

A Study of Growth Perspective and Challenges Involved In Digital Banking

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Abstract:

Drastic changes have been noticed in banking industry in 21st century due to deportment of customers. A rapid transmute in financial services made it compulsory for the banking sector to promote digital banking in lieu of traditional banking. Information technology and global convergence are two major factors in transforming banking system. A paradigm shift has been observed in Indian banking scope, structure, functions and context. With the increasing thrust of secure and expeditious financial services digital banking is most assertive decision by RBI. The information and communication technology revolution changed the banking environment. “Technology driven products “are now pillars for the banking industry in the present era to make the banking feasible for those who were lacking behind due to distance or unavailability of bank branches in the area. This study endeavors to explore the digital banking services provided by Banks of India in addition to analyzing the growth of different digital banking channels by amassing the data from secondary sources. The research found the favorable increase in volume and value of transactions through alternate channels of digital banking.

Key words: Digital banking, ATM, POS, Mobile banking, Growth rate, CAGR

Introduction:

Digital banking is the advancement of all the traditional banking activities and programs that historically were only available to customers only inside the bank branch. It includes activities such as Money Deposits, Withdrawals, Fund Transfers, mobile banking, Point of sale, E-

ticketing, Online shopping. Digital banking is a move from “Brick and Mortar” banking to internet banking. Customers and bankers both get advantage by convenient and faster banking services. It is possible due to various electronic banking channels such as ATM, Mobile banking, Mobile wallets, and POS machines.

The digital banking commenced in the form of ATM machines and cards which were launched in 1960. With the advent of internet in 1980 the retailers connected with suppliers and consumers. The internet comes forth by 1990 and it made the online banking a norm. The improvement of broadband and e-commerce systems in early 2000s led traditional banking to modern digital banking world today.

The advent of smart phones in the next decade opened the shutters for transactions go beyond ATM machines because the smart phones used as a mode of digital banking. April 11, 2016 was a historical day for India when Government launched its Unified Payment Interface (UPI), a digital banking system that allows people to easily transfer money to and from a bank account to others through a smart phone. It's these smart phones, and a growing digital banking culture, that allow the unbanked people to open accounts and those with bank accounts can easily manage their finances now. Some of the important channels of digital banking are:

Card: Different types of cards are in existence but most used cards are Debit card, credit card and ATM card. Debit card allows the customer to withdrawal cash, to swipe the card on point of sales (POS) machines, online shopping and e-commerce transactions.

Credit card allows the card holder to use the card against amount of credit approved by card issuer. It can be used at point of sales (POS) machines, for online shopping and e-commerce transactions. Advance cash facility is also available on the prescribed interest rate.

An ATM card is one whose could use only for cash withdrawal. Online shopping and e-commerce transactions facilities are not available in it.

Automatic Teller Machine (ATM): ATM is treated as a mini bank branch which performs functions such as cash withdrawal, balance enquiry, mini statement, cheque book request, fund

transfer, mobile recharge, insurance premium payment, update mobile/aadhar number, cash deposit and cheques deposit.

Point of sales machines (POS): Point of sales terminal is payment device initially installed by IBM in 1970s. These are installed at merchant location through which customer can pay for goods and services purchased to merchant by swiping or inserting the Debit/ Credit card at POS terminal. POS terminals process the transaction at merchant location by accepting the plastic cards with magnetic strips or chip based cards.

Literature Review:

Sujata T.Lata (2017) concluded that bank should provide effective and tailored services to its customers. Pre demonetization banks were making efforts to make consumer aware about new channels of digital banking. But post demonetization digital banking usage became necessity of customers. People of higher and middle class both were captured by digital banking channels.

Santani Tanya (2017) revealed many new online payment wallets entered and usage of wallet like paytm got pace post demonetization. Digital banking got momentum and it found reliable, speedy and easy to use. Despite many benefits security is founded still a big problem. Digital transactions have authentic record, save paper and found quick and efficient.

Veena K.P, Suheel (2016) observed that the internet banking provider must understand their customer attitude towards technology. The e-banking has replaced the traditional banking and customers have been converted from paper banking to card or e-banking. The various channels of e-banking like debit card, credit card, mobile banking, net banking, EFT and ECS are the result of revolutionary changes in digital era. Bill payment which is followed by funds transfer is the e-banking services which satisfy the customers most.

Reddy D.N.V Krishna & Reddy M Sudhir (2015) investigated that people are aware of e-banking services. Mostly consumer use it because of its 24/7 feature. People found e-banking

safe, secure and time saving. They found that e-banking provide up to date information and ATM and bill payment are frequently used services.

Mathivanan B & Kavitha. S (2015) described that bank officials are the main source of advertisement. Cash deposit machines is the most preferred e-banking channel. Innovative and efficient service is the most important factor which motivates the customers to use e-banking. Limited number of cash deposit machines is the main issue which restricts people to use e-banking followed by security.

Rajput Uday Singh (2015) revealed that e-banking is the boon of technology. E-banking reduced the queues of cash deposit/ withdrawal or bill payments. Its 24/7 feature is considered most important feature. The awareness level for e-banking among private and foreign bank respondents are higher than public sector banks respondents. Services like fund transfer and credit card dues payment are often used in private and foreign banks. Foreign banks consumers face fewer problems because they care for their customers more than private and public sector banks.

Wang Yen Yao et al. (2015) made a study on the perception of customers in UK towards digital banking and found that customers are highly satisfied by these services. The study indicates that money transfer and bill payments are most widely used internet banking facilities. The customers are concerned about security issues, banks are formulating technologies to cope up with cyber frauds.

Elavarasi.R & Surulivel (2014) concluded that ATM and internet banking are most preferred transactions. Younger generation use this service more than old people. Customers are more satisfied from services of private banks than public sector banks. Customers are more concerned about security when open internet banking account. They have so many doubts or can say fear in mind when open internet banking account.

Objectives of the study:

1. To identify the various digital banking services or products provided by Banks of India.

2. To study and analyze the growth of digital banking channels.
3. To study the challenges faced by Banks while adopting the new technology.

Research Methodology:

The present study is predicated on secondary data and is analytical and exploratory in nature. To analyze the data various statistical and mathematical tools such as simple growth rate, percentage, average and compounded average growth rate (CAGR) are used. Data of past six years is amassed from various published reports. The parameters of the study are different digital banking channels named Automatic teller machines and transactions done through Electronic payment mode such as Point of sale machines (POS) and mobile banking.

Here Growth rate is calculated by:

$$GR = (V_t - V_{t-1}) / V_{t-1} \times 100$$

Where:

V_t indicates value of given parameter in current year and

V_{t-1} indicates value of given parameter in the previous year.

Simple tabular analysis and relevant graphs are used for analysis purpose wherever found relevant for particular study. CAGR is a relatively simple metric which quantifies the average rate of an investment's growth over a variable period of time. Because of this simplicity, this metric is a flexible one and thus has a variety of uses. CAGR is used to calculate the overall growth rate of e-banking.

Formula to calculate CAGR is given below:

$$CAGR = \left(\frac{\text{Ending Value}}{\text{Beginning Value}} \right)^{\left(\frac{1}{\text{no. of years}} \right)} - 1$$

Analysis and interpretation:

Data on ATM Transactions

Table 1

Volume and Value of ATM transactions for the period March 2013 to March 2018

Year	Volume (ACTUALS)	Growth Rate	Value (Million)	Growth Rate
March 2013	30461141		136000	
March 2014	124493565	309%	539052.6814	296%
March 2015	624205135	401%	1987479.84	269%
March 2016	731722405	17%	2245821.75	13%
March 2017	710108656	-3%	2259457.4	1%
March 2018	774943830	9%	2663502	18%
Total	2995934732		9831313.671	
Average	499322455.3		1638552.279	
CAGR	71.50%		104.10%	

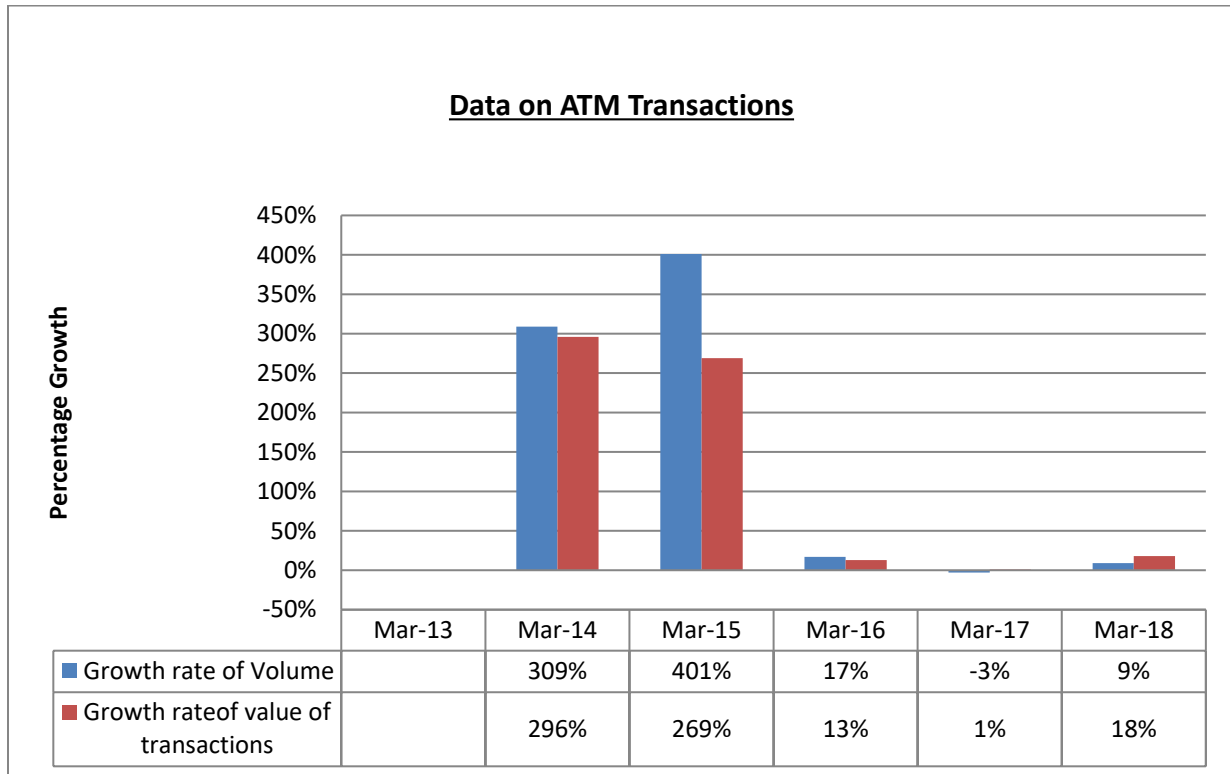
Source: Author's own calculation by basic data from

<http://rbidocs.rbi.org.in/rdocs/ATM/PDFs/ATMCS0320183246CA4C56D84E7CB208A15224EA4965.PDF>

Table 1 shows the Volume of ATM transactions and value of those transactions over 6 years. On studying the figures we found that there has been a tremendous growth in the use ATM transactions and the value of transactions in the initial years under study i.e. from march 2013 to march 2014 and from March 2014 to March 2015. The data reveals that there is a negative growth rate in transactions volume from March 2016 to March 2017 followed by a gradual increase from March 2017 to march 2018. The value of transactions through ATM shows a sharp increase in the growth rate from March 2013 to March 2014 and from March 2014 to March 2015.

March 2015 onwards the value of transactions being carried out has been increasing but on very low rates

Chart 1



Source: Prepared by the authors using RBI data

Data on POS Transactions

Table 2

Volume and Value of POS transactions for the period March 2013 to March 2018

Year	Volume (ACTUALS)	Growth Rate	Value (Million)	Growth Rate
March 2013	7395395		11720	
March 2014	26302892	256%	41483.35	254%
March 2015	76105726	189%	108283.2	161%
March 2016	112868336	48%	134631.9	24%
March 2017	271172292	140%	356991.3	165%

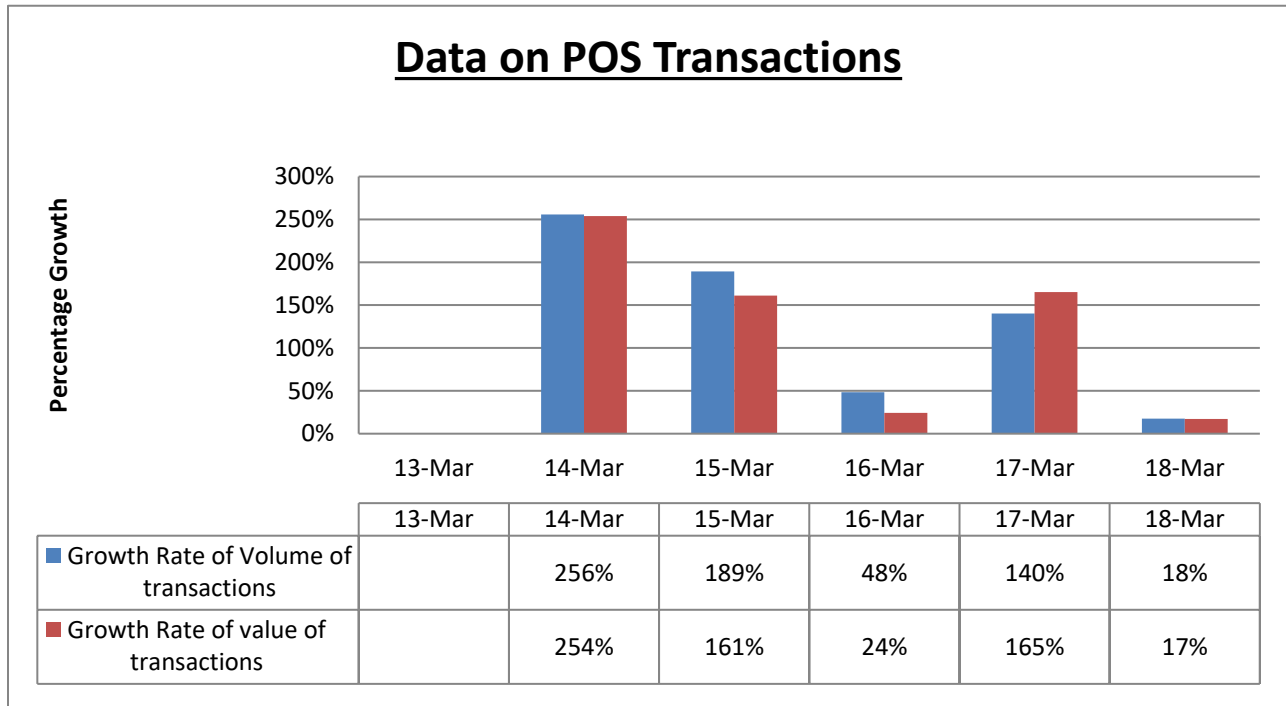
March 2018	318899139	18%	418567	17%
Total	812743780		1071677	
Average	33.86		178612.8	
CAGR	87.26%		81.47%	

Source: Author’s own calculation by basic data from

<http://rbidocs.rbi.org.in/rdocs/ATM/PDFs/ATMCS0320183246CA4C56D84E7CB208A15224EA4965.PDF>

Table 2 shows Volume of POS transactions and value of those transactions over 6 years. On studying the figures we found that there is a huge growth in the POS transactions and the value of transactions in the initial years under study i.e. from march 2013 to march 2014 and from March 2014 to March 2015. Further the data reveals that there is a low growth rate in transactions volume and value from March 2015 to march 2016 followed by a steep increase from March 2016 to march 2017. Again from March 2017 to march 2018 the growth rate is decreased.

Chart2



Source: Prepared by the authors using RBI data

Data on Mobile Transactions:

Table 3

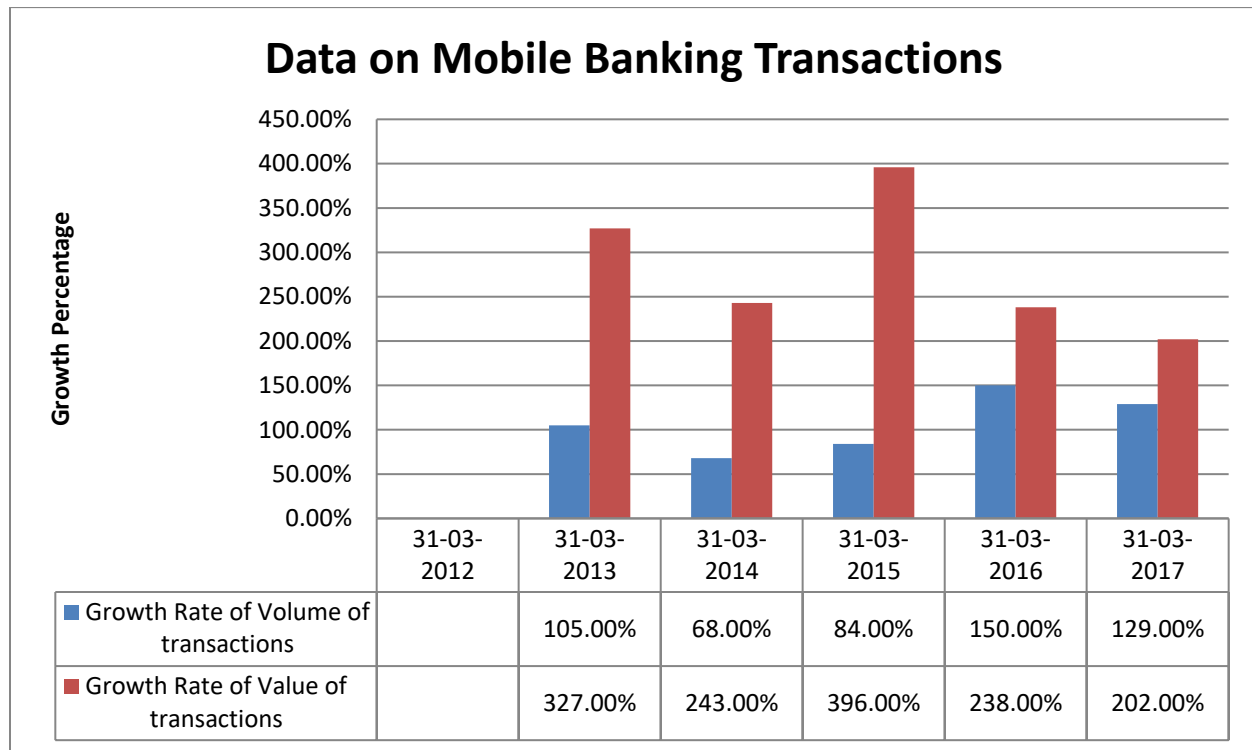
Volume and Value of Mobile transactions for the period March 2012 to March 2017

Year	Volume (Millions of Transactions)	Growth Rate	Value (Billion)	Growth Rate
March 2012	3.12		2.32	
March 2013	6.40	105%	9.91	327%
March 2014	10.74	68%	34.07	243%
March 2015	19.76	84%	169.14	396%
March 2016	49.47	150%	572.80	238%
March 2017	113.65	129%	1730.88	202%
Total	203.14		2519.12	
Average	33.86		419.85	
CAGR	81.30%		201.16%	

Source: Author's own calculation by basic data from RBI, <https://rbi.org.in/scripts/NEFTView.aspx>, accessed on September 9, 2017

Table 3 shows that volume of transactions through mobile banking has a great significance in banking sector. Continuous growth has been noticed in mobile transactions from March 2012 to March 2017. But growth rate between March 2015-16 was on its peak. The value of the transactions through mobile banking has been rapidly growing. Maximum growth rate in volume has been found between March 2014-15 instead of March 2015-16.

Chart 3



Source: Prepared by the authors using RBI data

Challenges in adoption of Digital banking:

Indian banking industry facing following challenges while adopting new technologies:

- Security issue is the most common threat for the customers while availing digital banking services. Customer does not find it safe because contemplate that data can be loss or misuse due to technical defaults.
- Lack of confidence on both the sides either of banks or customers in the adoption of new technology or technology changes.
- Rural customers do not use technology in equal proportion to urban customers.
- Lack of proper infrastructure for digital banking channels in both urban and rural area.

Findings of the study:

- It is found that ATM transactions volume and growth rate has been fallen between March 2016-2017 and the reason is demonetization.
- POS transaction growth rate never gone in negative but it get decline because of introduction of new digital banking channels.
- While ATM transaction growth rate is declining, Mobile banking growth rate is increasing simultaneously because people are moving towards mobile wallets, UPI and BHIM from 2016 onwards.
- Digital banking is getting competitive advantage as compare to brick and mortar banking because of its user friendly characteristics.

Recommendations and suggestions:

- Awareness among customers of Rural and urban areas should be created by banks. Education regarding digital banking should be provided to the customers.
- Banks employees should be trained by the experts through technical session on technology so that employees could train the customers and influence them for maximum usage of digital banking.
- Special attention on security and safety of transactions and customer data should be given by the banks and provide the immediate solution to customers in case of any problem.
- Events or seminars should be arranged by banks for technology illiterate customers.
- Equal treatment should be given to rural customers so that they could get benefitted by availing digital banking services.
- Huge investment should be made by Government to make customers technology savvy.

Conclusion:

Although Banks of India are making earnest efforts to promote digital banking yet large population is wary of the concept. Young generation is more prone to technology because of its

innovative features and benefits. UPI and mobile wallets make the mobile banking easier for the customer. RBI must come with new models of digital channels to outreach to the unbanked population. Measures should be taken to provide safe and secure digital banking to its customers to enrich the trust of customers in it. The usage of digital banking in unequal proportion by urban and rural population is still a challenge that is needed to be tackle. In the present era digital banking is a preferred mode of banking rather than acceptable mode of banking.

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