IDENTIFYING THE MOST PREFERRED DIGITAL PAYMENT
OPTION OF CONSUMERS OF VALSAD CITY

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ABSTRACT

On 8th November 2016, radical governance cum social engineering measure called Demonetization was enacted in India. Two major denomination notes, Rs. 1000 and Rs. 500 comprising around 86% of total currencies in India, were demonetized with immediate effect. Restrictions were placed on the convertibility of domestic money and bank deposits, hence consumers were forced to adopt digital payment option instead of cash payment. This led to opening new era of digital currencies in India. Many digital payment apps took advantage of new opportunities and made huge profits. This research work was done to identify the most preferred digital payment option rural consumers. 100 respondents were surveyed through structured questionnaire with convenient sampling method. The research was intended to identify the impact of demographical factors on the selection of digital payment options. The result suggested that BHIM (UPI) application took the first place, second was secured by debit card and third was free charge.

INTRODUCTION

Demonetization is a term which became very popular after 8 November 2016 in India. Earlier, demonetization was done in 1946 and 1978 which was not much successful as compared to latest one in 2016. Two largest currencies, Rs.1000 and Rs.500 were demonetized and ceased to be legal tender with immediate effect. The prime reason behind successful demonetization was currencies in circulation in the economy, around 86% of total currencies in India were in the form of Rs. 1000 and Rs.500. Demonetization was not a sudden move by government, it was planned well in advance. The aim of demonetization was to curb corruptions, counterfeiting currency notes, to stop the usage of funding terrorist activities in major currencies and accumulation of black money. Many steps were taken by govt. i.e. development of Special Investigation Team, (SIT) in 2014 under former supreme court justice M.B.Shah, the Benami Transaction Act 2015, The Black Money Act 2015, besides that govt. also sign information exchange agreement with Switzerland, changes in the tax treaties with Mauritius and Cyprus and Income Disclosure Scheme. India has 7 taxpayers for every 100 voters ranking us 13th amongst 18 of our democratic G-20 peers.
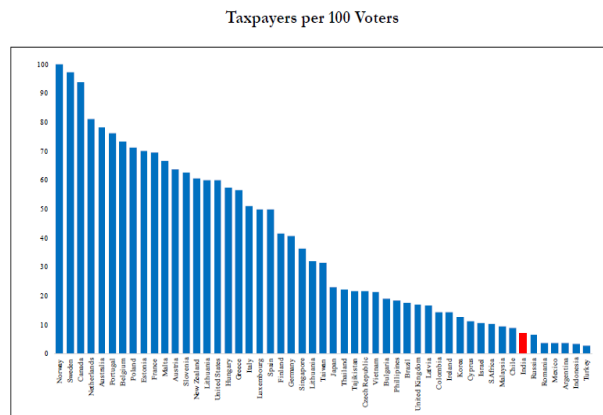
Taxpayers per 100 Voters

Figure 1

Source- Economic Survey 2016-17

Before demonetization India Trades More Than China, as of 2011, India's openness - measured as the ratio of trade in goods and services to GDP has far overtaken China's, a country famed for using trade as an engine of growth. (Figure no 2 and 3)
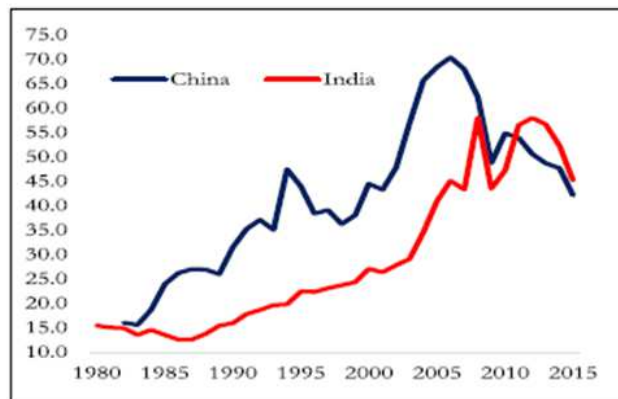
Trade (as percent of GDP)
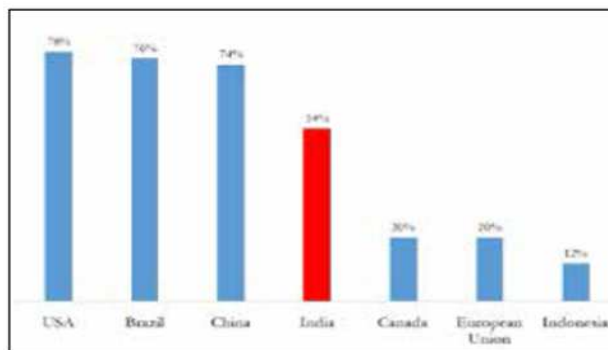

Figure 2

Internal Trade (as percent of GDP)

Figure 3

Source – Economic Survey 2016-17 Vol.1

However, the pertaining question was what after the demonetization? There were no cash available with the consumer to spend on goods and services, Banks and ATMs were out of cash, economic activities were suspended, toll taxes on national highways were closed for few days, long queues outside of banks and ATMs in order to exchange old currency notes and withdraw money, respectively.

Review of Literature

Abrazhevich, 2004 mentioned that as there are large numbers of transactions taking place online; e-commerce will become dominant over the traditional methods.

As per Mallat (2007) there are several factors which affect the adaptation of digital payment method by the consumer. These are the factors which significantly affect the consumer's choice regarding adaptation of digital payment modes either favorably or unfavorably.

Paul and Friday (2012) mentioned in their study that a facility where all the goods and services are transacted in without cash, known as cashless transaction.

The popularity of the debit cards is constantly rising and currently debit cards the most popular non-cash payments instrument globally (Capgemini and RBS, 2013).

Over the years, various studies have documented how countries could benefit moving from cash to digital payments. According to a 2016 Moody's Analytics study, card usage added USD 296 billion to global consumption, equivalent to accumulative increase of 0.1 percent in global GDP and to the creation of about 13 million jobs between 2011 and 2015. Even with activation rates in single digits for India's over 660 million debit cards, their use added about 1.6 million jobs, and USD 6.1 billion (INR 41,053 crores) to the country's GDP during this period.

Hasan et al. (2012) studied the basic relationship between digital retail payment and overall growth and development of economy from 1995 to 2009 across 27 European countries, their study suggested that transmission from traditional payment option to digital payment option will lead to overall economic growth, consumption and trades, however they mentioned that there is low positive correlation ship between payment using debit card, credit card, fund transfer and cheques on the economy.

Oyewole et al. (2013) found positive relationship between adoption of electronic payment by the consumers and growth of economy. There are many advantages of adoption of digital payment system i.e. hassle free transaction, conveniences, fast access, safety etc. And most importantly it reduces corruptions and black money transactions; it develops efficient and transparent functioning of system.

Aigbe and Akpojaro, 2014 stated that though there are large numbers of transactions are taking place in e-commerce, its growth and development depends upon the most important factor that is safety and security of transaction.

Doan (2014) explained that 'Mobile wallet is formed when your Smartphone functions as a leather wallet: it can have digital coupons, digital money (transactions), digital cards, and digital receipts'.

Karp (2015) suggested that the major issue faced by mobile payment system is the rising rate of cyber crime.

Installation of malware in mobile of customer lead higher risk of theft financial data i.e. password, credit card number, debit card number etc. from mobile application of online stores.

According to Pricewaterhouse Cooper (2015) India has very high proportion of consumer transaction carried out in cash, relative to other countries, as per its estimation around 68 percent of total transaction value and 98 percent by volume were in cash. (figure no 4) As per Watal committee (2016), cash accounts for around 78 percent of all consumer payment in India.
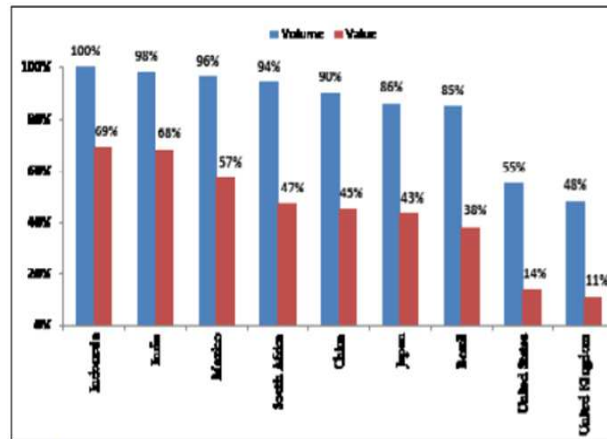
Source: PricewaterhouseCoopers 2015

Figure 4

Under the flagship of govt. *JAM* – Jan Dhan, Aadhar and Mobile, National Payment Corporation of India (NPCI) successfully launched Unified Payment Interface (UPI) platform. Furthermore reforms in FDI were implemented to attract FDI and to become one of the largest FDI recipient. Digital payment options like, BHIM, Internet banking, Debit card, credit cards, free charge, google wallets, pay u money, SBI buddy, HDFC Chillr, ICICI Pockets, Visa and Rupay card grew much faster pace than earlier.

Bharat Interface for Money (BHIM) was launched by govt. of India based on new Unified Payment Interface (UPI), as of 10th Jan. 2017; there had been around 10 million downloads and over 1 million transactions. New version of BHIM USSD 2.0 allows 350 million feature phone users to take advantages of UPI.

Govt. also launched Aadhar Merchant Pay which was aimed at 350 million people who do not have access to phones. In AMP, payment can be made by just using biometric identification requiring Aadhar and Bank account only. As per RBI survey data indicates that during December 2016 RuPay and other wallets are accounted for 95 billion in transaction and UPI only 7 billion as compare to 314 billion for debit card (excluding RuPay and ATMs) and 270 billion for credit cards.

RESEARCH METHODOLOGY

Research Objective

- To identify most preferred cashless payment mode by consumers of Valsad district.

- To measure the impact of demographical factors on selection of digital payment option.

   Sample Determination: 100 individual customers

Location: Rural region of Valsad District located in Gujarat.

Data Collection Methods

Primary Data: It was collected through personal interview of various respondents and asking questions related to research study for identifying most preferred digital payment mode.

Secondary Data: It is collected using previous research study on similar topics and other websites.

Data Collection Tool: Structured questionnaire with dichotomous set of questions.

Sampling Method: Convenient sampling method

Reliability Analysis: Reliability analysis was done by Cronbach's alpha. It is the most common tool used to measure internal consistency. Cronbach's alpha was found at. 798 which indicates questionnaire has a good consistency. Reliability coefficient more than.70 is considered acceptable.

Null Hypothesis

H1: There is no significant impact of Age, Gender, Marital Status, Education and Income on the preference of the digital payment option by investors of investors.

H2: There is no significant difference on the selection of digital payment options.

Table 1: Data Analysis & Interpretation (Anova Table)

Variables	PayTm	Freecharge	Googlewallet	Payumoney	BHIMApp	SBI Buddy	HDFC chillr	ICICI pocket	Debit card	Credit card	Net banking
Age	.082	.130	.056	.913	.119	.082	.130	.056	.913	.701	.347
H0	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Impact	significant	significant	Significant	significant	Significant	significant	significant	significant	significant	significant	significant
Gender	.786	.450	.386	.688	.878	.786	.450	.386	.688	.764	.850
H0	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Impact	significant	significant	Significant	significant	Significant	significant	significant	significant	significant	significant	significant
Marital Status	.242	.612	.733	.075	.256	.242	.612	.733	.075	.017	.002
H0	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Accepted	Accepted
Impact	significant	significant	Significant	significant	Significant	significant	significant	significant	significant	Insignificant	significant
Education	.257	.446	.771	.571	.609	.257	.446	.771	.571	.381	.991
H0	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected	Rejected
Impact	significant	significant	Significant	significant	Significant	significant	significant	significant	significant	significant	significant
Occupation	.000	.129	.148	.027	.000	.000	.129	.148	.027	.892	.008
H0	Accepted	Rejected	Rejected	Accepted	Accepted	Accepted	Rejected	Rejected	Accepted	Rejected	Accepted
Impact	Insignificant	significant	Significant	Insignificant	Insignificant	Insignificant	significant	significant	Insignificant	significant	Insignificant
Income	.049	.848	.728	.483	.091	.049	.848	.728	.483	.358	.074
H0	Accepted	Rejected	Rejected	Rejected	Rejected	Accepted	Rejected	Rejected	Rejected	Rejected	Rejected
Impact	Insignificant	significant	Significant	significant	Significant	Insignificant	significant	significant	significant	significant	significant

Table 1 suggest that age, gender, education has significant impact on choice of all digital payment options i.e. PayTm, Freerecharge, Google wallet, Pay U money, BHIM, SBI buddy, HDFC chillr, ICICI pocket, Debit card, Net banking etc. In the same way marital status has significant impact on for all digital payment options except credit card. High variability was found on income and occupation on selection of digital payment options. i.e. significant impact of Occupation on free recharge, google wallet, HDFC chillr, ICICI pocket, Credit card and insignificant impact on paytm, pay u money, BHIM App, SBI buddy, debit card and net banking facilities. On the other hand income has significant impact on selection for free recharge, Google wallet, BHIM, HDFC chillr, ICICI pocket, debit card, credit card and net banking while insignificant impact on paytm and SBI buddy.

Findings

Research was conducted to identify the impact of demographical factors like age, gender, education, marital status, occupation and income. 100 respondents were surveyed and analyzed in Valsad city. Analysis of variance (ANNOVA) was performed to identify the variability in the responses. Most preferred digital payment option was calculated on the basis on mean weighted which has given following result they are ranked according to their highest weights.

Table 2

Digital Payment Options	Mean	Rank
BHIM_App	4.42	1
Net banking	4.42	2
Pay_u_money	4.03	3
Debit card	4.03	4
Freecharge	3.71	5
HDFC chillr	3.71	6
Google_wallet	3.65	7
ICICI pocket	3.65	8
Credit card	3.65	9
PayTm	3.21	10
SBI Buddy	3.21	11

CONCLUSIONS

The research indicated that BHIM/UPI app was most preferred digital payment option of consumer of Valsad city, followed by debit card and free charge. Bharat Interface for Money (BHIM) was launched by govt. of India based on new Unified Payment Interface (UPI), as on 10th Jan. 2017; there had been around 10 million downloads and over 1 million transactions. New version of BHIM USSD 2.0 allows 350 million feature phone users to take advantages of UPI. (Economic survey 2016-17 Vol.1)

REFERENCES

1. *Abrazhevich, Dennis, 2004. Electronic Payment Systems: a User-Centered Perspective and Interaction Design.*

2. *Aigbe, Princewill and Akpojaro, Jackson, 2014. Analysis of Security Issues in Electronic Payment Systems.*

3. *Capgemini and The Royal Bank of Scotland (RBS) (2013), World Payments Report 2013, Capgemini and The Royal Bank of Scotland.*

4. *Doan, Ngoc, 2014. Consumer adoption in Mobile Wallet. The Turku University of Applied Sciences.*

5. *Economic survey 2016-17 Vol. No.1*

6. *Hasan I, De RT, Schmiedel H (2012), ―Retail Payments and Economic Growth, Bank Finland Research., pp 1–37.*

7. *http://www.finmin.nic.in/reports/watal_report271216.pdf*

8. *Karp, Nathaniel, 2015. Biometrics: The Future of Mobile Payments. U.S. Economic Watch, BBVA Research.*

9. *Mallat, Niina, 2007. Exploring Consumer Adoption of Mobile Payments – A Qualitative Study. Helsinki Institute*

of Economics.

10. *Savadam Balaji & H. Khan, Demonetization and Improving Security in Money Transactions using Smart Cards and GSM Technologies, International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJECIERD), Volume 7, Issue 1, January-February 2017, pp. 1-8*

11. *Moody's analytical report on " The impact of electronic payments on economic growth, Feb. 2016, (https://usa.visa.com/dam/VCOM/download/visa-everywhere/global-impact/impact-of-electronic-payments-on-economic-growth.pdf)*

12. *Oyewole OS, J.G. El-Maude, M. Abba and ME Onuh (2013), ―Electronic Payment System and Economic Growth: A Review of Transition to Cashless Economy in Nigeria‖, International Journal of Science, Engineering, Technology, Vol. 2, pp. 913–918.*

13. *Paul A and O Friday (2012), ―Nigeria's Cashless Economy: The Imperatives‖, International Journal of Managing Business Studies, Vol. 2, pp. 31–36.*

14. *PricewaterhouseCoopers India (2015), "Disrupting cash: Accelerating electronic payments in India" Vol. 2, pp. 913–918.*