below table shows the use of digital payment on different items by respondents before and after demonetization.

Head	Before Demonetization (%)	After Demonetization (%)
Groceries	10.00	36.00
Holiday / Travel	43.00	63.00
Movie Tickets	56.00	71.00
Utility Bills	32.00	51.00
Cloths and Accessories	29.00	42.00
Staff Salary	24.00	34.00

On the analysis of table 9 it is found that 56% respondents were using digital payments for movie tickets that increased to 71% whereas only 10% respondents were using digital payments for groceries it increased to 36%.

H04: There is no significant difference in online payment for purchasing different products before and after demonetization.

**Table 10: Test Results - Online Payment for purchasing different products before and after demonetization**

Online Payments	N	Mean	SD	T	Df	Result
Before Demonetization	6	32.33	15.83	-7.37	5	HS
After Demonetization	6	49.50	15.00			

Above table shows the result of t test on use of digital payments before and after demonetization period. On the analysis of the above result it is found that p value of t test is less than the test of significance at 5%. It, therefore, show that there is highly significant difference in usage of digital payments before and after demonetization.

### c. Relationship of Income, Gender and Age with

### Customers' attitude towards digital payment

Respondents were given 10 points to check their attitude towards digital payments and to check this relationship with income, gender and age.

H05: There is no significant relationship between income and age with consumers' attitude towards digital payments.

**Table 11: Test Result – Relationship between Income and customers' attitude towards digital payment**

Income	N	Mean	SD	F	Df	Result
Below Rs. 15000	62	3.43	0.30	2.27	3, 196	NS
Rs. 15000 - Rs. 30000	34	3.21	0.30			
Rs. 30000 - Rs. 60000	50	3.34	0.30			
Above Rs. 60000	54	3.32	0.25			

**Table 12: Test Result – Relationship between Age and customers' attitude towards digital payment**

Age	N	Mean	SD	F	Df	Result
<20	16	3.37	0.36	0.41	4, 195	NS
20-30	44	3.35	0.23			
30-40	56	3.36	0.30			
40-50	54	3.28	0.28			
Above 50	30	3.37	0.36			

Above table 11 & 12 shows the result of ANOVA test, it is found that  $F=2.27$ ,  $p>0.05$ ;  $F=0.41$ ,  $p>0.05$  It, therefore, show that there is no significant relationship between

income and age with consumers' attitude towards digital payments.

**Table 13: Test Result – Relationship between Gender and customers' attitude towards digital payment**

Gender	N	Mean	SD	Z	Result
Male	116	3.37	0.29	1.22	NS
Female	84	3.30	0.29		

Above table shows the result of Z test which indicates that there p value is more than level significance at 0.05%. Hence there is no significant relationship between gender and attitude towards digital payment.

### Conclusion

The present study attempted to study the impact on demonetization on digitalization. After analysis of secondary data it was found that the use of digital modes of payments has went through a sudden jump, the use of IMPS has been doubled. The use of debit and credit card has gone through significant increase in the last one year. However India still remains a cash intensive economy, even after demonetization withdrawal from ATM has returned to pre-demonetization level. After analysis of primary data it was found that respondents' attitude after demonetization has increased towards digitalization but it was also found that there is no significant difference in usage of ATM card. Thus it can be concluded that effect of demonetization in long term on Indian economy will increase on digitalization and cash will decrease down the line and this paper gives a clear picture of changing scenario from

swapping of currency to swiping of cards. The study and the analysis of both types of data i.e. (primary and secondary) shows that the attitude of people changed towards online transactions. But for this the Indian Government has to make continuous efforts towards digitalization then only the huge cost of Demonetization could be renewed otherwise it will be such a disappointment if the ratio returns to the pre-demonetization level.

**“ Digital India is an enterprise for India's transformation on a scale that is, perhaps, unmatched in human history.”**

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