



STUDY ON IMPACT OF COVID – 19 ON ACCEPTANCE OF DIGITAL PAYMENTS

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ABSTRACT

Digital Banking provides one step solution for all the banking needs like cash deposit, withdrawals, fund transfer etc. In the cashless economy, all transactions are digitally recorded. Digitalization of transactions has made the process more transparent and accountable. The types of digital payments includes mobile wallets, plastic money like debit and credit cards, net banking. Mobile wallets are virtual wallets on mobile phone. The money is transferred in these wallets using debit/credit cards or Net banking. Digital banking can be used to pay bills and make online purchases. Plastic money can be used for withdrawing cash from ATM, making online payments and swiping for purchases. NET banking involves transfer of funds from one bank account to another using electronic funds transfer (NEFT), real time gross settlement (RTGS) at a nominal transaction cost. The advent of demonetization in November-2017 has led to increase in digital transactions. That time there was liquidity crunch and people were using more of the alternative methods such as net banking, e wallets, debit and credit cards. The cashless transactions means there is absence of cash in the market and transactions are done using credit/debit cards, electronic fund transfer like RTGS (Real Time Gross Settlement) and NEFT (National Electronics Fund Transfer). In 2020, Corona virus epidemic originated in China and from there it traveled to all the other parts of the world. The first case of Corona was reported in India on 30th Jan, 2020. On 22nd March, fourteen hours voluntary curfew was imposed on appeal by Prime Minister Modi in 75 districts which were corona infected and all the major cities. On 24th March, he announced nationwide lockdown for 21 days. Further this lockdown was increased till 31st May. Due to risk of transmission of corona virus through physical currency, people once again moved to digital transactions.

Keywords : Cashless transactions, Demonetization, Digitalization, Covid -19, Pandemic

Introduction

This study related to trend in Digital Banking is based on impact of these two major factors as Demonetization and another is a Pandemic – Covid 19.

Demonetization in 2017 forced people in ambit of Digital transactions. Due to unavailability of cash, people were forced to adopt alternative channels of cash transactions like NEFT, RTGS, IMPS, E wallets, Credit cards etc. This was not only convenient but also reduced cash handling costs. It also helps in providing operational efficiency to the banks so banks also focused on diverting customers towards digital channels.

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In 2020, there was a country wide lockdown due to Corona virus attack. Corona virus has brought human suffering as well as economic suffering. Banking services comes under essential services so India's Central Bank took a decision to operate with minimum capacity. They decided to open only one branch every 5 kms. It had to safeguard thousands of employees and at the same time keeps the economy running. All banks in the country were providing at least four services to its customers - cash deposits and withdrawals, cheque

clearances, government transactions, utility bill payments and remittances. Besides, the government has also reduced charges for digital trade transaction and ATM cash withdrawals to promote digital financial transactions at the time of Covid-19 pandemic

According to a report by KPMG India “Incentivizing merchants, retailers and consumers through lower taxation, special incentive schemes to shift to digital payment transactions will be one of the key policy recommendation for the banks.” It can be seen that the preference is to move towards digitization. The secondary data of HDFC Bank, which is one of the largest private sector bank in India has been collected. It has been analyzed how demonetization has led to increase in e banking channels of HDFC Bank. Covid -19 again diverted the customers towards Digital Banking. The cashless transaction has reduced the cost for banks. HDFC Bank operates in a highly automated environment in terms of information technology and communication systems. The Bank has the best technology. All the branches have online connectivity

Review of literature

1. Pranjali A. Shendge, Bhushan G. Shelar, Smitaraja S. Kapase “Impact and Importance of Cashless Transaction in India” International Journal of Current Trends in Engineering & Research (2017) The Research paper focuses on impact and importance of cashless policy in India. Cashless policy will reduce cash related corruption and attract more foreign investors to the country. It is expected that its impact will be felt in modernization of payments system. The payment industry in itself keeps on evolving with the ever changing consumer sentiments and the needs of the businesses. An innovation in this space is thus a continuous process, while the adoption of each of new development takes its own pace to penetrate.
2. Pradeep H. Tawade “Future and scope of cashless economy India” International Journal of Advance Research and Innovative Ideas in Education

(2017) described that 85% of global payments still made using cash. One of the main reasons is that there is nothing to truly compete with the flexibility of notes and coins. The digital era is something to embrace, and new methods of payments will continue to be introduced. But Indians need to recognize the risks and benefits of different payment instruments, the risks associated with electronic payment instruments are far more diverse and severe. Recently huge data of debit card was stolen by hackers

3. Arvind Kumar “Demonetization and Cashless Banking Transactions in India” International Journal of New Innovations in Engineering and Technology (2017) depicted that Demonetization affects the economy through the liquidity side. Demonetization is progressive shift to a cashless economy with a greater focus on electronic transactions. Rising use of credit/debit cards, net banking and other online payment mechanisms will be another positive effect of demonetization, as these would not only lower transaction costs but many other benefits as well.

Objectives

1. To study various e banking services of banks
2. To explore various advantages of cashless transactions.
3. To examine the impact of demonetization on selected digital banking transactions.
4. To identify impact of covid-19 on selected digital banking services

Hypothesis

- H₀ There is no significant correlation in between selected digital banking services and demonetization along with covid -19 factor.
- H_a There is a significant correlation in between selected digital banking services and demonetization along with covid -19 factor.
- H₀₁ There is no significant difference in between mean of selected digital banking services on the basis of selected year of study.

H₀1 There is a significant difference in between mean of selected digital banking services on the basis of selected year of study. **Research Design** : Exploratory

Data Collection : Secondary Data

Sample size : Time series(6years) **Sampling Technique** :

Stratified **Variables** : Dependent Variable - NEFT, RTGS, Mobile Banking Digital banking services

Independent Variable - Economic factors as

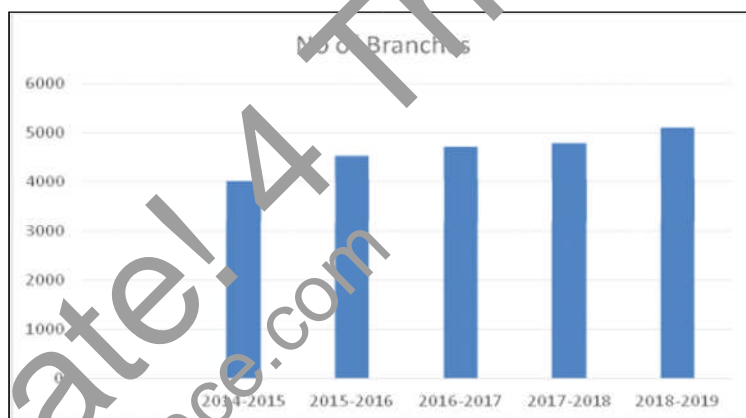
1. Demonetization and
2. Covid19

Data Description

2016-2017 2017-2018 –Demonetization Impact 2018-

1) **Tabular and graphical representation of total no. of branches of HDFC Bank**

YEAR	Number of Branches
2014-2015	4014
2015-2016	4520
2016-2017	4715
2017-2018	4787
2018-2019	5103

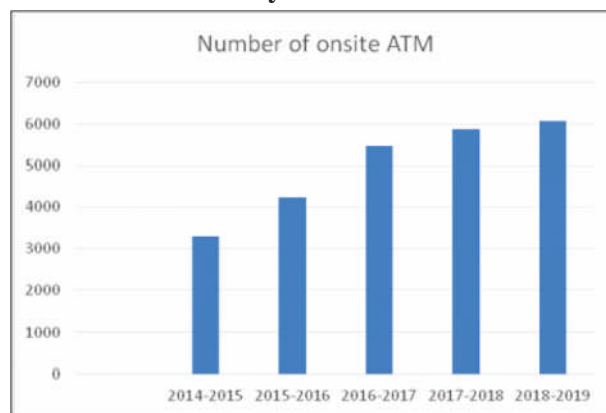


Source: <https://rbi.org.in/>

Inference : From the above tabular and chart it can be seen that number of branches increases every year. The number of branches in 2014-15 was 4014 and it increased to 5103 in 2018-19.

2) **Tabular and graphical representation of total number of ATM's installed by HDFC Bank**

YEAR	Number of onsite ATM
2014-2015	3,295
2015-2016	4,235
2016-2017	5,471
2017-2018	5,874
2018-2019	6,069



Source: <https://rbi.org.in/>

2019 2019-2020

Findings

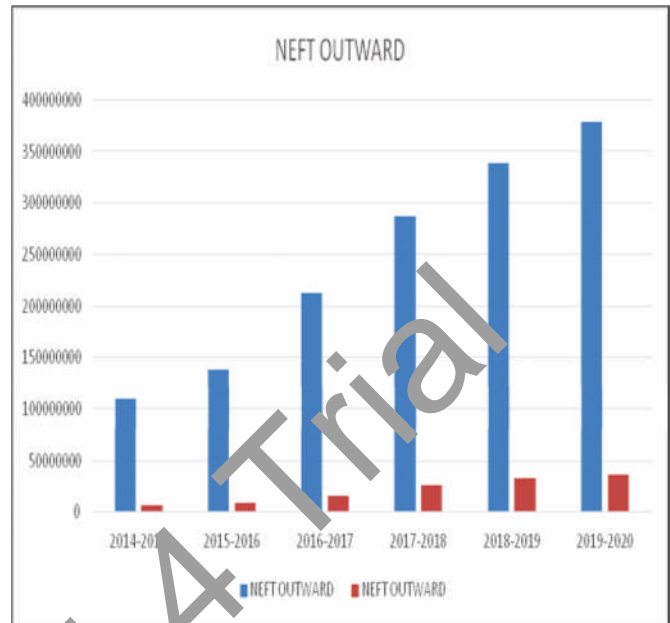
Jan 2020 – April 2020 Covid 19 impact

The present study covers the period from April 2014 to March 2020 by collecting secondary data. The secondary data was collected from published journals, research papers, RBI website, conference paper and working paper.

Inference The chart and tabular interpretation shows that from 3295 branches in 2014-15, the number of onsite ATMs have doubled to 6069 in 2018-19.

3) Graphical and tabular representation of NEFT – Total Outward Debits of HDFC Bank

Year	TOTAL OUTWARD DEBITS	
	NO. OF TRANSACTIONS	AMOUNT (RS. IN MILLIONS)
2014-2015	110165895	6912446.63
2015-2016	138054151	9128540.7
2016-2017	212972315	15987762.59
2017-2018	287063721	26078555.17
2018-2019	338868194	33195248.5
2019-2020	378895978	36535602.35

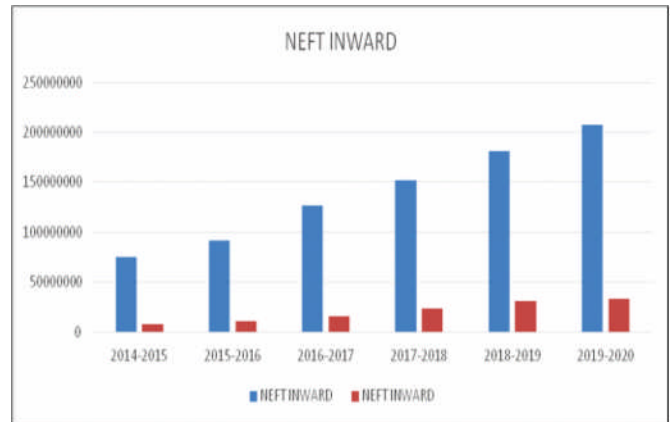


Source: <https://rbi.org.in/>

Inference : The tabular and graphical representation shows there is a steep increase in NEFT transactions in year 2016-17 over the year 2015-16. In 2017-18 and 2018-19 the volume of transactions increased further by 35% and 18%. Maximum transactions were done after the year 2015-16 and 2016-17. There is 25% increase in number of transactions in year 2017-18 and 54% increased by 63% and 27% in 2018-19.

4) Tabular and Graphical representation of NEFT-Inward Credits in HDFC Bank

YEAR	RECEIVED INWARD CREDITS	
	NO. OF TRANSACTIONS	AMOUNT (RS. IN MILLIONS)
2014-2015	74757562	8031358.62
2015-2016	91150780	10608269.87
2016-2017	126878012	15119376.09
2017-2018	151596362	23700668.43
2018-2019	180754639	31250723.7
2019-2020	207296877	32907763.3



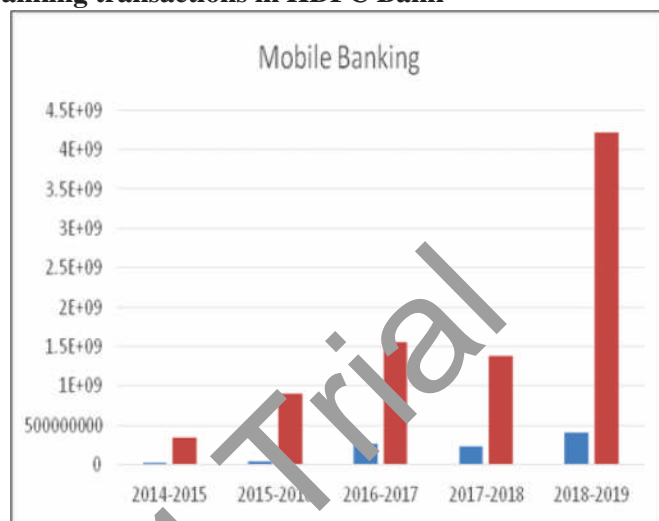
Source: <https://rbi.org.in/>

demonetization was announced by the government. The number of transactions in 2016-17. The percentage

There is increase of 22% transactions in 2015-16 and

5) Graphical and Tabular representation of Mobile Banking transactions in HDFC Bank

YEAR	VOLUME	VALUE (IN 000)
2014-2015	11091012	343869237
2015-2016	41545406	903384733.3
2016-2017	259447377	1547847674
2017-2018	235159796	1380091174
2018-2019	401730695	4218183911



Source: <https://rbi.org.in/>

volume has steadily increased after that. The value of NEFT Outward debits increased by 32% and 75% in year 2015-16 and 2016-17 respectively. In 2017-18

Inference : From the tabular and graphical representation it is inferred that there is substantial increase in NEFT (inward credits) in last five years.

Inference : From the above tabular and graphical representation it is inferred that banking transactions through mobile increased drastically in year 2016-17. There was increase in number of transactions by 275% in 2016-17 over the previous year and there was a drastic

increase of 39% in increase in 2017- 18 and 2018-19 was 13% of the base year. The value of NEFT (inward credits) has increased by 32% and 43% in year 2015-16 and 2016-17 respectively.

Value in 2017-18 increased by 57% and 32% in 2018-19.

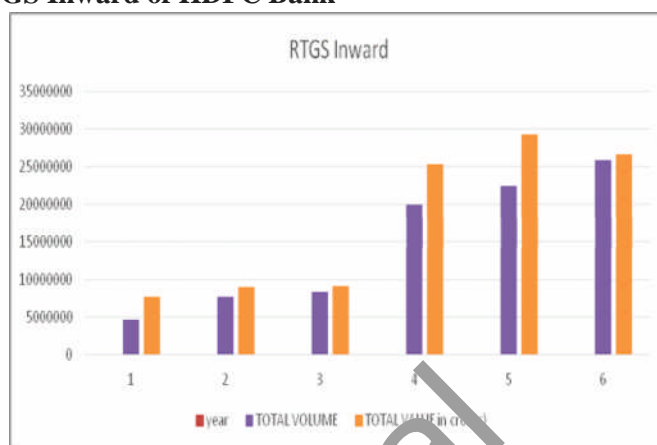
increase in volume by 524% for 2017-18. Here the maximum effect of demonetization could be observed for digital transactions. In 2018-19 again volume increased manifold by 71%. In terms of value also there is a significant increase in amount of transactions done.

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6) Tabular and Graphical representation of Total RTGS Inward of HDFC Bank

YEAR	TOTAL VOLUME	TOTAL VALUE (In Crores)
2014-2015	4747516	7699386.62
2015-2016	7757333	9021097.87
2016-2017	8400727	9112585.15
2017-2018	19888089	25348615.00
2018-2019	22456515	29247106.00
2019-2020	25790145	26599632.94

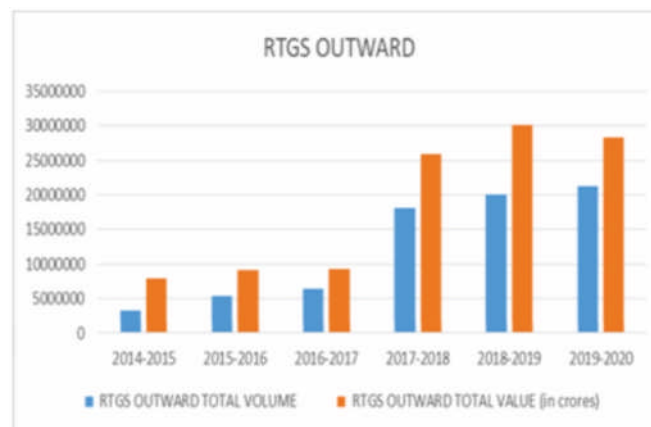


Source: <https://rbi.org.in/>

Inference : From the above tabular and graphical number of transactions over the previous year. Also there representation it can be inferred that RTGS Inward was increase in the value of transactions by 17%. In the transactions has grown in volume and value over the year 2016-17, the growth in number of RTGS Inward years. In the year 2015-16 there was an increase of 63% in transactions is 8%. In 2017-18 it shot to 137% in volume and 178% in value.

7) Tabular and graphical representation of Total RTGS Outward of HDFC Bank

YEAR	TOTAL VOLUME	TOTAL VALUE (In Crores)
2014-2015	322183	7934782
2015-2016	5380964	9190240
2016-2017	6471479	9335537
2017-2018	18109864	25832502



2018-2019	20037007	30130279
2019-2020	21331270	28250182.2

Source: <https://rbi.org.in/>

Inference : From the tabular and graphical representation 180% in 2017-18. It grew by 11% in 2018-19. In terms of RTGS Outward it is inferred that number of RTGS value RTGS outward increased many times to 177% in outward transactions increased by 62% in year 2015-16 2017-18. and by 20% in year 2016-17. It increased drastically to

Total_Volume Total_Value * Year			
Year		Total_Volume	Total_Value
2014.00	Mean	40816833.6000	74889442.1740
	N	5	5
	Std. Deviation	48266487.30706	150364918.92119
2015.00	Mean	5777726.8000	188266576.3480
	N	5	5
	Std. Deviation	57148958.32080	399763731.43193
2016.00	Mean	122833982.0000	319480586.9660
	N	5	5
	Std. Deviation	115585136.26588	686685442.94526
2017.00	Mean	142363566.4000	296210302.9200
	N	5	5
	Std. Deviation	122549729.30233	605908535.57668
2018.00	Mean	192769410.0000	868401453.6400

	N	5	5
	Std. Deviation	176066033.98068	1872585902.08672
2019.00	Mean	158328567.5000	31073295.2000
	N	4	4
	Std. Deviation	170667875.19532	4516107.97313
Total	Mean	117624891.8621	305535689.3462
	N	29	29
	Std. Deviation	124437930.79238	852145766.24735

Source:Spss

Inference : Ha is accepted and it shows a significant correlation in between selected digital banking services and demonetization along with covid -19 factor. It can be seen all the banking transactions like NEFT, RTGS and Mobile Banking increased after Demonetization in November – 2017. Similarly during Covid times from January 2020 onwards people were diverted to Digital transactions as lockdown forced them to stay in doors

Ha1 accepted which shows a significant difference in between mean of selected digital banking services on the basis of selected year of study. Table deictic that mean for mobile banking is **189794857.2000** for volume of Mobile Banking from 2014-2019 and **1678675.45.8600** for amount in Mobile Banking. For RTGS Inward, mean for volume is **14840054.1667** and **17858070.5967** for value. For RTGS Outward, **1242127.8333** is mean for volume of last six years and **145587.0333** for value of last six years. **13879038.6667** is a mean of volume for NEFT Inward and **202963.3367** is a mean for value. **244336709.0000** is mean for volume of NEFT Outward and **21306359.3223** is mean for value of NEFTOutward.

References :

- Arvind Kumar “Demonetization and Cashless Banking Transactions in India”, International Journal of New Innovations in Engineering and Technology (2017) Vol 7 Issue 3– April 2017 ISSN:2319-6319
- Pradeep H. Tawade (2017) “Future d scope of cashless economy India”, International Journal of Advance

Research and Innovative Ideas in Education Vol-2 Issue-3 2017 ISSN (O) 2395- 4396

Richard Baldwin and Beatrice Weder Di Mauro “Economics in The Time of Covid-19” Web:

www.cepr.org, ISBN:978-1-912179-28-2

Shendge Rajali A., Bhushan G., Smitaraja Shelar

S. Kapase (2017), “Impact and Importance of

Cashless Transaction in India”, International

Journal of Current Trends in Engineering &

Research (IJCTER) 3 Issue 4, pp. 22 –28

Web References :

<https://byjus.com/free-ias-prep/cashlesseconomy>

<https://rbi.org.in/>

https://en.wikipedia.org/wiki/2020_coronavirus_pandemic_in_India

[https://www.business-standard.com/article/finance/coronavirus-banks-to-ensure-cashwithdrawals-remittances-at-branches-](https://www.business-standard.com/article/finance/coronavirus-banks-to-ensure-cashwithdrawals-remittances-at-branches-120032200)

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424_1.html

<https://home.kpmg/content/dam/kpmg/in/pdf/2020/04/potential-impact-of-covid-19-on-the-indian-economy.pdf>

<https://www.pwc.in/consulting/financial-services/fintech/dp/impact-of-the-covid-19outbreak-on-digital-payments.html>

