

# A Study of E-banking in India: Trends of Popularity



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## **ACKNOWLEDGEMENT**

While doing this research, many People gave us various suggestions and opinions while conducting the project. We have tried to incorporate all those suggestions which are really relevant in preparing our final report. We think it is essential to thank all those who have contributed and helped us throughout the project.

We pay our immense gratitude to Rajatjoshi and Mrs. Mukulikathatte for their continuous and deliberate discussion on the topic and indeterminable burden taken by them in helping us throughout conducting the project. We would also like to thank our friends who rendered their wholehearted co-operation in the successful completion of the project work.

Finally, we are thankful to all the people who willingly responded to the questionnaire and their contribution has been valuable. This project would not have been completed without their participation.

## ABSTRACT

**Today, India is fastest developing country in the world and after demonitisation in 2016, there is surge in E-banking sector of India. E-banking is now a key component of today's digitalised world. In this study, we collected data about past of E-banking in India, analysed present situation of E-banking in India by taking surveys and tried to predict the future of E-banking sector in India.**

**In this study, we studied 7 different factors related to E-banking in India, which are as follows**

- 1. Different modes of transaction**
- 2. No. Of users**
- 3. Technological advancements in E, banking**
- 4. Net amount of transactions in E. banking**
- 5. Government policies**
- 6. Awareness in public**
- 7. Use of different services offered by E-banking**

**We then conducted a survey in Pune city and outskirts to get the required data after which we analyzed it and tried to determine the possible future. In the survey we had asked various questions like their preferred mode of banking, No of transactions per week done by them.**

**Then we analyzed the data collected from survey and RBI, and find out some conclusions using the analysis we tried to predict the future in two phases.**

## **INDEX**

1. Introduction
2. System web
3. Survey introduction
4. Survey data analysis
5. SWOT analysis
6. Predicted future-introduction
7. Data analysis and future predictions
8. Predicted future-phase I&II
9. Desirable future-phase I&II
10. Action plans
11. Conclusion
12. References

## CHAPTER-1

### INTRODUCTION

#### ➤ *Why We Chose this Topic?*

We all were interested in studying the economy of India and other countries. We discussed various topics such as demonetization, G6etc., but then understanding the importance of banks in the lifeline of Indian economy we chose E-banking as our topic for futurology project. When we came across various factors affecting physical as well as E-banking, we decided to finalize our topic. First we listed various factors related to our topic and segregated them based on various categories such as Age, Educational qualification etc. After studying about it ,we understood various factors affecting the E-banking in India and we chose the topics we would like to work on.

#### ➤ *Overall Structure of the Project*

As mentioned earlier we choose 7 main categories to segregate our data. Those factors were,

1) Mode of transactions for e.g..Cash, Cards, Internet banking etc.

In our subject mode of transactions plays a vital role and for the same reason we have considered this factor. We have mainly bifurcated this factor into 4 parts

- Cash transactions
- Transactions by Cheque
- Transactions with the use of Plastic Money (i.e. Credit cards, Debit cards, Smart card)
- Online transactions

2) Services offered in E-banking

This factor is mainly divided into 2 parts

1}Services offered by government like Jan Dhan Yojana

2}Services offered by private companies like PAYTM,Paypal etc.

This factor highly affects the number of E-banking users and for the same reason we have considered this factor

### 3) Awareness about E-banking

Many people are not well aware about E-banking and do not know much about it. Due to ineffective implementation of Govt. policies and some other reasons E-banking has not reached all the places and hence people are not using it on greater extent

### 4) Government policies

As mentioned earlier Gov. Is trying to initiate various schemes like Jan Dhan Yojana which is going to make E-banking sector even to the poorest sections of the society and for the same reason we have chosen this factor.

### 5) Technology

Today the Modi government is trying to implement more and more schemes as well as policies which will help in making Indian economy the Cashless economy. For these new technological advancements such as Biometric system, eye scanner etc. This is going to affect the development of E-banking sector on a greater extent. Therefore we have chosen this as an important factor

### 6) Volume of transactions-

For studying this topic one of the most important factor to be taken in the consideration is volume of transactions. Under this factor we have studied number of transactions as well as amount of transactions (in millions). We wanted to know how the people are transacting throughout the India and how the number of transactions will be affected by the wild card decision of Demonetization and for the same reason we have taken this factor into consideration.

### 7) Number of users-

As mentioned before the number and amount of transactions is ultimately dependent upon the number of users. If there are no users of a particular system that system will not be able to sustain for a long time. Thinking similarly about E-banking sector we have chosen this as an important factor

## CHAPTER-2 SYSTEM WEB

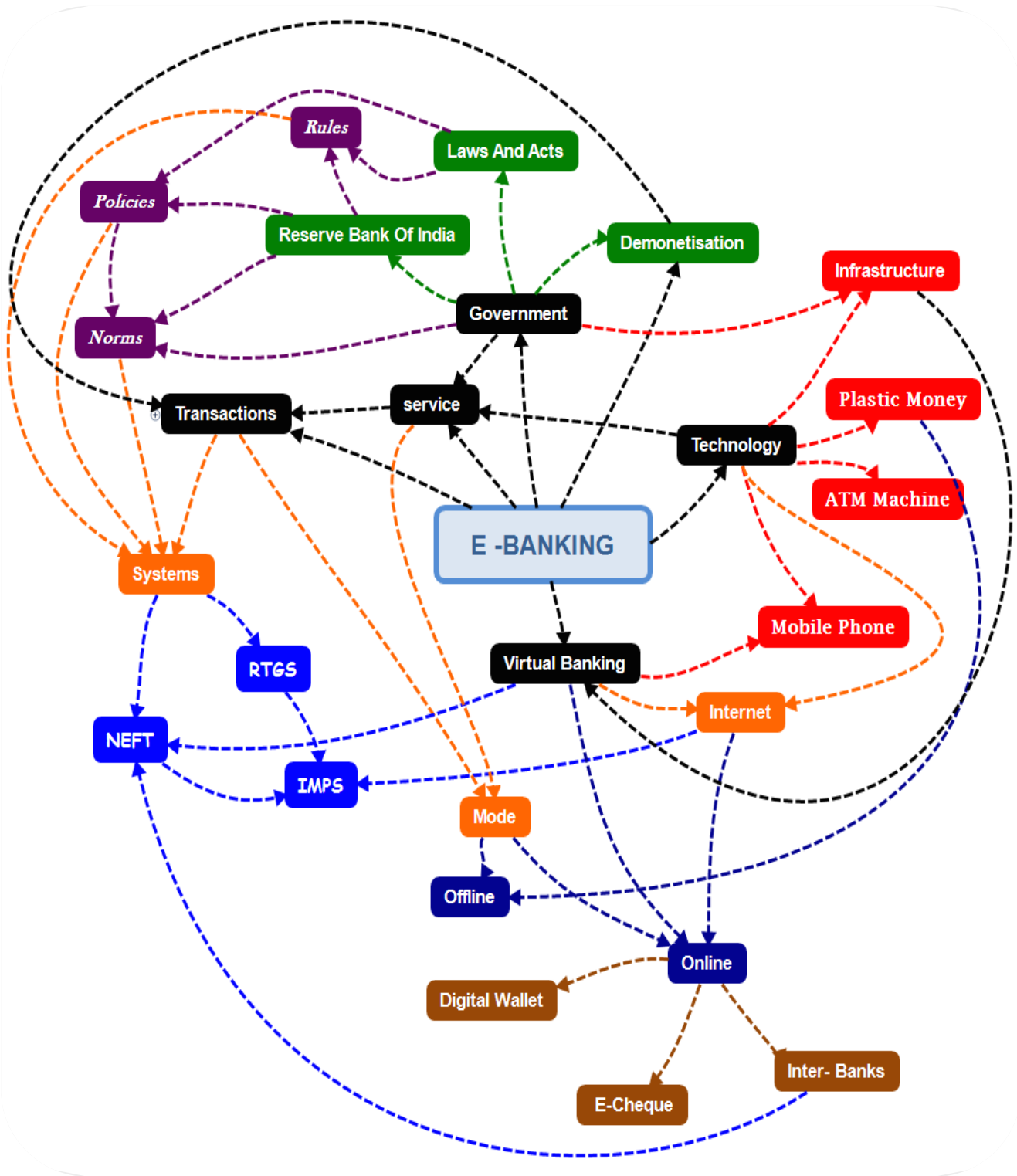


Fig 1

## CHAPTER-3

### SURVEY INTRODUCTION

- For case study a survey was conducted from November2016 to December2016 for the project .This survey was done on the basis of 500 respondents from various sectors.
- Mainly the objective of the research is to understand online banking user’s behaviors, opinions, preferences and expectations
  
- Duration of survey- 1-11-16 to 15-12-16
  
- Target population- Local people of Pune city and surroundings
  
- Survey method- Direct interview and form filling
  
- Total no. of respondents- 500

#### **Survey Questionnaire**

##### **E-Banking survey**

\*name not required\*

{E-banking includes ATM, debit or credit cards, online payments, online transactions, online shopping, paytm and other digital wallets also }

\*Please tick on appropriate answer\*

1) Do you use e-banking?-Yes /No

(If you are not using e-banking then answer only question no.1, 2, 3, 6, 7 &8)Reason of using e banking instead of normal banking is (1 or 2 lines)-

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2) Age-

AGE	20-30	30-40	40-50	50-60	60-70	70+

3) Qualification or education-

Qualification	<graduate	Graduate	Post graduate	>post graduate

4) If you want to do transaction of RS5000 or more then which mode will you prefer?(please give sequence from first preference to last preference by giving rank 1 to 6 in descending order.)

Mode of transactions	Cash	Cheque	Debit card	Credit card	online	Paytm or bit coins
(give preference from 1 to 6)						

Why you gave first preference to this mode? (Mode which you gave 1<sup>st</sup> preference above)

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6) How many times you do online transactions per week?

No. of transactions	
0-3	
3-6	
6-9	
9 or 9+	

6) Are you well informed about e banking-Yes/No

7) Living area

Urban	Sub urban	Rural

8) If you are **not using e-banking**, then reason behind it is-

Reason	
I)less information about e-banking	
II)online bank account is not activated	
III)misconceptions or security reasons	
IV)other	

9) Kindly give preference of the followings of your online banking services:

(Give preference in descending order from 1 to 9)

services	preference
fund transfer	
ATM banking	
BALANCE ENQUIRY	
ONLINE FIXED DEPOSIT	
REQUEST A DEMAND DRAFT	
PAY BILL	
ONLINE SHOPPING	
ONLINE RECHARGE	
OTHER	

10] In your opinion which online operations should be modified promptly for better services in future? (Please tick on only 1 or 2 services)

services	
ATM services	
Account services	
Fund transfer	
Bill payment	
e-tax payment	
e-deposit	
Investments and services	
Loans and credit services	
Internet security services	

11] Give your overall rating in online banking services.

EXCELLENT	VERY GOOD	GOOD	AVERAGE	POOR	HARD TO SAY.

## CHAPTER-4

### SURVEY- DATA ANALYSIS

#### 1) NUMBER OF PEOPLE USING E-BANKING

No of E-Bank Users	No of People Not using E-Banking
68%	32%

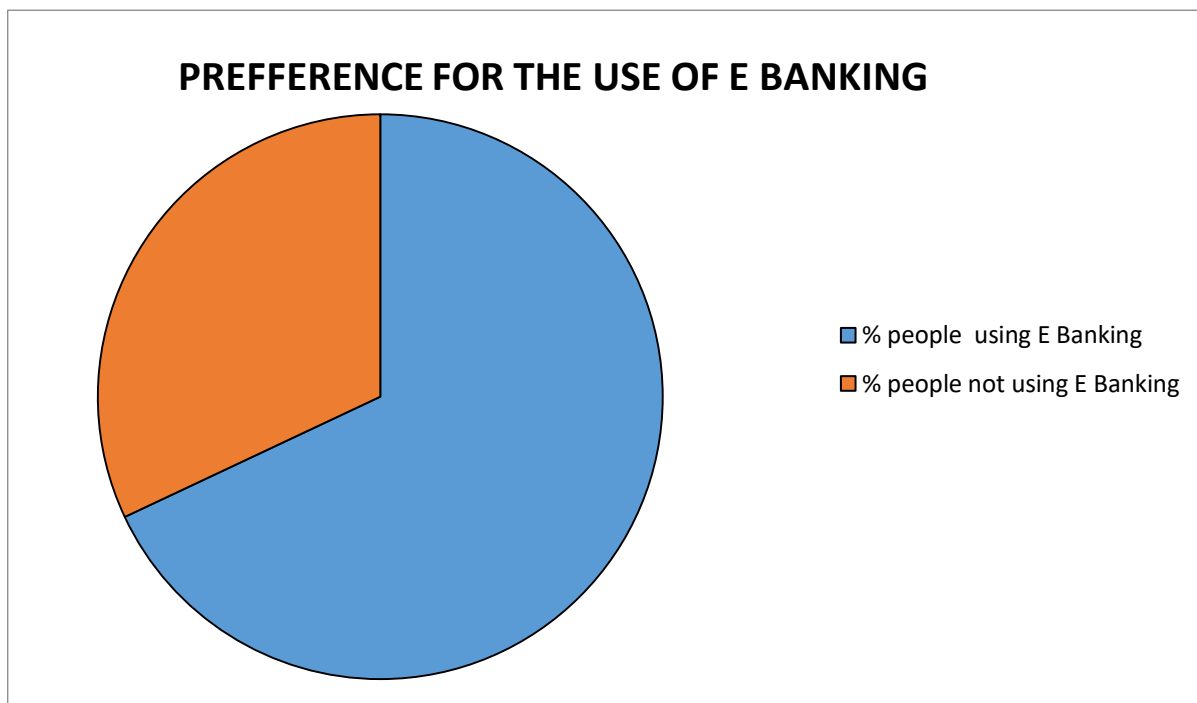


Fig 2

Here we can observe that according to survey around 68% of the total people who answered the survey are using e-banking. Today in India (according to RBI statistics) around 35 % of the population is using E-Banking for daily transactions. In the near future this number will increase by 50-60%.

2) FREQUENCY OF TRANSACTIONS PER WEEK

0-3	51%
3-6	22%
6-9	15%
9+	12%

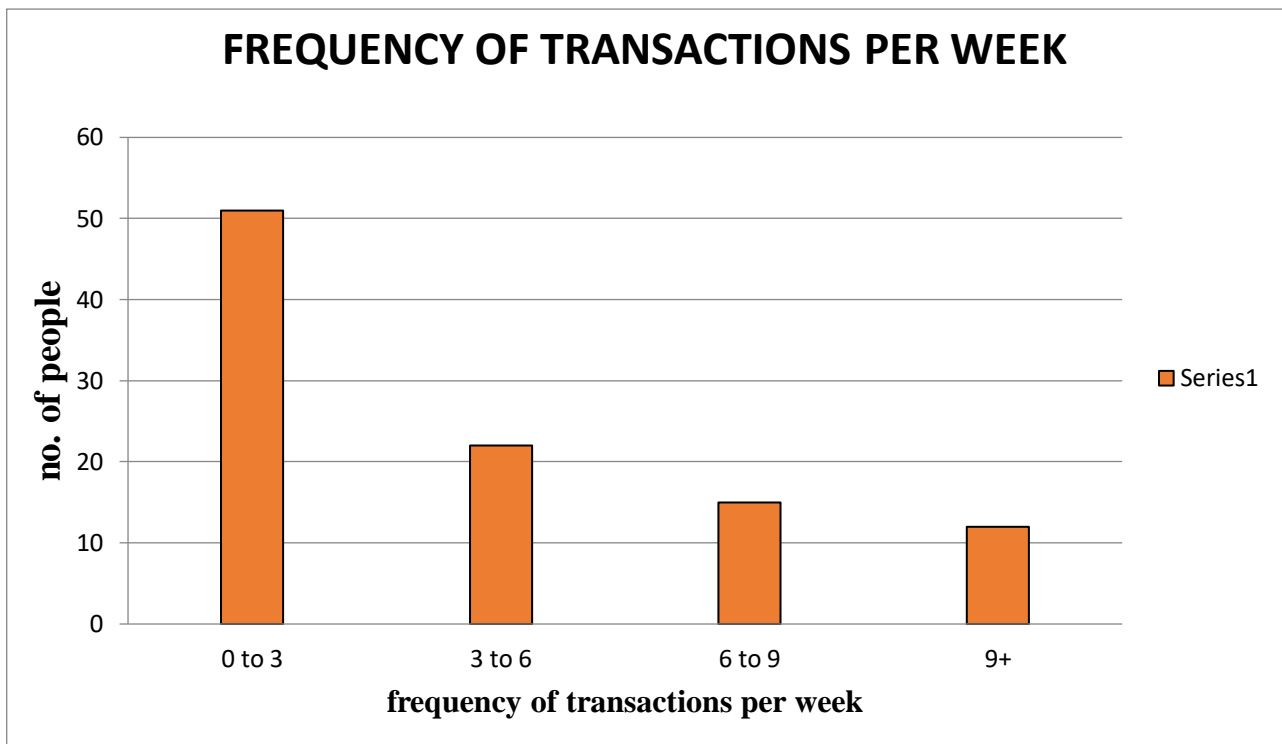


Fig 3

According to the data the frequency is for 0-3 transactions per week. Out of every 100 persons nearly 50% do less than 3 online transactions per week. As we all know DEMONITIZATION is going to change this situation completely. Here we can see that nearly 12% people are doing on an average 9 and more transactions per week. According to our prediction in the near future this percentage will increase by two- folds

3) PREFERENCE FOR USE OF VARIOUS SERVICES

Online payment	32%
Balance enquiry	14%
ATM banking	22%
Fund transfer	26%
Other services	6%

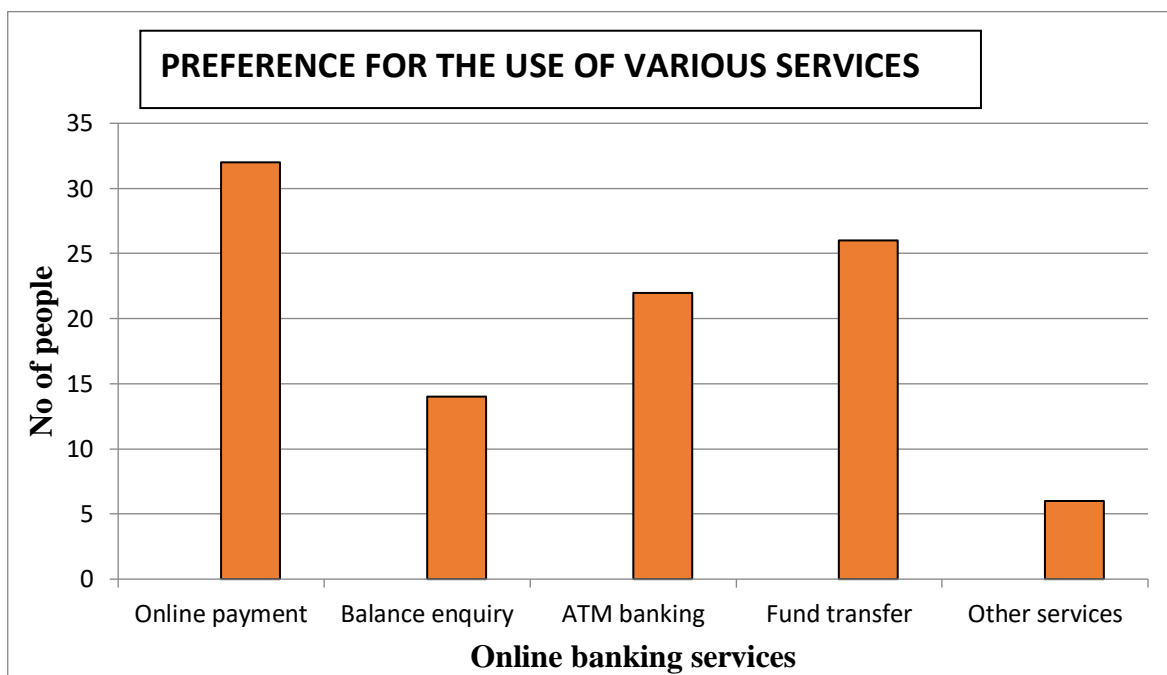


Fig 4

The graph clearly tells us that the service used mostly by the people is Online Payment. People prefer to pay online rather than visiting the place physically to pay. Nearly 32% people use the service of online payment mostly. The second most used service is Fund Transfer accounting to about 26%. The third most used service is ATM Banking accounting to about 22%. There are various modes by which the funds can be transferred between two accounts, but if we look at the % of people doing fund transfer by various means like cash , ,Cheque ,Online etc. we can see that from these 22% around 21% do transactions by cash, 38% transact by Cheque and 41% do transactions online.

4) SERVICES TO BE IMPROVED

ATM Services	18%
Account services	8%
Fund transfer	5%
Bill payment	8%
E-Tax payment	9%
E Deposits	6%
Investment and Services	7%
Loans and Credit services	6%
Internet security services	33%

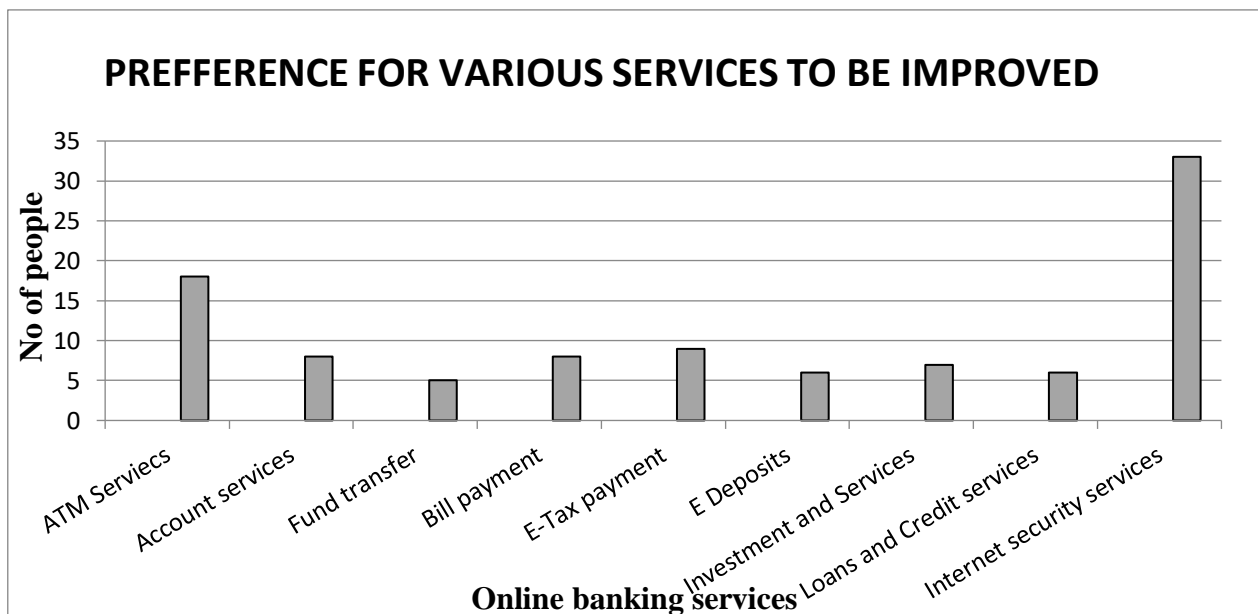


Fig 5

Here we can clearly observe that the highest percentage of people , that is 33% people want Internet security services to be improved. This clearly indicates the fact that Official Govt. sites are highly insecure and there is risk of Hacking and Misuse of confidential data. Today it is surprising to see that our online bank account, credit card number etc. can be hacked only in 6 seconds. There is an urgent need to improve these services.

Further 18% people want ATM services to be improved. Today more than 30% financial frauds are done by using ATM cards. The ATM card pin can take few seconds to be hacked. On the other hand only 5% people want Fund transfer service to be improved. Based on this we can conclude that , according to the survey , today the most secure service offered in E-banking sector is Fund transfer.

5) REASONS FOR NOT USING E-BANKING

Not well informed	30%
Inactivated online bank account	27%
Misconceptions/Security reasons	26%
Others	27%

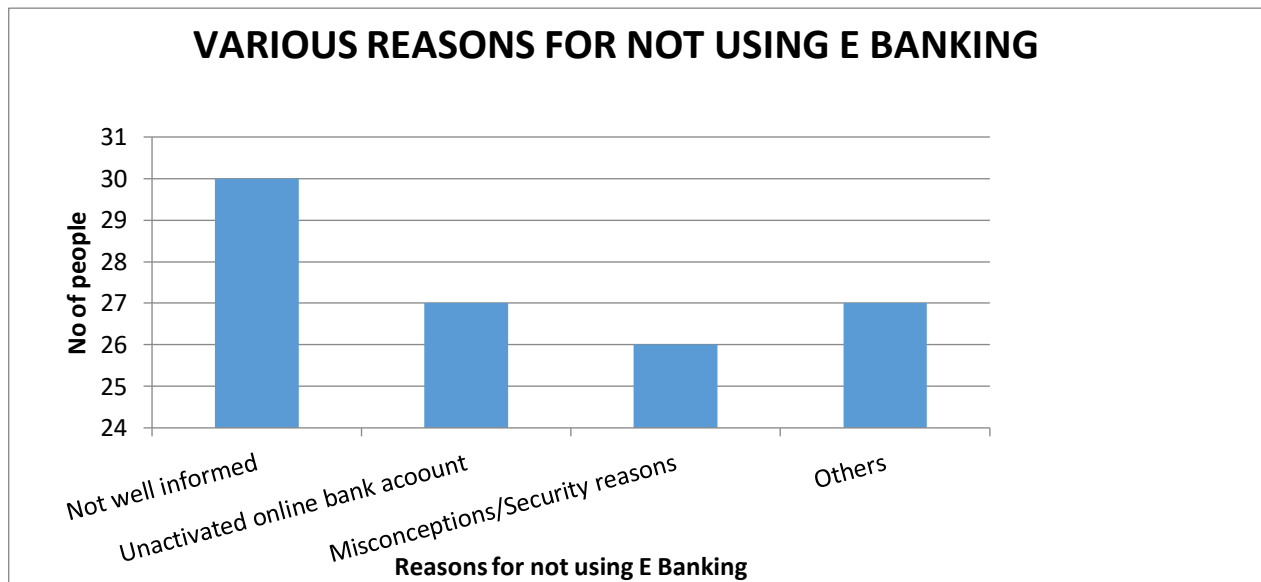


Fig 6

Here are some of the important reasons for which the people are not using E-banking. We can observe that most percentage of the people are not using E-banking because they are Not Well Informed about E-banking. Around 30% people are not aware about, some very basic questions like how to do banking transactions online? What things we need to do online transactions and many more basic questions about E-banking

This clearly indicates that there is an urgent need to organize awareness and information campaigns on E-banking. Secondly around 27% of the people are not using E-banking because of the inactivated online



account. At last we can observe that around 26% of the people are not using E-banking because of misconceptions and security reasons. This clearly indicates that there is a need for organizing information and awareness campaigns on E-banking.

#### 6) PREFERENCE TO MODES OF TRANSACTIONS

Credit	18%
Online	27%
Cheque	25%
Debit	19%
Cash	11%

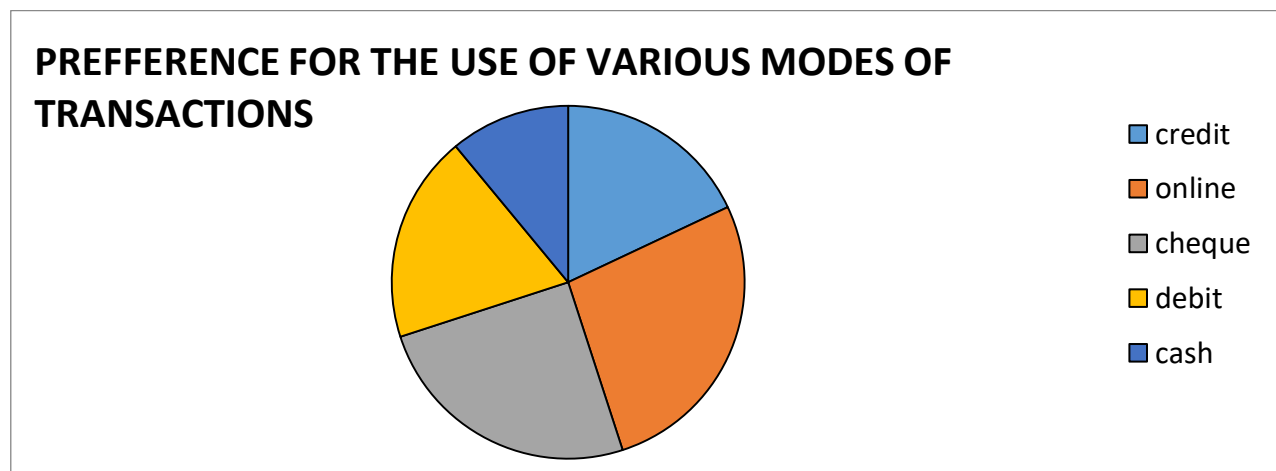


Fig 7

This graph shows the modes of transactions preferred by people. 27% people have given the first preference to the Online mode of transaction. This is the highest percentage among other modes but still we can observe that it is very less. There can be variety of reasons for such a small percentage of people using Online mode of transaction. Some of these reasons we can see in graph no.5.

Further 25% of people prefer Cheque as a mode of transactions. This is also a secure mode of transaction. Compared to other modes of transactions online modes provides us with variety of services.

## CHAPTER-5

### SWOT ANALYSIS

#### STRENGTHS

- Transparency and Disclosure practices are available almost everywhere
  - E-banking is Facilitating the offering of more services
  - Online services and E-banking are Increasing customer satisfaction and loyalty
  - Competitive advantage for banks
- As the competition will increase banks will try launching more and more schemes reaching to the wider public section.
- Reduces the time, cost and effort in the interaction
- We will be able to do transactions by sitting at home within a few seconds which will reduce the time consumed. Infrastructure required for the setup of online services will be less leading to the effective reduction in cost and efforts
- E-banking provides Permanent access to the bank
  - It is a Safe and secure method regarding security issues
  - Discounts and offers on Online services are attracting more customers

#### WEAKNESSES

- Delayed statements of transactions are consuming a little bit of more time and thus people are thinking it to be more time consuming
- Less awareness about e-banking
- Misconceptions about security reasons are making people use E-banking on a very small scale
- Low Internet connectivity in rural and some urban areas is preventing people from accessing online bank websites
- Lack of trust in people. People are not well aware about E-banking and think of it as a risky method.
- Insufficient penetration of Mobile banking in rural areas
- Infrastructural issues such as building banks and ATM machines in rural areas.
- E-banking services are costly .so, it is not affordable for poor people

- Online payments are not accepted everywhere

### OPPORTUNITIES

- Demonetization-Promoting CASHLESS transactions-demonetization is positive booster for e-banking. People don't have any money in hand so; people have no other option other than online banking. So, people will move towards E-banking
- Promotion of inter-connectivity between banks and customers-Today, BJP government is promoting e-banking .so, people are getting more information about E-banking and as a result e-literacy is increasing.
- Increased quality of online services
- Supporting Government policies
- Increasing investment in E-banking sector
- Increased competition among companies in E-banking sector-

This may led to increase in qualities and decreased cost of services provided in E-banking

### THREATS

- Security problems-today ,there are many security threats in online transactions like-
  - Card trapping
  - Fake websites
  - Keystroke logging
  - Use of malware programs

Because of above threats people are not using E-banking because there is fear in minds of people about online transactions

- Misuse of lost cards-if people don't deactivate their cards after getting lost, then other people may misuse it.
- Misuse of confidential data –many times confidential data like phone no. ,password of email address and many other things may leak while performing online transactions
- Development in E-banking will led to decrease in employment of people in banking sector .so, it may create a big problem of unemployed people

## **CHAPTER-6**

### **PREDICTED FUTURE**

DEMONITIZATION a wild card decision taken by the Modi Government proved to an important decision for E-banking sector in India. This introduced us to the concept of 'CASHLESS Society', which is mostly based on the concept of E-Banking and cashless transactions. In this section we have mainly focused on predicted future for Credit and Debit cards, Mobile transactions, and NEFT transactions. We got our required data from official RBI site and tried to predict its future by figuring out the possible rates at which the usage of this technology will increase.

Note -

1]All data till January 2016 is collected from official website of Reserve Bank of India -

[www.rbi.in](http://www.rbi.in)

2] The future is predicted by analyzing the graph and rate of change in slope and also from results of the survey.

3] the term POS means 'point of sale purchase.'

## CHAPTER-7

### DATA ANALYSIS AND FUTURE PREDICTION

#### 1) MOBILE TRANSACTIONS-

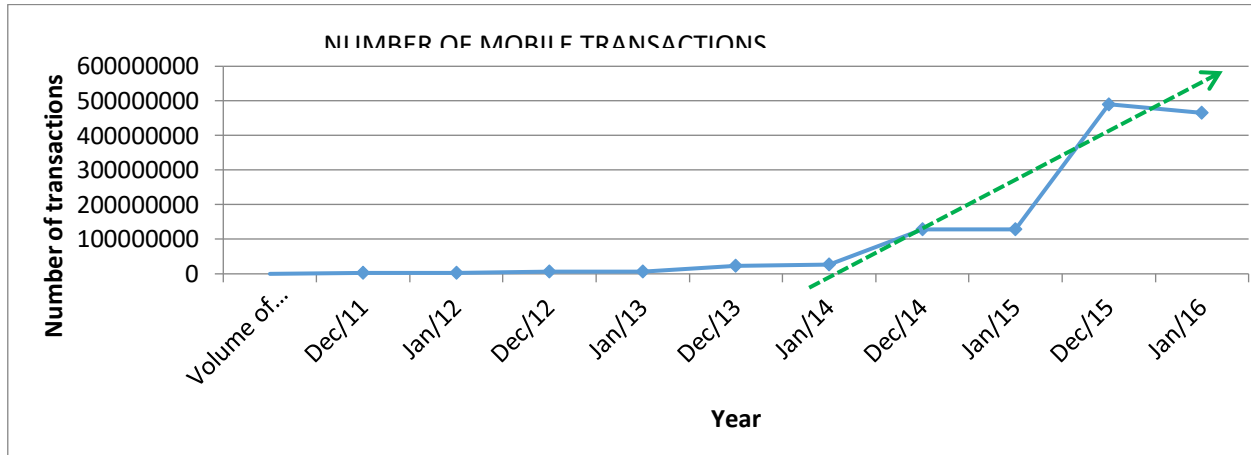


Fig 8

	No of transactions
Dec/11	2844938
Jan/12	5221007
Dec/12	5554327
Jan/13	39491499
Dec/13	9519166
Jan/14	92799697
Dec/14	98892790
Jan/15	99745697
Dec/15	18071922
Jan/16	16783505

This graph shows the number of mobile transactions from Dec.11 to Jan.16. Here during jan.15 to dec.15 we can observe the drastic increase in number of transactions mainly due to the government change. Modi govt. initiated various policies and schemes which are helping to boost the number of online transactions. That is the main reason, according to our predictions this will keep increasing at the steady rate over next 5 years.

**2)CREDIT CARDS-**

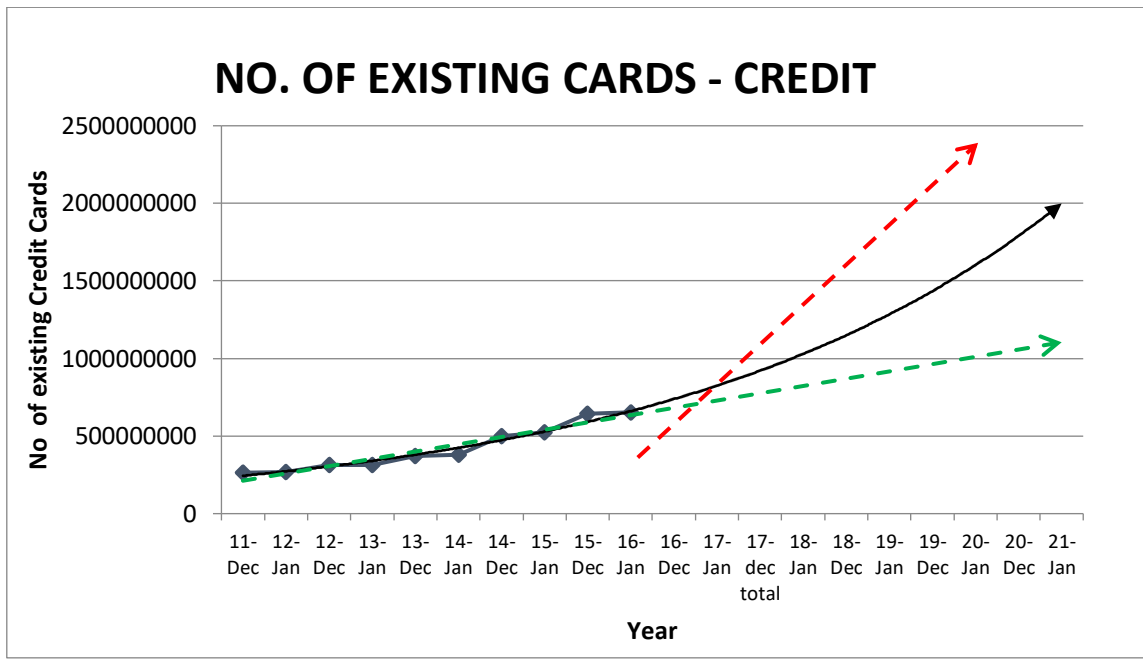


Fig 9

12-Jan	17739500
12-Dec	18851351
13-Jan	18851351
13-Dec	18686136
14-Jan	18974160
14-Dec	20362859
15-Jan	20612165
15-Dec	22748760
16-Jan	23782202

In this graph we can observe 3 lines,

- 1) The curve line represents how the total number of existing credit cards will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of existing credit cards in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the number of existing credit cards as a result of ‘demonetization’ in the near future that is in the next 5 years till January 2021

Here as represented if we observe the graph carefully, we can observe that the black line is clearly indicating the linear growth in the total number of existing credit cards in the upcoming 5 years, with respect to the data from December 2011 to January 2016, but in reality this is not going to happen due to the wild card decision of DEMONITIZATION. Demonetization is promoting the idea of cashless society, which is going to affect this trend of E-banking on a greater extent. According to black dotted line the total number of existing credit cards is going to increase 4% per annum but because of demonetization this can become two fold and according to our predicted future this will increase by average 6% to 8% per annum.

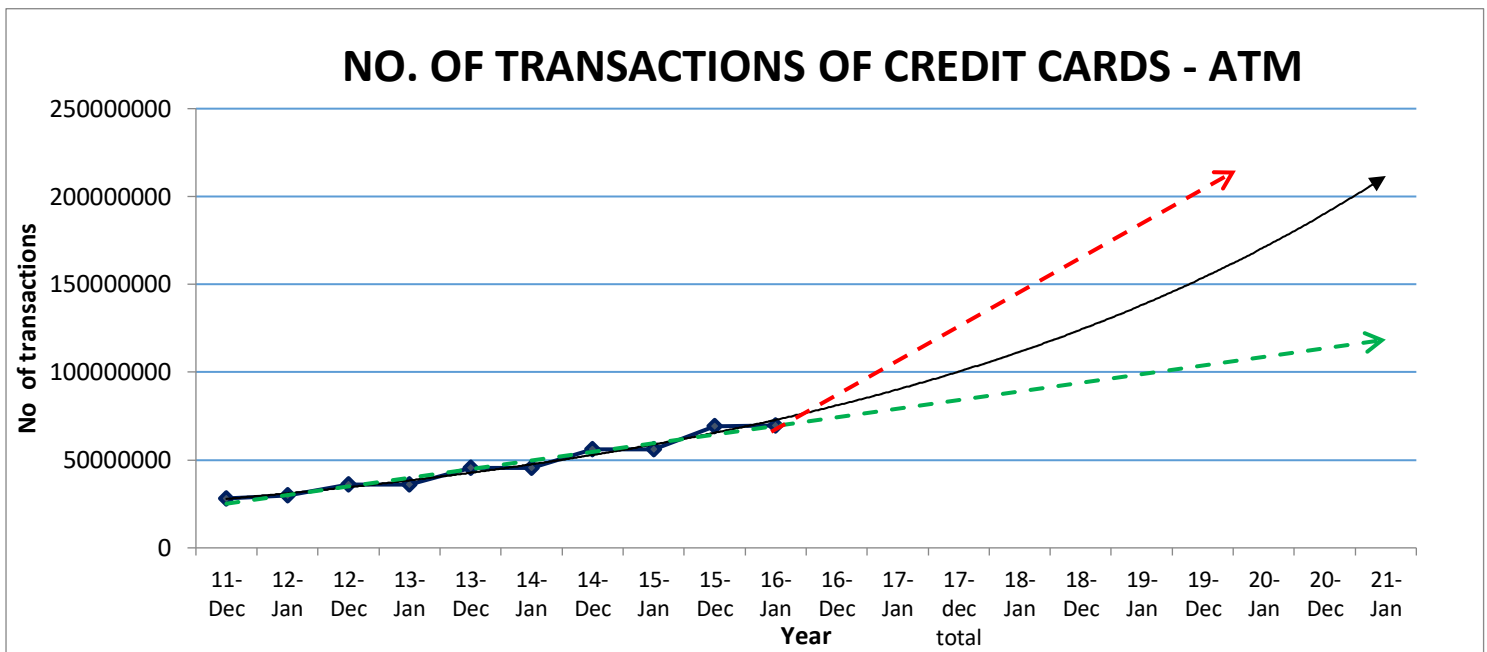


Fig 10

11-Dec	184298
12-Jan	188208
12-Dec	215268
13-Jan	215268
13-Dec	273653
14-Jan	274156
14-Dec	438032
15-Jan	410590
15-Dec	534094
16-Jan	547789

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total number of transactions done by credit cards at ATM will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of transactions done by credit cards at ATM in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total number of transactions done by credit cards at ATM as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

As mentioned above total number of existing credit cards is going to increase by 6% to 8% per annum, as predicted, from the graph above we can conclude that according to the black dotted line average annual growth in no of transactions done by credit cards at ATM is increasing at an average rate of 3.5% per annum, similar to the situation above due to the wild card decision of DEMONITIZATION, this increase will be 6% to 7% per annum according to our prediction. Such a large % increase in total number of credit card transactions is seen because, according to the RBI data and our survey data, more than 50% population per 100 persons transact on an average 0 to 3 times per week, but in the upcoming 2 to 3 years number of these transactions will be more than 9 transactions per week according to our predictions. This is the main reason for why we are going to witness such a large increase in number of transactions by credit cards in the near future

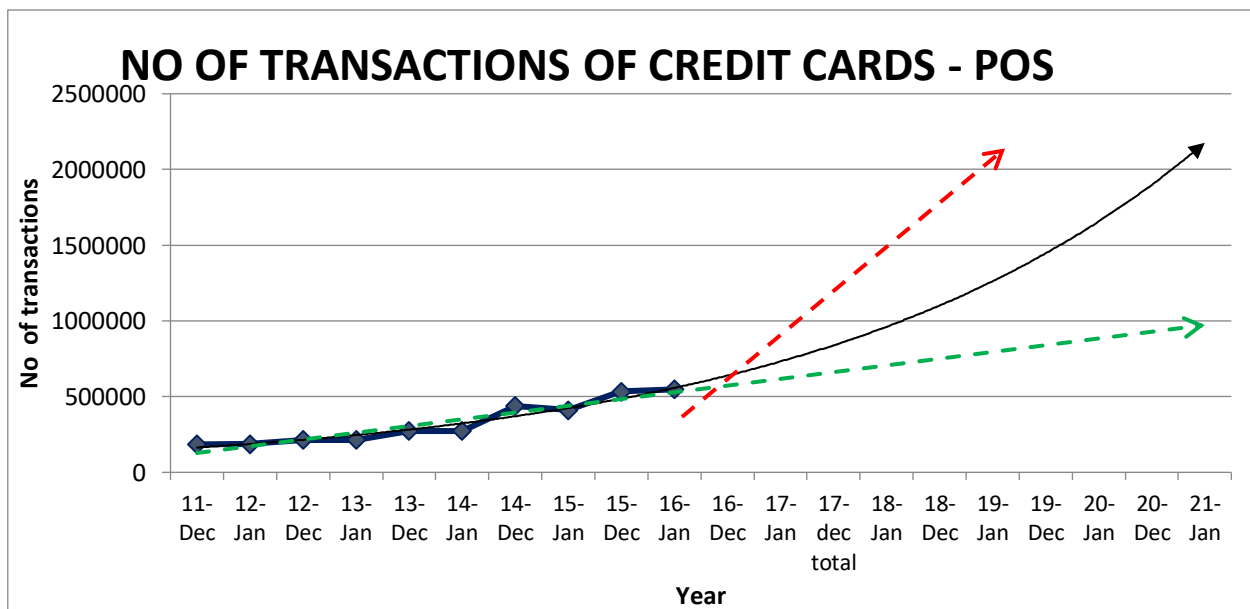


Fig 11



11-Dec	28145943
12-Jan	29812268
12-Dec	36104486
13-Jan	36104486
13-Dec	45636971
14-Jan	45578598
14-Dec	56091791
15-Jan	56171747
15-Dec	69367262
16-Jan	69676607

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total number of transactions done by credit cards at POS will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of transactions done by credit cards at POS in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total number of transactions done by credit cards at POS as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021
- 4) As mentioned above total number of existing credit cards is going to increase by 6% to 8% per annum, as predicted, from the graph above we can conclude that according to the black dotted line average annual growth in no of transactions done by credit cards is increasing at an average rate of 10% per annum, similar to the situation above due to the wild card decision of DEMONITIZATION, this increase will be 16% to 17% per annum according to our prediction. Such a large % increase in total number of credit card transactions is seen because, according to the RBI data and our survey data, more than 50% population per 100 persons transact on an average 0 to 3 times per week, but in the upcoming 2 to 3 years number of these transactions will be more than 9 transactions per week according to our predictions. This is the main reason for why we are going to witness such a large increase in number of transactions by credit cards at POS in the near future

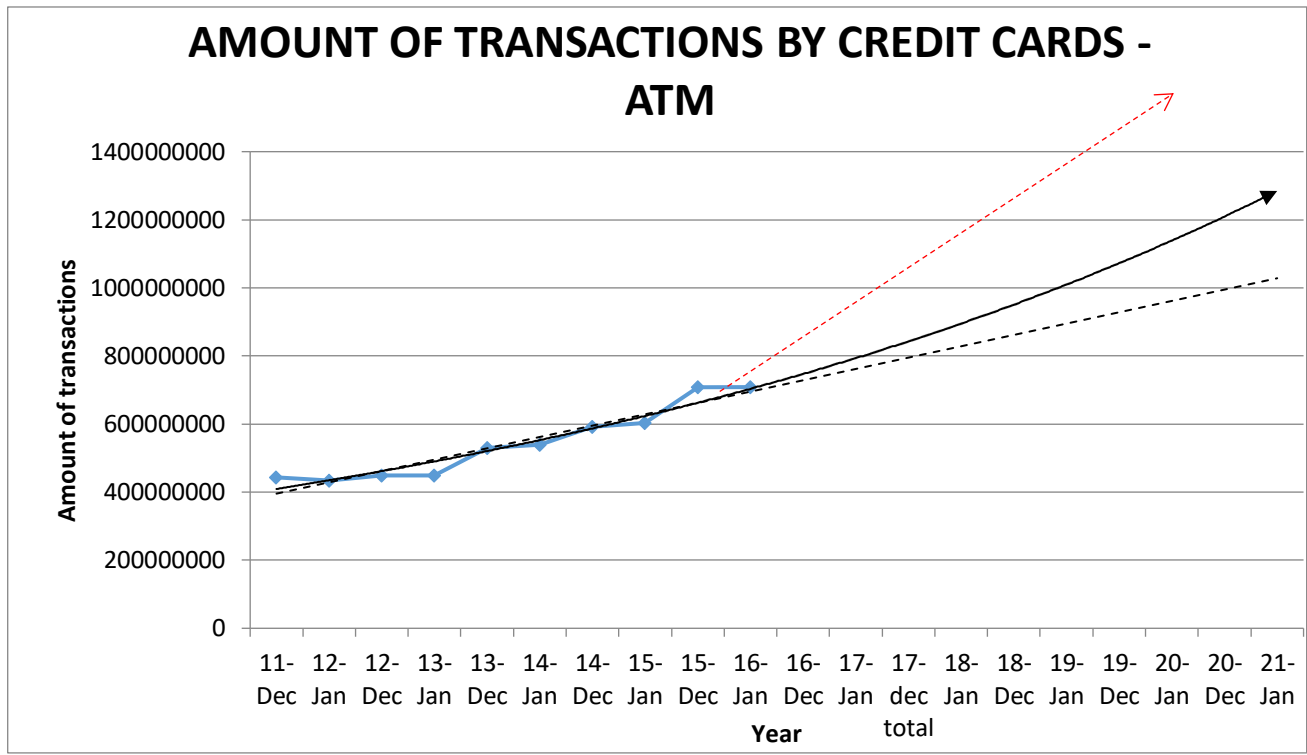


Fig 12

	at ATM
11-Dec	444161114
12-Jan	434051835
12-Dec	448551210
13-Jan	448551210
13-Dec	530351893
14-Jan	538387754
14-Dec	591056613
15-Jan	602575841
15-Dec	708001000
16-Jan	707629136

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total amount of transactions done by credit cards at ATM will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total amount of transactions done by credit cards at ATM in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total amount of transactions done by credit cards at ATM as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

Comparing among the credit and debit cards it is clear that amount of transactions using Debit card [ATM] is going to be clearly higher than that of the Credit cards .In this graph at present i.e. January 2016 we can observe that total amount of transactions is around 800 crores which is going to reach around 1300 crores by December 2021. This is the drastic increase in amount of transactions by credit cards is mainly due to the wild card decision of Demonetization. As said earlier the increase in amount of transactions is going to increase at even higher rates, the main reason being the less charges applied on debit cards than the credit card.

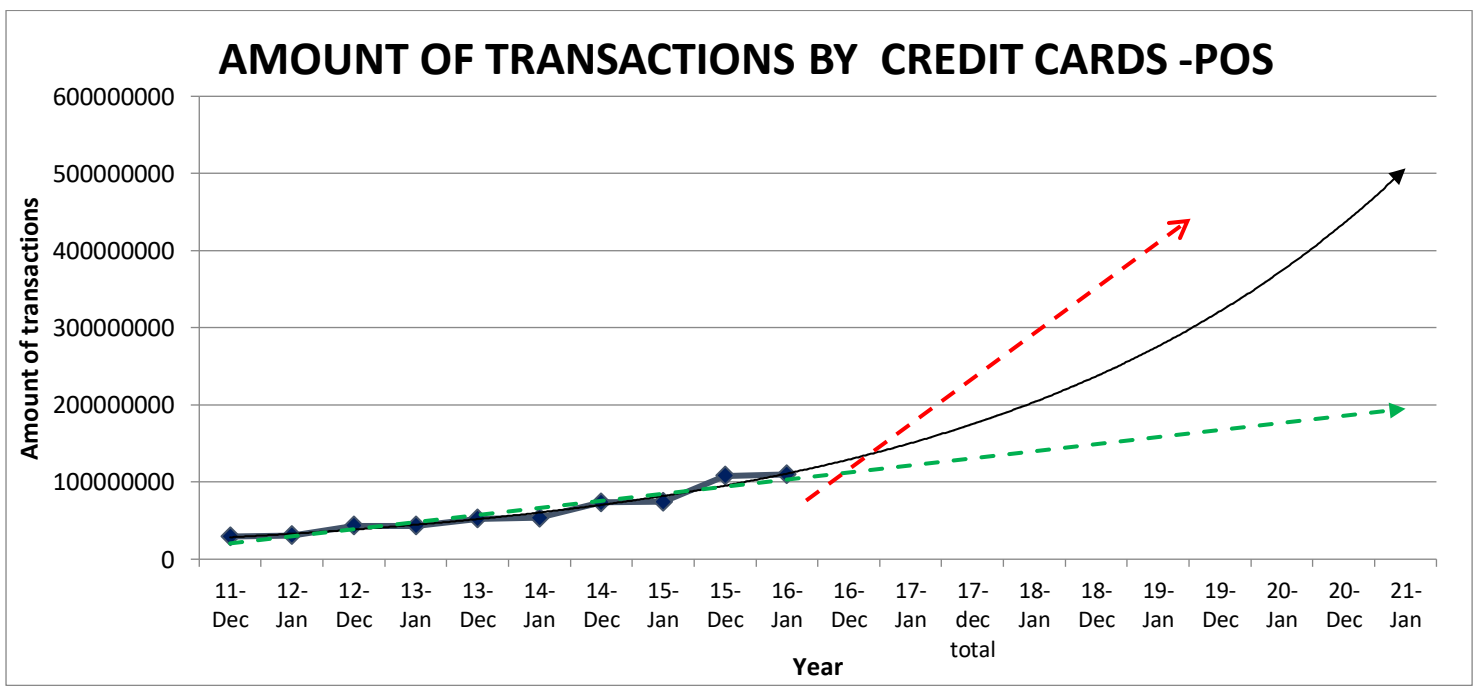


Fig 13

11-Dec	1108.52
12-Jan	1089.36
12-Dec	1249
13-Jan	1249
13-Dec	1508.19
14-Jan	1505.737
14-Dec	2505.79
15-Jan	2144.20
15-Dec	2748.528
16-Jan	2655.663

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total amount of transactions done by credit cards at POS will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total amount of transactions done by credit cards at POS in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total amount of transactions done by credit cards at POS as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

Comparing among the credit and debit cards it is clear that amount of transactions using Debit card [ATM] is going to be clearly higher than that of the Credit cards. In this graph at present i.e. January 2016 we can observe that total amount of transactions is around 100 crores which is going to reach around 500 crores by December 2021. This is the drastic increase in amount of transactions by credit cards is mainly due to the wild card decision of Demonetization. As said earlier the increase in amount of transactions is going to increase at even higher rates, the main reason being the less charges applied on debit cards than the credit card.

**3)DEBIT CARDS-**

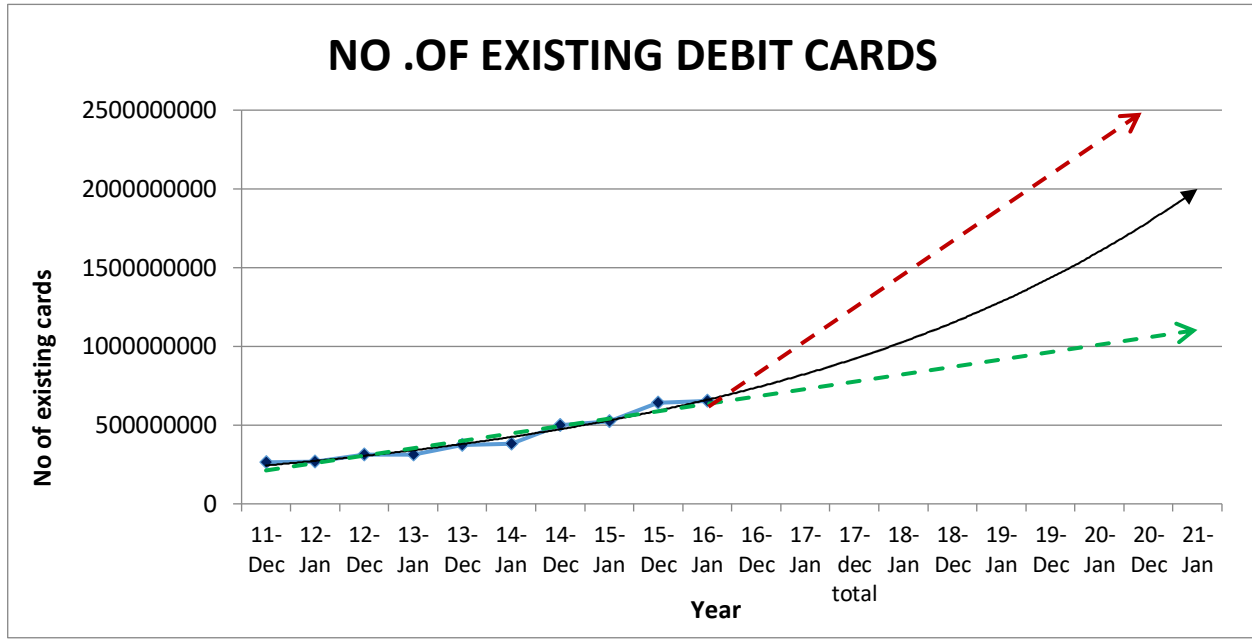


Fig 14

11-Dec	263796762
12-Jan	268000217
12-Dec	314436803
13-Jan	314436803
13-Dec	372506779
14-Jan	380332001
14-Dec	500080855
15-Jan	524787926
15-Dec	643191224
16-Jan	653363198

In this graph we can observe 3 lines,

- 1) The curve line represents how the total number of existing debit cards will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of existing debit cards in the near future that is in the next 5 years till January 2021

3) Similarly red dotted line represents the linear growth that is going to take place in the number of existing debit cards as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

Here as represented if we observe the graph carefully, we can observe that the black line is clearly indicating the linear growth in the total number of existing debit cards in the upcoming 5 years, with respect to the data from December 2011 to January 2016, but in reality this is not going to happen due to the wild card decision of DEMONITIZATION. Demonetization is promoting the idea of cashless society, which is going to affect this trend of E-banking on a greater extent. According to black dotted line the total number of existing debit cards is going to increase 4% per annum but because of demonetization this can become two fold and according to our predicted future this will increase by average 8% to 9% per annum.

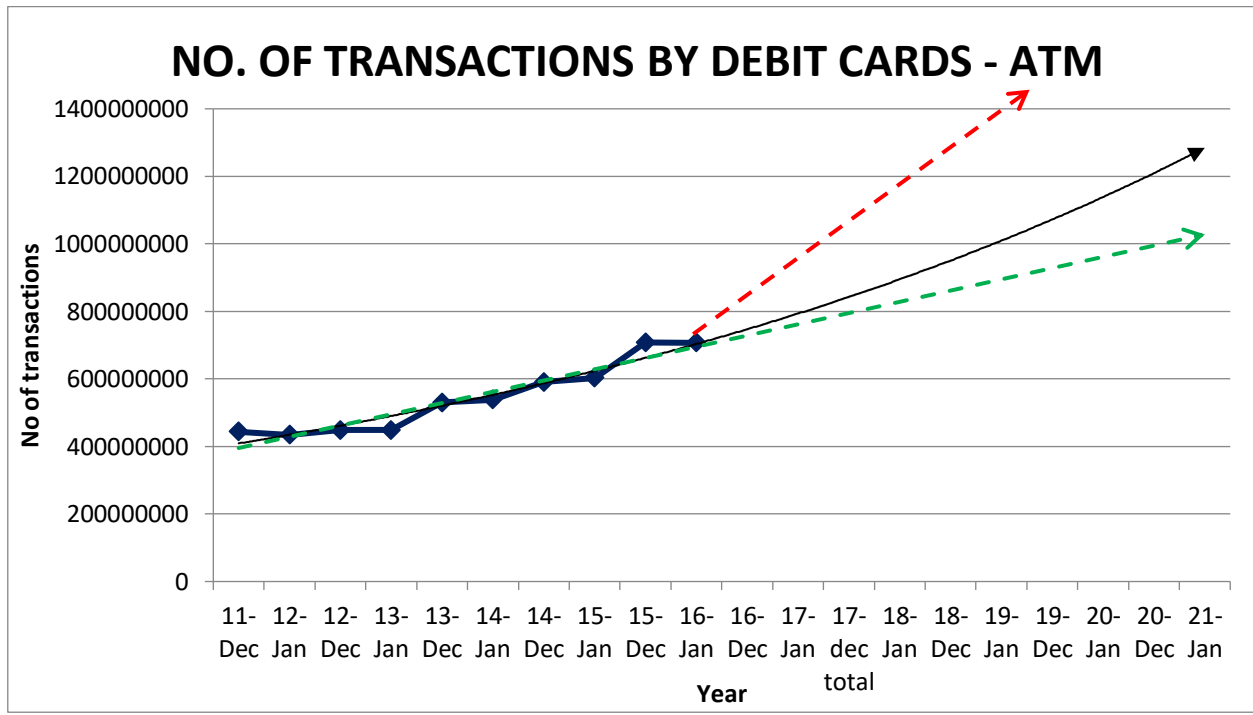


Fig 15

11-Dec	444161114
12-Jan	434051835
12-Dec	448551210
13-Jan	448551210
13-Dec	530351893
14-Jan	538387754
14-Dec	591056613
15-Jan	602575841
15-Dec	708001000
16-Jan	707629136

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total number of transactions done by debit cards at ATM will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of transactions done by debit cards at ATM in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total number of transactions done by debit cards at ATM as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

As mentioned above total number of existing debit cards is going to increase by 6% to 8% per annum, as predicted, from the graph above we can conclude that according to the black dotted line average annual growth in no of transactions done by credit cards at ATM is increasing at an average rate of 3.5% per annum, similar to the situation above due to the wild card decision of DEMONITIZATION, this increase will be 6% to 7% per annum according to our prediction. Such a large % increase in total number of debit card transactions is seen because, according to the RBI data and our survey data, more than 50% population per 100 persons transact on an average 0 to 3 times per week , but in the upcoming 2 to 3 years number of these transactions will be more than 9 transactions per week according to our predictions. This is the main reason for why we are going to witness such a large increase in number of transactions by debit cards in the near future.

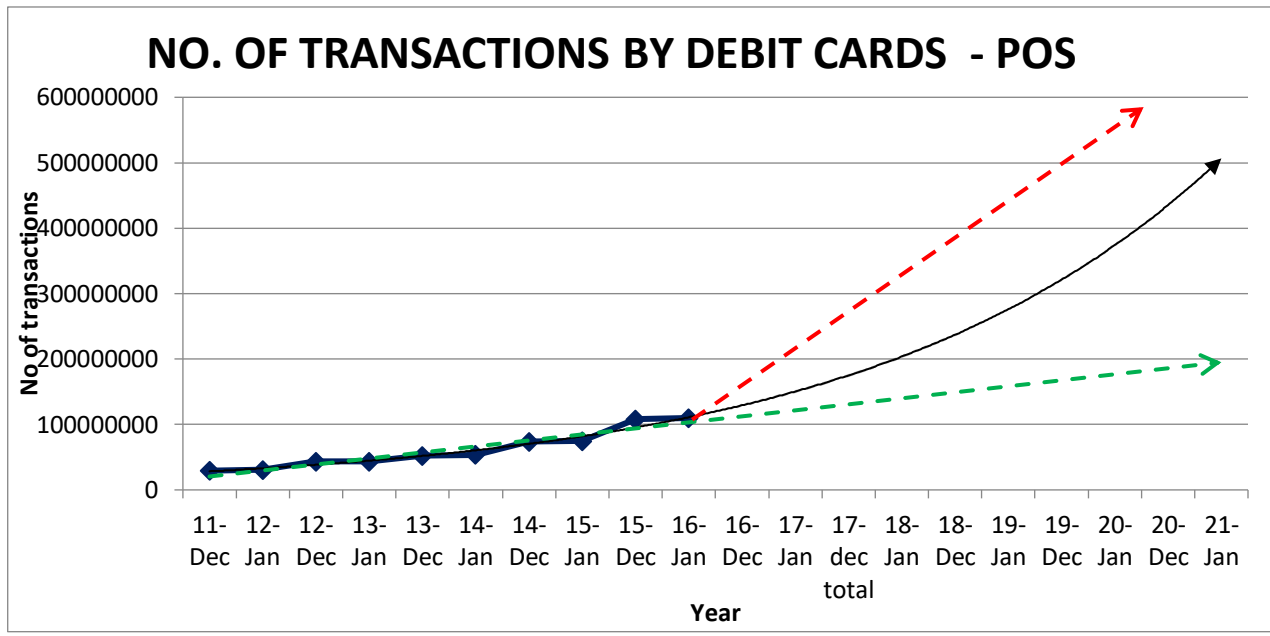


Fig 16

29406351	11-Dec
30673852	12-Jan
43129684	12-Dec
43129684	13-Jan
52295128	13-Dec
53832983	14-Jan
73618740	14-Dec
74464782	15-Jan
108118356	15-Dec
109876461	16-Jan

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total number of transactions done by debit cards at POS will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total number of transactions done by debit cards at POS in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total number of transactions done by debit cards at POS as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021



As mentioned above total number of existing debit cards is going to increase by 6% to 8% per annum, as predicted, from the graph above we can conclude that according to the black dotted line average annual growth in no of transactions done by debit cards is increasing at an average rate of 10% per annum, similar to the situation above due to the wild card decision of DEMONITIZATION, this increase will be 16% to 17% per annum according to our prediction. Such a large % increase in total number of debit card transactions is seen because, according to the RBI data and our survey data, more than 60% population per 100 persons transact on an average 0 to 3 times per week, but in the upcoming 2 to 3 years number of these transactions will be more than 9 transactions per week according to our predictions. This is the main reason for why we are going to witness such a large increase in number of transactions by debit cards at POS in the near future.

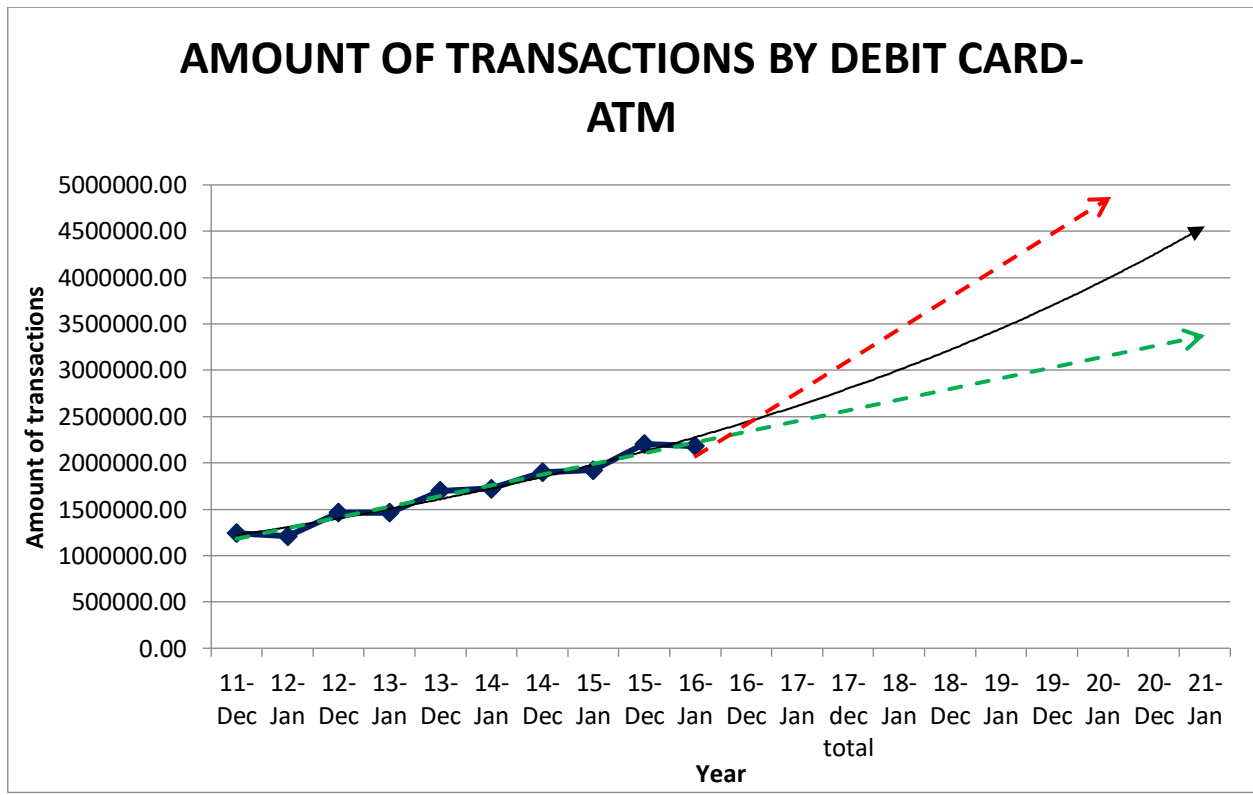


Fig 17

11-Dec	1242370.69
12-Jan	1209807.88
12-Dec	1462717.85
13-Jan	1462717.85
13-Dec	1699023.75
14-Jan	1722318.05
14-Dec	1897693.28
15-Jan	1924679.94
15-Dec	2204614.96
16-Jan	2181881.52

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total amount of transactions done by debit cards at ATM will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total amount of transactions done by debit cards at ATM in the near future that is in the next 5 years till January 2021
- 3) Similarly red dotted line represents the linear growth that is going to take place in the total amount of transactions done by debit cards at ATM as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

Comparing among the credit and debit cards it is clear that amount of transactions using Debit card [ATM] is going to be clearly higher than that of the debit cards .In this graph at present i.e. January 2016 we can observe that total amount of transactions is around 210 crores which is going to reach around 450 crores by December 2021.This is the drastic increase in amount of transactions by debit cards is mainly due to the wild card decision of Demonetization. As said earlier the increase in amount of transactions of debit cards is going to increase at even higher rates, the main reason being the less charges applied on debit cards than the credit card.

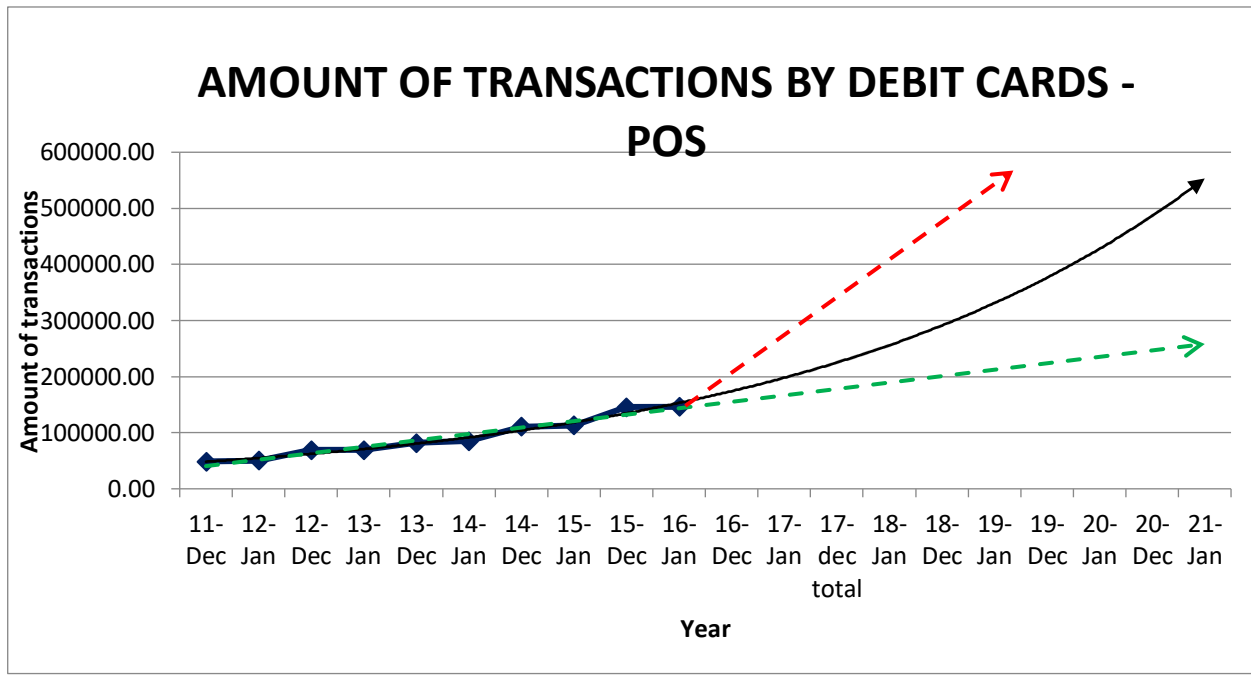


Fig 18

48818.97	11-Dec
50611.02	12-Jan
69061.09	12-Dec
69061.09	13-Jan
81943.38	13-Dec
84977.59	14-Jan
111006.57	14-Dec
112952.29	15-Jan
145831.93	15-Dec
2181881.52	16-Jan

In this graph also we can observe 3 lines,

- 1) The curve line represents how the total amount of transactions done by debit cards at POS will increase exponentially in the near future that is in the next 5 years till January 2021
- 2) Black dotted line represents the linear growth of the total amount of transactions done by debit cards at POS in the near future that is in the next 5 years till January 2021

3) Similarly red dotted line represents the linear growth that is going to take place in the total amount of transactions done by debit cards at POS as a result of DEMONITIZATION in the near future that is in the next 5 years till January 2021

Comparing among the credit and debit cards it is clear that amount of transactions using Debit card [ATM] is going to be clearly higher than that of the Credit cards .In this graph at present i.e. January 2016 we can observe that total amount of transactions is around 150 crores which is going to reach around 570 crores by December 2021.This is the drastic increase in amount of transactions by debit cards is mainly due to the wild card decision of Demonetization. As said earlier the increase in amount of transactions is going to increase at even higher rates, the main reason being the less charges applied on debit cards than the credit card.

**3)NEFT-**

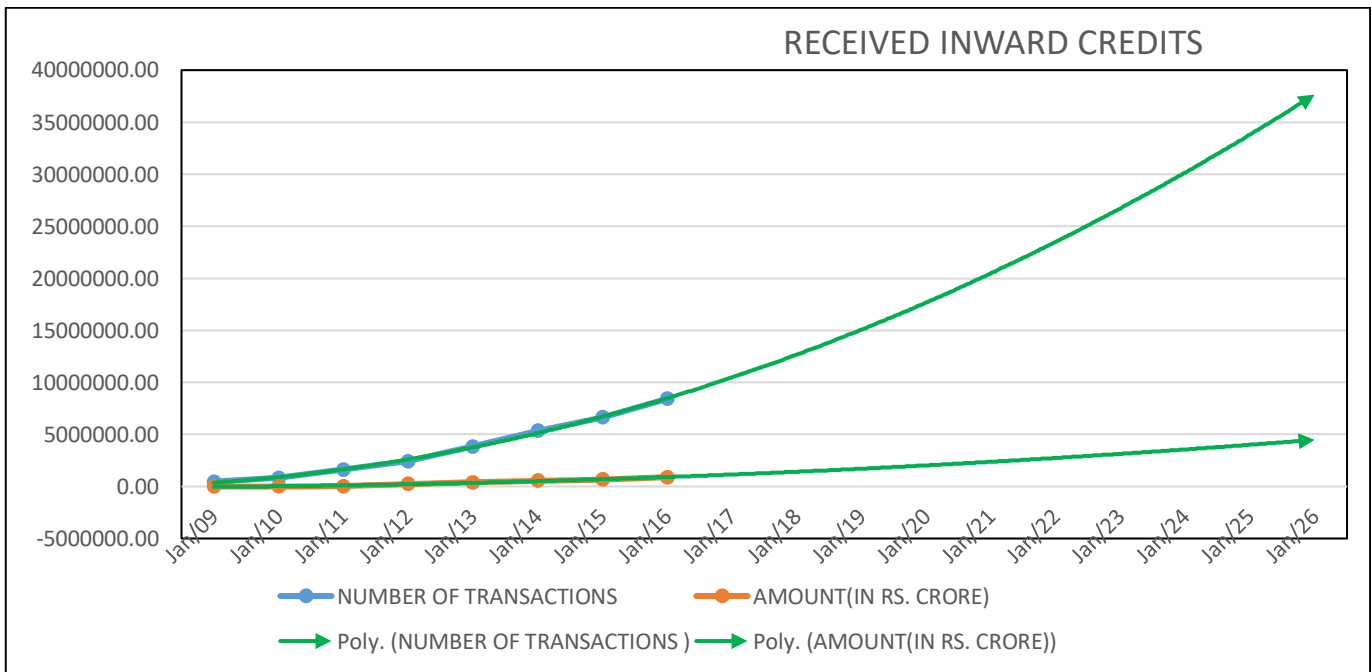


Fig 19

	No. of transactions	Amount in crores
Jan-09	464568.00	3291.37
Jan-10	811171.00	6015.39
Jan-11	1623342.00	13504.04
Jan-12	2435650.00	240826.96
Jan-13	3826838.00	381385.57
Jan-14	5354542.00	543754.86
Jan-15	6649810.00	678124.89
Jan-16	8411848.00	895757.65

This graph shows the total number of transactions at the national level where the money was deposited by the people in their bank account. The duration of this graph is from Jan.09 to Jan.21. We can observe the gradual increase in the number as well amount of transactions during the last 12 years At present i.e. Jan.16 total amount of is 100 crores and is gradually going to increase to more than from 350crores.While the number of transactions is going to increase from 20 crores to 70 crores

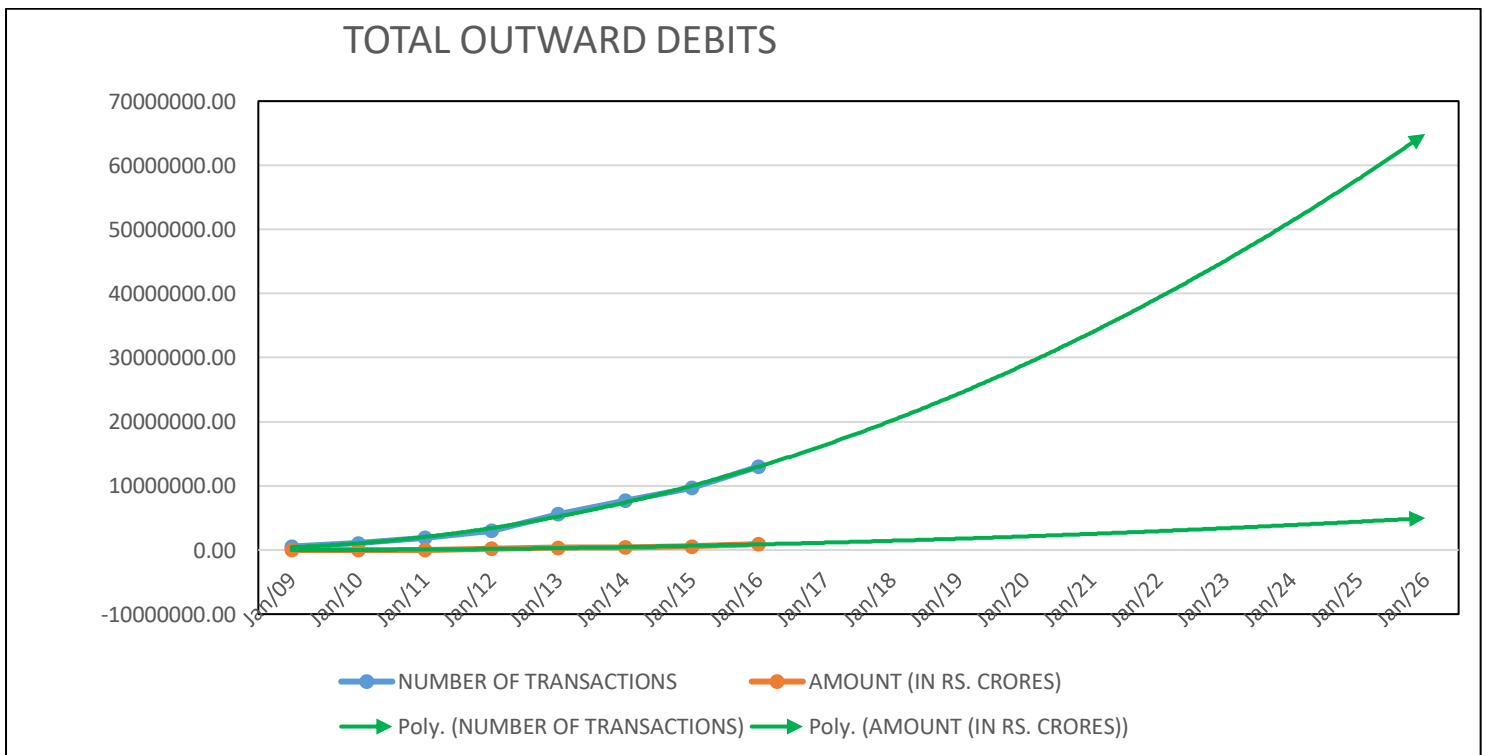


Fig 20

	NUMBER OF TRANSACTIONS	AMOUNT (IN RS. CRORES)
Jan-09	Feb-09	Mar-09
Jan-10	1049059.00	4389.43
Jan-11	1938818.00	12444.50
Jan-12	3010677.00	234372.00
Jan-13	5618944.00	365562.00
Jan-14	7705205.00	422169.02
Jan-15	9721668.00	596009.16
Jan-16	13008156.00	923012.14

This graph shows the total number of transactions at the national level where the money was deposited by the people from withdrawal their bank account. The duration of this graph is from Jan.09 to Jan.21. We can observe the gradual increase in the number as well amount of transactions during the last 12 years at present i.e. Jan.16 total amount of is 40 crores and is gradually going to increase to more than 90 crores. While the number of transactions is going to increase from 125 crores to around 670 crores.

## **CHAPTER-8**

### **PREDICTED FUTURE**

This is the future which we think will happen in India with current economic growth and infrastructure development.

#### **Phase-I (2016-2021)**

- 1) By 2021 around 50% people will be using E-banking
- 2) Around 60% of the hotels, street shops and other institutions will be installed with various payment methods like virtual, online, plastic money, biometric system etc.
- 3) New services like Paytm, Bhim app etc will be introduced in the near future i.e. in 2018-2019
- 4) Looking on a broad basis more than 55% of the people in Maharashtra will be Digitally Literate
- 5) Popular and the most used modes of transactions in the upcoming 5 years will be
  - Online
  - Cheque
  - Plastic money
- 6) Government policies and schemes will start reaching the rural areas
- 7) SHGs will help people in villages in being digitally literate and will promote the concept of CASHLESS SOCIETY in that village
- 8) More ATMs and swipe machines will be installed in most of the villages

#### **Phase-II(2021-2026)**

- 1) More than 65% of the population will be using E-banking and Online mode of transactions and this percentage will keep growing steadily. By 2030 more than 70% of the population will be using E-banking
- 2) People will be doing more than 80% of the transactions through mobile banking or net banking
- 3) Government will mainly focus on making India a cashless country and thus Government will keep launching various schemes and policies will even reach to smallest villages
- 4) Plastic money users i.e. Credit card users, Debit card users, Smart card users will keep growing at a steady rate of 4%-5% per annum
- 5) The mobile banking penetration in India, currently being around 50%, will increase to 60%-65%
- 6) New ways of transactions such as transacting by biometric or eye scanning, will be commonly used everywhere. This will also reach to the poorest sections of the society and will help in making them Digitally Literate.

## CHAPTER-9

### DESIRABLE FUTURE

This is the ideal future which we think is essential to make India a superpower till 2030. But , for this ideal future , we need stable government , people's support and good implementation of government policies till the root levels of India.

#### **Phase 1-2016-2021**

##### Infrastructure Development

- Everyone will be connected through bank accounts through various governmental schemes.so; everyone will be a part of formal banking system. This will help government to spread awareness about E-banking among people
- Services of online banking will be provided everywhere and anytime .This will help people to overcome their problems related E-banking.
- Internet connectivity all over India at reasonable rate. This will help to increase efficiency of E-banking.
- Sufficient energy resources will be available for electricity generation and supply. Electricity is one of the most important resource required for E-banking .so, if there is 24/7 supply of electricity ,then there will be no problem in performing online transactions

##### Services and awareness

- User- Friendly Services will be available on monthly/annual basis.
- All services will be available everywhere, anytime and quick.
- With the help of self-help groups, NGOs and government officers the awareness will be spread all over India ,included rural and remote areas
- Digital literacy in India will be 85-90%

##### Uses

- 85% people will be Dependent On E-Banking
- All services(included both government and private) will be available online.
- Following services and many more services will available online-



- Payment of school fees
- Recharge of internet, set top box and phone
- All taxes
- Shopping
- salaries
- All government payments will be paid online
- Cash payments-limitation of 3000 RS

There will be limitations on cash payments so that you are not allowed to pay more than 3000 RS with cash per month

- Most preferable mode of transfer will be-
  - 1)online
  - 2)UPI and BHIM
  - 3)plastic money

### **Phase 2-2021-2026**

We have proposed new mode of transaction which will work as an ideal mode of transaction for Indian economy-B.V.M.T.

### **B.V.M.T.- Biometric verification and money transfer**

What will you need to use this system?

- You need only aadhar card so that government will create biometric password for each person.
- You need nothing other than aadhar card and bank account in any bank in this system.

How will it works?

Suppose, you went to the restaurant and you have to pay 1435 RS, Only thing you need to do is-Just scan your finger on biometric scanner. Money will be transferred from your account to hotel manager's account immediately, within few seconds, payment will be done. No need to carry any cash and cards, No need of internet. Because your thumb will be your bank.

How it will overcome security threats of other mode of transactions?

1) Misuse of lost cards and money-

In B.V.M.T., there will be no need of anything to carry, because your thumb will be your bank.

2) Hacking of online account-

B.V.M.T is completely offline mode of transfer and all servers of this network will be under govt. control so, there will be least probability of hacking.

3) Copying of finger print and misuse of it –

There will be system in which scanner will sense your sweat on your finger tip which is non-identical for everyone so, even if someone copied your finger print ,then also he can't misuse it.

Other advantages

1) Eco-friendly mode-no use of paper .so, totally pollution free mode of transactions. This will help in the conservation of trees and will provide other environmental benefits also.

2) This system will be under government's control so, all profit will be of government, and As a result wealth drain will stop. FDIs in India along with the wealth generation at the local level will help the government for providing better facilities.

Desirable future

- Internet access –everywhere almost free. Everyone will be able to access the bank websites and get the required information
- All services will be quick ,user-friendly and efficient
- Cards or cash: B.V.M.T. Plastic money and cash transactions will be almost negligible and will gradually decrease to 0%.People will prefer using B.V.M.T instead of cash transactions as it will be easier and accessible to all including rural areas.
- 99% of transactions will be done by using E-banking. Cash transactions will be almost negligible
- From pan shop to hospital, everywhere transactions B.V.M.T will be available
- Internet Servers will more efficient and can operate at very high speeds without any interruptions which will ultimately help in reducing time consumption and human labour.
- Transactions more than 1lakh will done with triple security-password ,onetime code ,B.V.M.T
- Transactions more than 10000 will done with Double security-B.V.M.T and onetime code

## **CHAPTER-10**

### **ACTION PLANS**

These are the actions which people of India and Government should take to achieve the goal of desirable future,

#### Infrastructure development

- Deepening of banking system- with the help of self-help groups (SHGs) and NGOs, Everyone should be connected to formal Indian banking system.

Every person in rural India will be connected to formal Indian banking system. This will help to promote e-banking in remote areas.

- Having bank account must be compulsory for everyone.
- Swipe machines should be installed in all remote and rural areas.
- Every person in India will get e-banking facilities anywhere, anytime all over India.
- Setting internet towers and providing internet facilities all over India .This will help to increase efficiency of online money transactions. This will decrease interruptions and problems while performing online transactions.
- Self-sustainable energy source should be created and provided 24/7.sufficient electricity supply will help to improve quality of services offered.
- Better implementation of government schemes.

#### Services and awareness

- Quick and more user friendly services should introduce and developed by the Indian Government and private companies.
- This will led to increased customer satisfaction and decrease customer problems.
- The government should try to improve economic relations of India with other countries in order to promote and provide new technological services. This will help to increase quality of services offered.
- Digital literacy campaigns should be promoted and organizes in the rural areas. This will led to increase in no. of e-banking users.

- This will reduce misconceptions in minds of people

### USE

- Government should focus on promoting cashless transactions and restricting cash transactions
- Government payments like taxes should be made online
- We should try to promote the concept of Cashless Society in the nearby areas

## **CHAPTER-11**

### **CONCLUSION**

Today E-banking or Net banking and cashless transactions have become very important for the fast development of Indian Economy. After the wild card decision on Demonetization by the Modi government Indian Economy will take giant strides in its development. Looking at the present situation there is an urgent need for the promotion of the Cashless society by the Indian government.

In today's world of globalization, promoting cashless society is the necessary thing for development of any country. Now, it is need of INDIA to develop a user friendly ,more efficient mode of online banking which will boost the E-banking sector in India.

But before we should at least try to spread awareness about benefits and threats of e-banking, for which we can take help of online shopping companies like amazon and flip-cart.

Today, there is exponential growth observed in E-banking sector .but, to have controlled and sustainable growth of this sector our government should take some serious steps for promotion and regulation of online transactions.

Finally, we conclude this project to a following statement- "E-banking is a necessary thing for development and progress of any country"

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