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Digital Payment Saga: Pandemic Impact on ATM Usage in India

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Abstract

In order to make sure that common man gets easy access to all the government services electronically, in the past decade there has been a revolutionary campaign launched by government of India – Digital India programme,. Since then, we are witnessing positive and negative after-effects and experiences in our routine lives. We are front-ending newer challenges and were becoming used-to the new way of getting habitual to the digital way. Nevertheless, during the Covid-19 lockdown since last year; suddenly access to the cash is remaining essentially critical. As the Banks are focusing more and more on digital services, also branches have reduced working hours and on the other hand, customers want to avoid face-to-face or in branch interaction with bank officers . In such scenario Automated teller Machine (ATM) play a critical role in ensuring that consumers get access to their cash 24 X 7. Customer's payment behavior is changing rapidly. Many banks are seeing high adoption of more low-value contactless payments, as well as increased and encouraging online payments transactions. The ATM is still an important self-service channel for cash withdrawal during Covid-19. There are many factors which have influenced customers towards cash withdrawal trends right now. Despite the coronavirus driving up digital transactions, many customers still rely heavily on cash. Customers are seeking more usage of online payments, but also keeping more cash on

hand during a crisis period. This paper intends to take a review over this digital payment saga, related trends (esp. inclination of consumers); and how it has impacted the usage of ATM services during this pandemic phase.

Keywords: ATM, Cash, Digital Payments, Covid-19

Background and Introduction:

In today's fast paced world one of the most essential technologies is doubtlessly what we see, the influence of digitalization that has served as a back-bone and an important pillar of any country's economy. We have seen this transformation gradually since 90s, while there has been liberalization and privatization of Banking industry and new technological advancements in not only the banking systems but as well in the payment products. Digital India programme is a campaign launched by the Government of India on July 2, 2015. This mission has been executed and it has started showing its impact on the lives of citizens and on businesses. In normal situations (Pre Covid-19) this has provided a prospect to transform the lives of the citizens through digital technologies even after facing many challenges in terms of infrastructure. We have taken this challenge by becoming a part of this digitally empowered society and knowledge economy. Moreover, demonetization further pushed us towards a cashless economy, as the government can slow the circulation of physical currency and move towards more digital options.

Considering the world crisis of Pandemic that we all are witnessing commonly is about Covid-19 or coronavirus that has completely shattered the world economy and rather the way of life too. The nationwide lockdown announced on account of the spread of COVID-19 from March 2020 got extended far beyond its initial expectations. Later though the nation has started "unlocking", this prolonged lockdown has made a massive impact on the livelihood and various walks of life. We experienced four phases of the lockdown wherein almost all kinds of workplaces were shut, and only essential services could function. Now even after one year of this pandemic, the situation remains critical albeit vaccine is arrived. On front of monetary transactions and its mode; one significant change observed and experienced which cannot be ignored – a heavy rise in the digital transactions. Earlier to pandemic awareness and orientation was on-going yet there was subtle resistance from the common man to switch to the plastic money and later to the online mode. Over the pandemic phase things changed dramatically and huge upsurge in the online transaction has taken place. Using cards, phone, credit notes, etc. are used for the online monetary transaction along-with the usage of ATM which is as well significant. We have considered ATM usage to limit the scope of our study here in this paper. Wherein it was interesting to note the secondary data comprising the consumer behavior and the way they have been influenced during these days of pandemic especially in India.

Digital Payment Scenario

The digital payments in India were at Rs,1638.49 trillion in FY 2019 and are expected to reach Rs.4323.63 trillion by FY 2024, expanding at a compound annual growth rate of 22 % during the FY 2020-2024 period. The increase in digital initiatives such as UPI, BHIM, Rupay, wallets, and other apps leads to an extremely promising future for

digital payments in India. However, security and awareness among Indian customers is the biggest challenge in the industry. Day by day the hacker and technology bug is creating the biggest hurdle in the full functioning of the digital payment system in India.

Depending on where you look, cash may still be king. It's no secret that the pandemic has been forcing consumers to embrace all things digital. That includes paying for everything from clothes to restaurant deliveries through online and card-not-present transactions. These factors are creating new patterns for financial institutions to consider regarding their current cash forecasts – such as reduced transaction frequencies, but increased withdrawal values. So it's important that banks and credit unions closely monitor current transactions and cash withdrawals to make sure they're adequately anticipating the demand at their ATMs.

China was the main driver for a decrease in ATM usage globally with a fall of 30,000 machines. But once China is taken out of the equation, a report by Retail Banking Research (RBR) shows 15,000 more ATMs were in operation at the end of 2019 compared to a year earlier. The biggest rise was seen in India, which experienced its fastest growth since 2016, adding more than 7,000 machines. India's Independent ATM deployers (IADs) installed three times the number of ATMs over 2019 compared to banks, suggesting the growth is in part down to financial inclusion efforts by non-bank institutions attempting to tap consumers in rural areas.

Indians are going to ATMs more than ever before
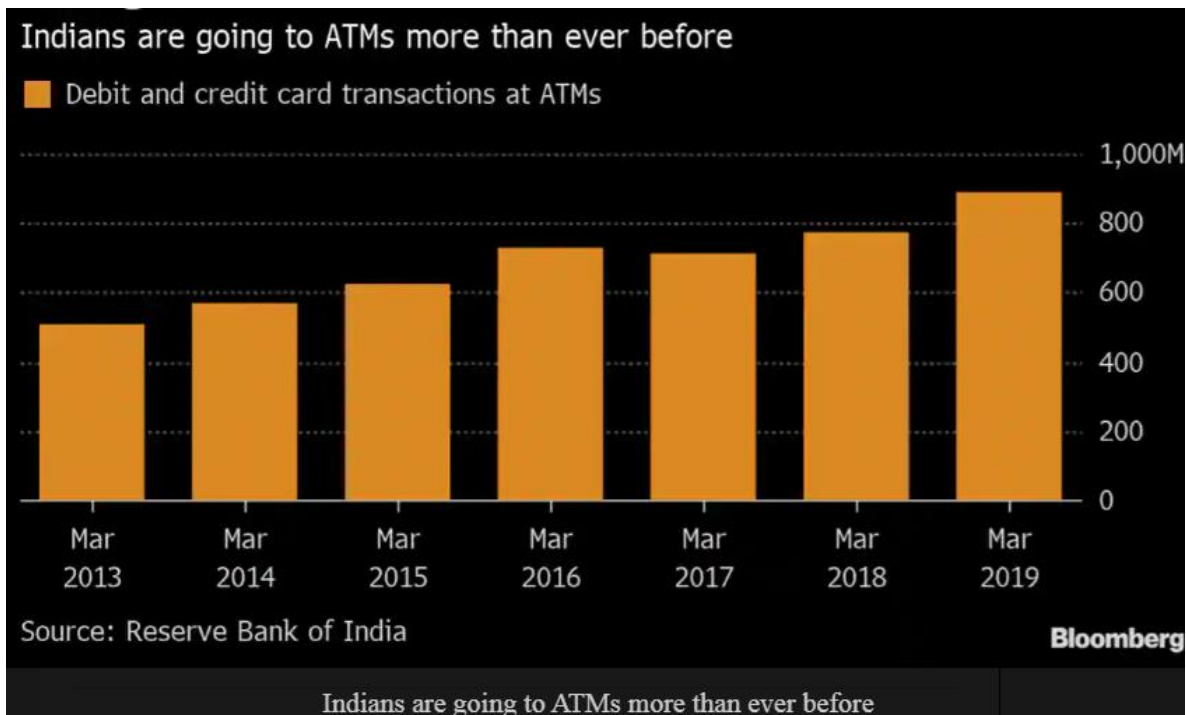
Research Objective

- To depict the cash withdrawal from ATMs in Covid-19 crisis.

- To analyze the percentage increase usage of ATMs during the Covid-19 situation.

Scope of the study

The study primarily focuses on usage of ATM and therefore secondary data from various sources are studied. Multiple E- banking channels are available in banking system and the study is restricted to ATM usage which is the service given by all banks in India throughout all the locations. ATM has relevance in today's world. Majority of Indian population depends on cash for their daily life transactions. ATM serves as an alternative digital banking channel. The source of data is for usage of ATM by customers of various banks during period of from January 2020 till December 2020. This study focuses on the direct effort of digital banking channel, customer experience and migration towards ATM usage.

Research Methodology

The COVID-19 Pandemic phase commonly experienced in the world since past year had raised many curious questions and problem areas popped in front of all of us as faculty researcher colleagues. During the brainstorming one common real life concerns heard was about the Digital transaction and threats associated with it as well. May it be National or International News feeds, concerns raised were nearly similar. We being part of this economy; it was stimulating to spot closely the impacts on the on-going change in payment modes earlier in pre pandemic and later during pandemic situation. So we decided to work on this available data being compiled worldwide and thus arrived at our problem area that we thought of considering for writing our research paper. Thus research study undertaken for this paper has been based on news readings online as well as majorly on secondary data. Most of the data were sourced from the Reserve Bank of India database and other digital financial platforms.

The period of the ATM statistical report taken ranges from 2019 to 2020 and only the report January to June 2020 month was taken for the study. Other sources include articles from various recognized journals, periodical articles, monthly magazines, and the sources on websites.

The researchers have employed percentage analysis to find out the usage of ATMs and digital payments during covid-19 crises. Percentage Analysis refers to a special kind of rate, wherein percentage is used in making comparison between two or more series of data. Basically a percentage is used to determine the relationship between the series.

Formula for percentage analysis

*Percentage = No. of Respondents * 100 Total no.*

As we can see here data is available in comparison between two variables. Most basic application of percentage analysis method is to compare one quantity with other quantity; with second quantity rebased to 100 the researchers used Percentage analysis.

Literature Review

Extensive Literature review has been carried out by the researchers jointly to derive the information scattered on various research publications as well as reports being generated. (Moutinho & Meidan, 1989) states that technological development leads to the usage of a new product like an ATM. It helps in reducing the usage of the bank and interaction between the banker and the customer. (Davies, Moutinho & Curry, 1996) states that ATMs act as a mediator between the banker and the customer. It also acts as a connecting device between persons and artificial intelligence. (Jetley, 2004) The technological development in various sectors illustrates the need for new innovative concepts like ATM in the banking sector as well. The advancement in ATMs in recent times is shown through the environment-friendly approaches adopted by the banks such as solar power ATM centers. Solar power ATM centers will become a necessity soon as India is suffering from the lack of adequate supply of electricity in most of its areas. Power is the biggest barrier to the development of ATMs in India.

(Choodambigai, 2011) This study aims to find the usage of ATM among the customers. The result is that most of the customers use ATM for withdrawal of their money and very few of them use it to verify the account details. This study only concentrates on public sector banks. The paper also aims to study credit card and ATM services based on customers' perceptions.

(Kumar, 2011) This study expresses the reason for the increasing usage of ATMs in India. The ability to provide major facilities like bill payment, money transfer, and other financial services helps customers to save their time. The trust prevalent over the ATMs is high that the customers do not even count after withdrawing their cash from the machine.

(Tuli, Khatri & Yadav, 2012) This study aims to compare public sector and private sector bank ATMs, usage, and other facilities. Only two banks- SBI and ICICI were taken for the study. The result reveals that the public-sector banks dispense old currencies and private sector banks run out of cash most of the time. Thus, both the banks have their limitations. The paper does not consider the bank employee perspectives and concentrates only on the customers who are using the ATM.

 (Premalatha & Sundaram, 2012) The primary concern of this paper is about customer satisfaction while using ATM, and it has been found there is a significant effect on age factor and safety, gender, and tangibility. But there is no significant relation between occupation and satisfaction level. So, it is concluded that the customers expect safety, assurance, and convenience while using ATM and suggests to the banker to provide safe and accurate information to the ATM users to increase reliability. (Bishnoi, 2013). Increase in the usage of ATM customers but lacks to find out the reasons and factors for the same is revealed.

(Renuka & Paulraj, 2014) This study concentrates on customer satisfaction at the point of withdrawal, 24 hours, and on the deposit system. But there is a lack of awareness among the customers while using ATM. It is suggested to the bankers that ratifying customers' comments, doubts and suggestions will increase the reputation of the bank among the customers.

(Sisat & Barbuddhe, 2014) This paper explains the various threats to ATM and Cash Deposit machines. There are three types of risks involved while using the ATM, which are currency fraud, logical attacks, and physical damages. This paper explains the security system of ATM and CDM.

ATM System

Automated teller Machine (ATM) play a critical role in ensuring that consumers get their cash through digital medium. Customer's payment behavior is changing rapidly. ATM , also known as a Cash Point OR cash machine or sometimes is a computerized telecommunication device that allows clients to access financial transactions in a public space without the need for a cashier, human clerk or bank teller The Automated Teller Machine is commonly known as ATM is some countries and ABM (Automated Banking Machine (ABM) in other countries. Some of the common names for ATM are a cash machine, mini bank; cash dispenser, etc. The primary function of ATM is financial transactions, particularly the withdrawal of money. ATMs are convenient, allowing consumers to perform quick self-service transactions such as deposits, cash withdrawals, bill payments, and transfers between accounts. Fees are commonly charged for cash withdrawals by the bank where the account is located, by the operator of the ATM, or by both. Some or all of these fees can be avoided by using an ATM operated directly by the bank that holds the account. Customers can do financial transactions from their accounts easily without any human resources interference (clerk, cashier). ATMs are user-friendly and can be operated and accessed by all. The ATM has a user-friendly electronic display to guide producers step by step for customers. It helps customers to withdraw money anytime 24*7. The machine can be used for other functions like the mini statement, balance verification, change pin, funds transfer, etc. The ATM card is like a plastic smart card with a magnetic strip and microchip along with a unique number on it. A number is a unique number of an individual customer. The cards also contain other details such as CCV code, expiry date, etc. The ATM card is accessed and operated with the help of a PIN(personal identification number) provided to every customer for authentication.

ATMs in Indian context

Types of ATM in India 2020- ATM are an indispensable part of our lives. Withdrawing cash has been made very simple with the advent of the ATM. However, digital banking has replaced a major chunk of cash transactions. This is a good development since digital transactions can always be traced whereas cash transactions cannot always be done so. Though that is understood, cash transactions will be here for many more years to come. And as that is the case, we think it's good for you to know the Types of ATM cards in India. Surprised? Well, contrary to your belief, there is not merely one kind of ATM. There is a bunch of different ones.

   A. **Online ATM** -This type of ATM is connected to the bank's database 24 hours. You can't withdraw beyond the balance you have in your account.
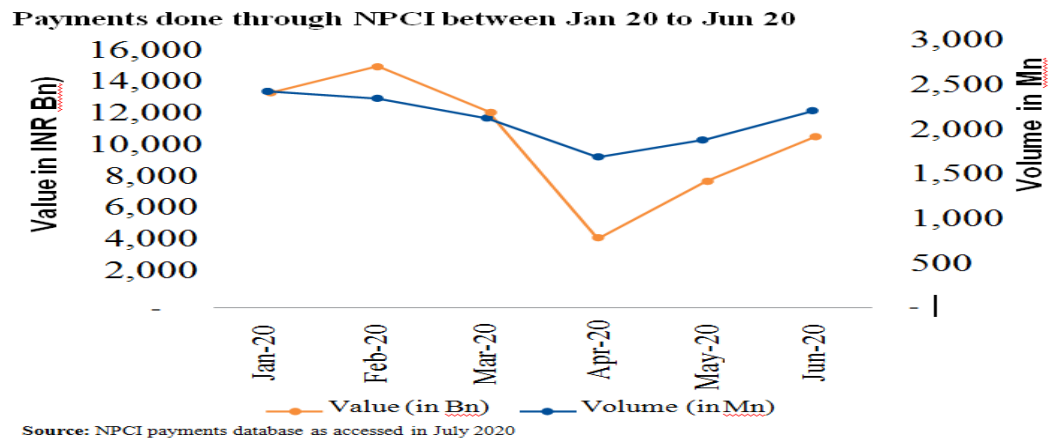
B. **Offline ATM**-This is not connected to the database of the bank. Even if you don't have the required amount in your account, you will be able to withdraw it, if it falls within the prefixed withdrawal amount. For this, the bank may charge some penalty.

C. **Onsite ATM**-ATMs inside the bank compound are known as Onsite ATMs.

D. **Offsite ATM**-The ATMs that are located in various places except inside the bank premises are known as Offsite ATMs.

E. **White Label ATM**-The ATMs that are set up by Non-Banking Financial Companies and offer services are known as White Label ATMs.

F. **Yellow Label ATM**-The ATMs that are provided for E-Commerce reasons.

G. **Brown Label ATM**-A service provider owns the hardware and lease of the machine but a bank manages the cash and connectivity to the bank network. In this case, the ATM is termed Brown Label.

H. **Orange Label ATM**-These ATMs are provided for share transactions.

I. **Pink Label ATM**-Meant only for Women.

J. **Green Label ATM**-These ATMs are provided for agricultural transactions.

Understanding the transitions happening around across all the masses, it was a worthwhile thought to analyze the usage of ATM in Indian context. We being part of this economy; it was interesting to spot closely the influences happening on the on-going change in payment modes pre pandemic and during pandemic situation.

Data Analysis and Discussion

Banks under the guidelines of the Reserve Bank of India have set up NPCI, which is responsible for all retails payments done in India. NPCI acts as an intermediary between the banks and multiple modes of digital payments such as UPI, IMPS, and others. A review of the value and volume of such transactions from January 2020 to June 2020 has depicted a decline in payments in India instead of COVID-19 and accompanying containment measures but has later shown a quick recovery in subsequent months across various modes
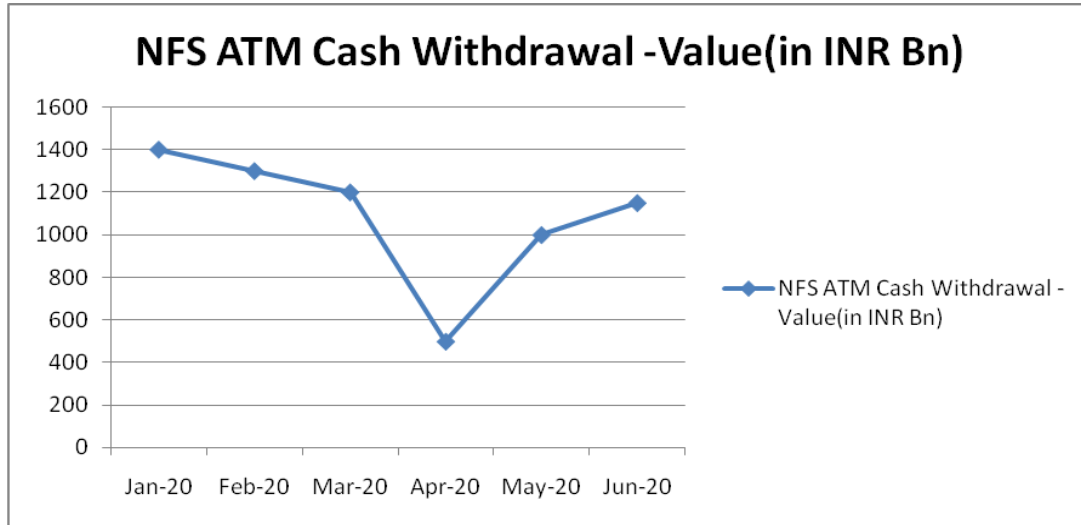
1. **NPCI payment:-**

Payments done through NPCI between Jan 20 to Jun 20

Source: NPCI payments database as accessed in July 2020

The lockdown period was the period of limitations and access to payment transitions. The monthly payment was deferred or stopped. Lockdown caused uncertainty in customers' decisions in doing the payment. The uncertainty was both in terms of value and timing of payment. This is reflected by a 49 % decline in the value of payments in April compared to March 2020 as per NPCI data.

2. **National Financial Switch (NFS) Cash Withdrawals in Value:-**

*(**Source**: NPCI payments database as accessed in July 2020)*

Cash, in general, was treated with caution and reprehension once the lockdown was instituted primarily due to fear of transmission of the COVID-19 virus, lack of access to ATMs, and challenges in the ATM replenishments due to restriction of physical movement. This is reflected as cash withdrawals in April 2020 via ATMs seeing a 52 % decline as compared to January 2020 withdrawals.

3. **National Financial Switch (NFS) Cash Withdrawals in Volume**:-
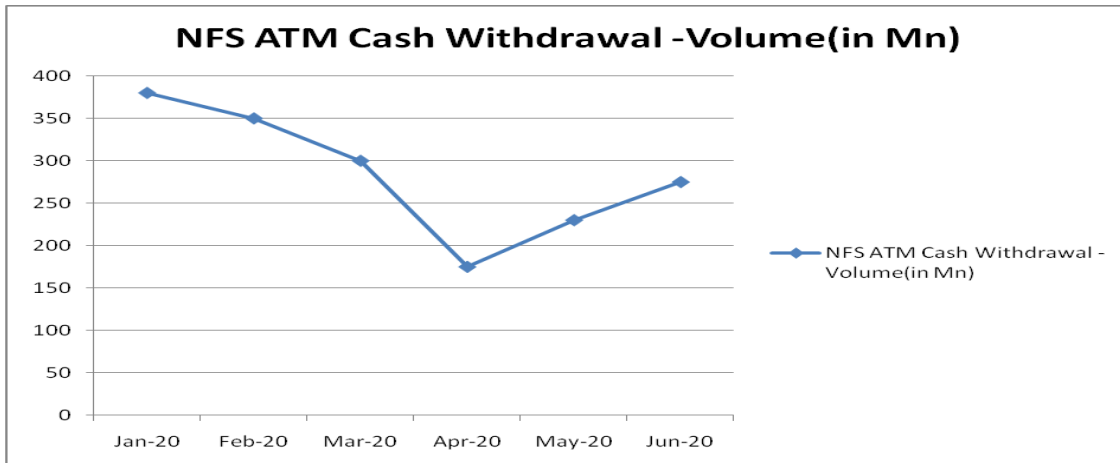
(**Source**: NPCI payments database as accessed in July 2020)

Cash withdrawals did see an increase from May 2020 onwards and by June 2020, they stood at 84 percent of January 2020 withdrawals. Demarcation policies of contamination zone as red, amber, and green and substantial relaxation in the green and amber zones post-May 2020 were implemented, allowing access to ATMs. Further, services delivering essential goods started accepting cash on delivery to boost declining sales (E.g. food aggregators, e-commerce players, etc.). Additionally, resumption of cash replenishment at offsite ATMs, which faced prolonged cash-outs during the lockdown, reopening of the bus and railway ticket booking, permission for the resumption of liquor sales, and general uncertainty over lockdown timelines further accelerated cash withdrawals.

From a macro outlook on the future of cash as a means of transacting post the pandemic, cash remains the preferred mode of payment for many people in India, more so in semi-urban and rural areas. Many of the small retailers, wholesalers, and local vendors are not part of the digital ecosystem. They prefer cash as their transactions happen in this medium – both from their customers and to their suppliers. Also, because cash is convenient to use and universally accepted, and it does not require a multitude of access to infrastructure and related support services, which is difficult to find in many areas, the usage of cash continues to remain high. With the COVID-19 situation continuing coupled with considerable levels of economic uncertainty, the reliance on cash is expected to be maintained.

Conclusion

In Covid-19 the digital payments witnessed a decline in the transaction value as per the data available from the National Payments Corporation of India (NPCI). This was primarily due to the direct impact on the retail sector, travel, etc. However, on the other side Government and payment regulatory authority have pushed and encouraged digital payments to avoid usage of physical which has a higher risk of covid-19 transmission. This indicates that the detrimental impact of COVID-19 on digital payments, although significant, is not lingering and the digital payment ecosystem in India is expected to evolve rapidly to help shape the post-COVID-19 era growth. In April 2020, the usage of ATM was declined due to complete lockdown. However, it was observed that in light of relaxation in lockdown and opening of the marketplaces there was an increase in usage of ATM. The fear of uncertainty over the pandemic situation must have lead customers the need to hold cash to manage any unforeseen circumstances.

References

1. https://www.ncr.com/blogs/banking/cash-and-atm-trends-during-the-covid-19-pandemic

2. https://assets.kpmg/content/dam/kpmg/in/pdf/2020/08/impacting-digital-payments-in-india.pdf

3. https://www.fintechfutures.com/2020/05/india-among-major-markets-to-see-increase-in-atm-usage-over-2019/

4. https://www.toprankers.com/exams/types-of-atm/

5. https://www.livemint.com/industry/banking/why-number-of-atms-is-going-down-in-india-1557888582791.html

6. https://www.researchgate.net/publication/322428014 / Asian Journal of Research in Banking and Finance · January 2018

7. https://www.researchsquare.com/article/rs-27112/v1 ; Dynamics of the COVID-19 pandemic in India; Subhas Khajanchi, Kankan Sarkar, Jayanta Mondal, Matjaz Perc

8. Moutinho, L., & Meidan, A. (1989). Bank Customers' Perceptions, innovation, and new technology. International Journal of Bank Marketing, 22-27

9. Sisat, S., & Barbuddhe, V. (2014). Secured Automatic Teller Machine and Cash Deposit Machine. International Journal of Advanced Research In Computer Science and Management Studies, 118-121