A leap towards Cashless India: An Empirical Study of Consumer Perceptibility

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1. Introduction

A cashless economy is one in which all the transactions are done using cards or digital means. The circulation of physical currency is minimal. Globally, there is a tremendous interest among policy makers, academicians, and commercial enterprises to explore the possibilities of moving towards a cashless economy. It is widely believed that the movement from cash to cashless economy has significant benefits. It will enhance in Financial Inclusion which will automatically reduce poverty, increase in tax net would result in greater revenue, and it would bring down the logistics and cost involved in printing, managing and moving money around. Digital transactions bring in better transparency, scalability and accountability. The economy of most developing countries is cash driven; meaning that monetary transactions are basically made through the exchange of bank notes and coins for goods and services. However, this trend is now giving way to a modern and sophisticated payment system where the currency and notes are converted to data, which are in turn transmitted through the telephone lines and satellite transponders. This is as a result of rapid technological progress and development in the financial market.

Indian economy is primarily to be driven by the use of cash and less than 5% of all payments happen electronically. This is largely due to the lack of access to the formal banking system for a large part of the population and as well as cash being the only means available for many. Large and small transactions continue to be carried out via cash. Even those who can use electronic payments, use cash. India's cash to GDP ratio an indicator of the amount of cash used in the economy -- is around 12 to 13 per cent, much higher than major economies including the US, the UK and Euro area but below that of Japan (about 18 per cent).

On 8th November the Government of India had announced that all Rs. 500 and Rs. 1000 notes are no more legal tender. The move taken by Government had cherished as well as assessed by the populaces. At the same time, the government also initiated a big promotion to create a cashless economy, quoting this as one of the main intentions of demonetization and bringing all transactions under tax scrutiny and making shift to cashless transactions. The path to any new behavior is always apprehensive with many obstacles that one needs to tackle.

2. Literature Review:

Adoeti, (2013) Economies that are developing should be keen to move from cash based economies to cashless society since it is cheap, safe and convenient for customers especially those that are information technology savvy.

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 mainstream.
plastic money it becomes possible that control the money 
laundering and effective utilization of financial system would 
become possible which would also helpful for tax legislation.\textsuperscript{vii}

3. Statement of the Problem:

Financial inclusion is one of the foremost policy challenges 
facing India today. In June 2016, for instance, a circular from 
the government stated that 40% of the Indians are “outside the 
ambit of formal banking institutions”. While the Pradhan 
Mantri Jan Dhan Yojana (PMJDY) has been credited with 
halving the number of the unbanked from 557 million in 2011 to 
– claims that over 165 million Indians still do not possess bank 
accounts.\textsuperscript{viii}

But the problem that this ambitious venture faces, among 
others, is the problem posed by the cash-dependent informal 
economy. Consider this: 92% of the Indian economy is made up 
of informal workers, who contribute around 50% of the GDP; 
80-90% of these workers are paid in cash which are often 
declared assets.\textsuperscript{x}

In a developing economy like India, where 40 percent of 
the population is excluded from the formal financial system, 
where the penetration of alternative mediums of exchange is 
limited, cash plays a crucial role as a medium of exchange. It is 
often observed that even among those who regularly engage 
with the formal financial system, use of cash as a medium of 
exchange dominates over the use of alternative forms of 
exchange such as plastic money and internet banking. While 
transactions of higher value may be routed through the banking 
system, those undertaken on a daily basis are to a large extent 
carried out through cash. Cashless economy is an economic 
system in which transactions are not done predominantly in 
exchange for actual cash.

Now in the time, when we have the cashless transactions 
flowing, are the cash dependent masses readily accepting the 
change of the modes of transaction; from cash to cashless? 
And to know this very phenomenon, we have taken into 
account the study, which collects the perception of the people 
towards the changing modes of transaction.

4. Objectives:

1. To assess the usage of cashless transaction 
   depending on demographics.
2. To know the preference of cashless modes of 
   transaction.
3. To find out the opinion of the respondents regarding 
   the various problems in using cashless modes of 
   transactions.
4. To give valuable suggestions to improve awareness 
   and satisfaction about cashless services.

5. Hypothesis:

$H_{01}$: There is no significant relationship between gender of the 
respondents and cashless usage.
$H_{02}$: There is no significant relationship between age of the 
respondents and cashless usage.
$H_{03}$: There is no significant relationship between education of the 
respondents and cashless usage.
$H_{04}$: There is no significant relationship between occupation of the 
respondents and cashless usage.

6. Data base and Methodology:

The study was conducted in Dhaurra Mafi town, Aligarh 
District, Uttar Pradesh, having a population of 13,241. Literacy 
rate of Dhaurra Mafi is 77.77%, which is higher than the state 
average of 67.68%. x The study was to cover people’s 
perception of the cashless transaction and to assess the usage 
of it. Data for this analysis was collected from primary as well 
as secondary sources. The sampling chosen, consisted of 122 
sample respondents. The type of sampling used is random 
purpose sampling. The data was collected during the months, 
between March to April, 2017. The data collected was analysed 
with the help of statistical measures; simple percentage 
analysis, averages and the Pearson’s Chi-square test for 
independence has been used to test the hypotheses. 
Secondary data has been collected from journals, reports, 
newspaper and internet.

7. Analysis and Result:

Table 1: Demographic Profile of the Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>76</td>
<td>37.7</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
<td>62.3</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 25</td>
<td>29</td>
<td>23.8</td>
</tr>
<tr>
<td>25-35</td>
<td>63</td>
<td>51.6</td>
</tr>
<tr>
<td>35-45</td>
<td>11</td>
<td>9.0</td>
</tr>
<tr>
<td>45-55</td>
<td>12</td>
<td>9.8</td>
</tr>
<tr>
<td>Above 55</td>
<td>07</td>
<td>05.7</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below High School</td>
<td>15</td>
<td>12.3</td>
</tr>
<tr>
<td>High School</td>
<td>04</td>
<td>03.3</td>
</tr>
<tr>
<td>Intermediate</td>
<td>10</td>
<td>08.2</td>
</tr>
<tr>
<td>Graduate</td>
<td>25</td>
<td>20.5</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>59</td>
<td>48.4</td>
</tr>
<tr>
<td>Doctorate</td>
<td>09</td>
<td>07.4</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>39</td>
<td>32.0</td>
</tr>
<tr>
<td>Business</td>
<td>14</td>
<td>11.5</td>
</tr>
<tr>
<td>Self Employed</td>
<td>08</td>
<td>06.6</td>
</tr>
<tr>
<td>House Wife</td>
<td>08</td>
<td>06.6</td>
</tr>
<tr>
<td>Student</td>
<td>53.</td>
<td>43.4</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 20,000</td>
<td>61</td>
<td>50.0</td>
</tr>
<tr>
<td>20,000-40,000</td>
<td>38</td>
<td>31.1</td>
</tr>
<tr>
<td>40,000-60,000</td>
<td>10</td>
<td>08.2</td>
</tr>
<tr>
<td>Above 60,000</td>
<td>13</td>
<td>10.7</td>
</tr>
</tbody>
</table>

Table 2: Usage of Cashless mode of transactions

<table>
<thead>
<tr>
<th>Cashless Usage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>102</td>
<td>83.6</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>16.4</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 shows that among 122 respondents, 83.6 per cent 
use cashless modes of transaction.
Table 3: Result of Pearson Chi-Square testing

<table>
<thead>
<tr>
<th>Variable tested</th>
<th>Pearson Chi-Square Value</th>
<th>Degree of Freedom</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender X Cashless usage</td>
<td>1.644</td>
<td>1</td>
<td>.200</td>
</tr>
<tr>
<td>Age X Cashless usage</td>
<td>22.456</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>Education X Cashless usage</td>
<td>26.918</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>Occupation X Cashless usage</td>
<td>15.466</td>
<td>4</td>
<td>.004</td>
</tr>
<tr>
<td>Income X Cashless usage</td>
<td>6.733</td>
<td>3</td>
<td>.081</td>
</tr>
</tbody>
</table>

Table 3:

H₀₁: There is no significant relationship between gender of the respondents and cashless usage.

The Pearson Chi-Square result is .200 which is greater than 0.05 (5%). So the null hypothesis cannot be rejected at 5 per cent significance level, which means that there is no significant relationship between the gender and usage of cashless transactions. The cashless modes of transaction are used irrespective of gender.

H₀₂: There is no significant relationship between age of the respondents and cashless usage.

The result is $X^2 = 2.456$, df = 4, P = 0.000, which means that there is relationship between the age and cashless usage. So the null hypothesis cannot be accepted at 5% significance level. The age group of 25 to 35 has an expected count less than that of the actual count, which means they are more likely to engage in cashless mode of transaction.

H₀₃: There is no significant relationship between education of the respondents and cashless usage.

The result $X^2 = 26.918$, df = 5, P = 0.000, so the null hypothesis cannot be accepted because the p < 0.05. It means that there is significant relationship between the education of the respondents and cashless usage. The graduates and post graduates have an expected count less than that of the actual count, which means they are more likely to engage in cashless mode of transaction.

H₀₄: There is no significant relationship between occupation of the respondents and cashless usage.

The result $X^2 = 15.466$, df = 4, P = 0.004, it means that p < 0.05 the test is significant, which means there is a significant relationship between occupation and cashless usage. The service men, businessmen and students have an actual count more than that of the expected count, which means they are more likely to engage in cashless mode of transaction.

H₀₅: There is no significant relationship between income of the respondents and cashless usage.

The result $X^2 = 6.733$, df = 3, P = 0.081, p > 0.05, it means the test is not significant and there is not significant relationship between income and cashless usage. Whereas income group of above Rs. 20,000, is more likely to engage in cashless usage.

Figure 1: Shows that 95.5 per cent respondents use Plastic cards (i.e. ATM, Credit and Debit Cards), while UPI Apps and USSD modes of transaction are less used; 5.5 percent and 2.7 per cent respectively. This is because, respondents are not aware of these facilities which are also available. The mobile and internet banking were used by 30 per cent and 34.5 per cent respectively. The e-wallets trend in the recent past has increased as per the responses recorded; the e-wallet providers offer cash backs to promote the cashless transactions.
Figure 2: The difficulties in using the cashless modes of transactions are, as deemed by 47.5 percent respondents is the inadequate technological infrastructure and inadequate internet facility. Although 59 per cent respondents felt that there may be security threats in using the cashless transactions. Among the important factors education plays a very vital role in the promotion of the cashless transactions, but due to the lack of education, 40.2 percent respondents felt that they face difficulty in using cashless mode of transaction. The inability to provide viable servers and payment gateways reduce the preference of cashless transactions, which amounts to 37.7 percent respondents. Transaction failures are the negative role players in the preference of the cashless modes of transactions, a total of 52.5 percent respondents felt this as a difficulty that discourages the cashless transactions.

Figure 3: Despite knowing about the different modes of transactions, the most preferred type among the respondents was cash, amounting to a massive 74.6 percent. Least preferred modes were USSD and UPI apps, 59.8 percent and 47.5 percent respectively. The reason for the least preferred type is the same as mentioned in the discussion of Figure 1.
The second most preferred mode was the banking cards, which volumes to 43.4 percent of the respondents. There has been a mixed response to the modes of e-wallets, mobile banking and internet banking, but among these three modes the preferred mode was e-wallets.

The preference given to the cash transactions is because of the tangibility of the rupee notes, which psychologically strengthens the belief system, and in turn strengthens the belief in the mode of the transaction. The thing which we possess in our hands is deemed to be truth in absolute. The non-visibility of the transactional amount doesn’t give us the strength which we have when possessing the tangible rupee notes.

Further, a study conducted in Ernakulam district of Kerala, found that more than 90 percent population has not carried out cashless transaction in their lifetime. Only 1.6 percent of the population has been making such transactions. And ironically, Ernakulam is the first district in the country to achieve universal literacy, and is India’s first financially inclusive district.

Another sample survey conducted in 2014 across the urban and rural neighborhoods in Delhi and Meerut, shows that despite being keenly aware of the costs associated with transacting in cash, most consumers see three main benefits of cash viz., freedom of negotiation, faster settlements, and ensuring exact payments.

8. Suggestion and Conclusion:

The study found out that age, education and occupation play a significant role in preference of cashless transactions, while gender and income has no effect over the preferences. And while cashless transactions are done, the most used is plastic cards.

Security threats while doing the cashless transactions is the main hindrance in the promotion of a cashless economy. While inadequate technological infrastructure and inadequate internet facility along with transactional failure, plays a part in preventing the mass usage of cashless transactions. Security and Data protection should be very vigilant for digital transactions and development of tools to ensure a safe gateway that promises every citizen a harmless transaction would be very laudable.

The access to the internet facility is must in near cashless economy, while there seems to be a very little of the usage of internet banking and mobile banking, which are done through internet, the government may take up a step in this regard as to promote the internet access.

While the government continues to propagate the vision of cashless and digital India this seems like a far off fantasy for the majority of people who live in rural societies and are engaged in cash dependent informal sector of economy. Complete cashless economy is impossible; however a near cashless economy is possible. Most of the people are uneducated and they don’t know the basics of using cashless modes of transactions and there seems to be a chance of being cheated.

Instead of forced digitalization the government may fix targets for promotion like 10 percent in 2018 and 20 percent in 2020. Lack of awareness and consumer confidence in digital payments is a gap that needs to be addressed while ensuring the pace doesn’t prove to be deemed as a forced regulation.

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