



## The critical analysis of cashless transaction

**Dr. Tushar Chaudhari**

Department of Commerce, Seth Kesarimal Porwal College of Arts & Science & Commerce, Kamptee, Nagpur, Maharashtra, India

### Abstract

Indian economy has witness third time demonetization process in year nov. 2006. Ever after demonetization the consequences have been studied and one of the major consequences is of cash less transaction. It was not that cash less transaction was not there in India but no real specific need was felt earlier. The demonetization has urged the need of cashless transaction. But still many people believe that cashless transaction is not possible in India. In this research researcher has tried to examine what the real reasons are for slow growth of cash less transaction popularly known as digital economy and what step can be done in order to improve cash less transaction number.

**Keywords:** cashless transaction, digital economy, technology, black money

### 1. Introduction

In a barter economy one must both someone who wants what one has and has what one wants, while in a monetary economy one only needs to someone who has what one wants. This insight has been used in a spate of recent papers that analyze the transition from a barter economy to a monetary economy. Most of these papers are based on the elegant analytic search model in Kiyotaki and Wright<sup>[1]</sup>. Earlier it was in form of gold and silver then it go translated into copper and bronze and eventually into paper currency. Paper currency has its own advantages and disadvantages. One of the main disadvantages which has emerged is of black money and fake currency. The recent demonetization was a step towards curtailing these disadvantages. One can say that cash less transaction get momentum after the demonetization. Ever since demonetization has took place rapid effort has been made for promotion of cash less transaction. There are various arguments whether it is essential or not, what are the consequences. The digital economy has emerged as an unstoppable giant that's growing at 10 percent a year – more than triple the rate of overall global economic growth. Digital Economy is one of 10 central themes for Budget-2017 for establishing speed, accountability and transparency in the system<sup>[2]</sup>. The government has given direction that no payment in excess of three lakh will be made in cash subject to certain expectation. A Mission will be set up with a target of 2,500 crore digital transactions for 2017-18 through UPI, USSD, Aadhar Pay, IMPS and debit cards. At the end of June 2016, 616 million unique users subscribed to mobile services in India, making it the second largest mobile market in the world<sup>[3]</sup>. The phenomenal global growth in digital payments may be attributed to four factors – (i) digital and technology revolution, (ii) entry of several non banking PSPs into payments space, (iii) customers becoming more demanding and expecting instantaneous and one-touch payment solutions and (iv) progressive changes in the regulatory framework<sup>[4]</sup>. With an installed base of 1.3 million point-of-sale terminals and about 5 percent of personal consumption expenditure incurred digitally. The digital economy has emerged as an unstoppable giant that's growing at 10 percent a year – more than triple the

rate of overall global economic growth<sup>[5]</sup>. The implementation of electronic commerce based on e-cash as the main engine driving global economic activity will determine the future shape of society<sup>[6]</sup>

### 2. Review of literature

The first major use of smartcards was by French banking association Cartes Bancaires who saw advantage of using the technology in reducing fraud. By replacing magnetic striped cards with smart cards fraud rates in France dropped tenfold then<sup>[7]</sup>

Ashish Das, and Rakhi Agarwal, (2010) in their article “Cashless Payment System in India- A Roadmap” Cash as a mode of payment is an expensive proposition for the Government. The country needs to move away from cash-based towards a cashless (electronic) payment system. This will help reduce currency management cost, track transactions, check tax avoidance / fraud etc., enhance financial inclusion and integrate the parallel economy with main stream<sup>[8]</sup>.

Vincent, L. (2005) in the article “Credit cards - Modern payment system”, provided information about credit card functioning in India and settlement and concluded that it is a blessing to both the traders and customers<sup>[9]</sup>.

Jain, P.M (2006) in the article “E-payments and e-banking” opined that epayments will be able to check black money. Taking fullest advantage of technology, quick payments and remittances will ensure optimal use of available funds for banks, financial institutions, business houses and common citizen of India. He also pointed out the need for e-payments and modes of e-payments and communication networks<sup>[10]</sup>.

Reddy, Ramakrishna (2006) in his article “Card products in India”, commented about the reasons for not attaining full growth potential among card products and suggest remedies for growth in this field for the benefit of all players<sup>[11]</sup>.

### 3. Statement of problem

Cashless transaction has been in one form or another in the world. Every economy in the world has adopted it. The proportion might be different. In India it was supposed to high class tool. The after scenario of demonetization has specially

came with atmosphere which is conducive for cash less transaction. The segment of people which were not using cashless transaction was asked to join cash less movement. This is not an easy task. There are some fundamentals and routine issues regarding cash less system. The burden of cash usage on national economies is substantial, representing as much as 1.5% of GDP [12]. As a researcher need was felt to analyses these issues and found some dissuasive solution to encourage it furthermore.

**4. Research Methodology**

**Sample size**

The sample size for the current research is 200. The said sample size is selected by random selection method. The questionnaire were filled from the respondents of Nagpur city.

**Limitations**

The geographical location for current research is Nagpur city.

**Analytical tools**

The analysis of primary data is done by following techniques

- 1) Percentage method
- 2) Chi square test
- 3) Kalmogorov – smirnov test
- 4) ANOVA test.

**Objectives**

- 1) To analyses the demographic profile of respondents used for current research.
- 2) To study the factors which are important for cash less system.
- 3) To suggest the ways for improvement cashless system.

**Hypotheses**

- 1) **H<sub>0</sub>** :- Fear of technology is not the biggest challenge in cashless transaction  
**H<sub>1</sub>**:- Fear of technology is the biggest challenge in cashless transaction.
- 2) **H<sub>0</sub>**:- there is no significant difference between the use of cashless transaction between male and female  
**H<sub>1</sub>**:- there is significant difference between the use of cashless transaction between male and female.
- 3) **H<sub>0</sub>**:- According to various education level people the benefits of cash less transaction are not same  
**H<sub>1</sub>**:- According to various education level people the

benefits of cash less transaction are same

**5. Result and Discussion**

**Table 1**

Particulars	Number of Respondents	Percentage	
Age	Below 25	50	25
	25-35	89	44.5
	35-45	24	12
	Above 45	37	18.5
Sex	Male	151	75.5
	Female	49	24.5
Marital Status	Married	89	44.5
	Unmarried	111	55.5
Educational Qualification	Up to 10 <sup>th</sup>	17	8.5
	Intermediate	102	51
	Graduate	47	23.5
	Post Graduate and other	34	17
Occupation	Business	26	13
	Govt. Employee	21	10.5
	Professional	76	48
	Students	57	28.5
	Others	20	
Monthly income	Below 25,000	36	18
	25,001-50,000	45	22.5
	50,000- 1,00,000	100	50
	Above 1,00,000	19	9.5

Source: Primary data collection

The first and foremost question which was asked in the questionnaire formed for this research purpose is whether respondents were aware about the concept of cash less transaction out of total respondents 90% of respondents confirmed that they are aware about the aforesaid concept. After that next question asked was from where respondents have heard about cash less transaction, in this case 50 % respondents stated that they have heard from news channel specially after demonetization effect. Moreover 63% of respondents have used cashless transaction in one form of another.

**Testing of hypotheses**

Fear of technology is not biggest challenge in cashless transaction

**Table 2**

Particular	Strongly agree	agree	Neutral	Disagree	Strongly disagree
Fear of technology	05	15	20	20	140

Source: primary data

**Kalmogorov – smirnov test**

**Table 3**

Nature of response	Observed response	Response proportion	Cumulative proportion	Null proportion	Null proportion	C
Strongly agree	05	0.025	0.025	0.20	0.20	-19.975
Agree	15	0.075	0.1	0.20	0.40	-0.30
Neutral	20	0.1	0.2	0.20	0.60	-0.40
Disagree	20	0.1	0.7	0.20	0.80	-0.10
Strongly disagree	140	0.70	1.00	0.20	1.00	-0.30

Critical Value = 0.0707

From the above table it is clear that the value of D comes 0.50 which is greater than critical value. Hence we reject the null hypotheses that Fear of technology is not biggest challenge in cashless transaction.

**Ho:** There is no significant difference between the use of cashless transaction between male and female

**Table 4**

Gender	Cheque	Demand draft	On line transfer	Credit or debit card	E wallet mobile	UPI apps & other	Total
Male	61	25	11	34	19	01	151
Female	11	09	08	10	11	00	49

Source: primary Data

Calculation of Chi square test

**Table 5**

Gender	Cheque	Demand draft	Online transfer	Credit or debit card	E wallet, mobile	Upi apps and other	Total
Male	61 54.36 (0.81)	25 25.67 (0.02)	11 14.35 (0.78)	34 33.22 (0.02)	19 22.65 (0.59)	1 0.76 (0.08)	151
Female	11 17.64 (2.50)	9 8.33 (0.05)	8 4.66 (2.40)	10 10.78 (0.06)	11 7.35 (1.81)	0 0.24 (0.24)	49
	72	34	19	44	30	1	200

$$\chi^2 = 9.366, df = 5, \chi^2/df = 1.87,$$

The value of chi square is 9.366 and table value is 12.59. Since the calculated value is less than is less than table value hence the hypotheses is accepted.

**Ho:** According to all education level people the benefits of cash less transaction are not same.

**Table 6**

Source	df	SS	MS	F	P-value
Treatments	1	2969.697	2969.697	5.9197	0.2413
Error	13	6521.636	501.664		
Total	14	9491.333			

On calculating ANOVA it shows that table value for d.f. (1, 13),  $f_{0.05}$  is 4.67 Comparing the calculated value of F with the table value, we find  $5.9197 > 4.67$ . Hence there is significance. Hence the null hypothesis is rejected. Hence null hypotheses that According to all education level people the benefits of cash less transaction are not same is rejected.

**6. Recommendations**

1. Cash less transaction are not possible without internet, hence government must investigate in infrastructure availing internet. Specially free wifi zones should be made available at local market
2. All the major banks must have separate counter which will be specifically used for assistance in cash less transaction.
3. Extra charges on Cash less transaction must be stopped.
4. It should be made mandatory to all cooperative societies to make Cash less transaction specially cheque or demand draft.
5. Some meaningful privileges must be given to the people who are using Cash less transaction.
6. The vast advertisement campaign must be launched which will not only promote Cash less transaction but also will provide valuable help in using it.
7. Majority of respondents were not too sure whether black money will yield due to demonetization hence effort must be made to investigate black money in foreign, gold and real estate.

8. Special cash incentive plan must launch to consumers as well as businessmen for using Cash less transaction. This plan can be based on percentage of cash less transaction in their total transaction.
9. Government must manufacture POS machine under Make in India so that revenue can be generated.
10. Government must officially disclose all information of demonetization so as to gain information to common man as to what will be more advantages if Cash less transactions are being utilized.

**7. References**

1. Kiyotaki, Nobuhiro, Randall Wright. *A Search-Theoretic Approach to Monetary Economics*. American Economic Review. 1993; 83:63-77.
2. John Horvath. *The Cashless Society*. 1997, 1. <http://www.heise.de/tp/artikel/6/6093/1.html> posted on 13.11.1997
3. [http://cashlessindia.gov.in/Union\\_Budget\\_\(2017-18\).html](http://cashlessindia.gov.in/Union_Budget_(2017-18).html) dated 25<sup>th</sup> feb 2017.
4. *The Mobile Economy India*. 2016, 2.
5. Committee on Digital Payments, Ministry of Finance, Government of India. 2016, 19.
6. John Horvath. *The Cashless Society*. 1997, 1. <http://www.heise.de/tp/artikel/6/6093/1.html> posted on 13.11.1997
7. Flohr U. *The smartcard invasion*. Byte. 1998.
8. *The digital economy has emerged as an unstoppable giant that’s growing at 10 percent a year – more than triple the rate of overall global economic growth*. 2016, 5.
9. Vincent L. *Credit Cards - Modern Payment System*. Review of Social Sciences. 2005; 6(1):71-76.
10. Jain PM. *E-payments and E- Banking*. Indian Banker. 2006, 108-113.
11. Reddy Ramakrishna. *Card Products in India*, Indian Banker. 2006, 133-134.
12. Tufts University, Fletcher School and Steinbeis University Research Center for Financial Services studies. 2013.