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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

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BHIM AADHAAR PAY – SMART WAY TO GO CASHLESS IN INDIA

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ABSTRACT

India is truly shining. She has an unrivalled youth demographic: 65% of her population is under 35, and half the total population of 1.3 billion people is under 25 years of age. We have got remarkable achievements in the areas of IT/Software, Space technology, Education & Research, Internet, Mobile, Social Media usage etc. We further expect to leapfrog to an exciting future ahead. The number of Internet users, mobile subscribers, various social media users etc. is steadily increasing in our country. Payments through cashless modes are also rapidly growing. The purpose of this study is to explore the various aspects of cashless transactions in India and how BHIM Aadhaar Pay can play a lead role in making India a less-cash economy in the future. Government of India has taken many initiatives like Digital India, Make in India, New India etc. to take our country to the next level. More and more people are using various cashless modes of payments such as Debit Card, Credit card, Internet Banking, Mobile Banking, UPI/BHIM, Mobile wallets etc. for various banking transactions or cashless payments. Government of India has disbursed a total of ₹ 2.43 lakh crore through Aadhaar based DBT (Direct Benefit Transfer) to beneficiaries of 394 government schemes which have led to saving of ₹ 57,000 Crore in the last 3 years by removing fictitious claimants. This is one of the many great advantages of our country's ambitious project "Aadhaar". Another such use of Aadhaar is payment through BHIM Aadhaar Pay, a mobile based payment solution with Aadhaar based biometric authentication. This study is an attempt to explore various aspects of BHIM Aadhaar Pay and how it can transform the world of cashless transactions in India to make her a less-cash economy.

KEYWORDS

BHIM Aadhaar pay, cashless India.

JEL CODE

E42, G21, O30.

INTRODUCTION

"A cashless economy is secure, it is clean. You have a leadership role to play in taking India towards an increasingly digital economy".

- Sh. Narendra Modi, Prime Minister

Unique Identity Authority of India (UIDAI) was established with the vision to empower residents of India with a unique identity and a digital platform to authenticate anytime, anywhere. It was created with the primary objective to issue Unique Identification numbers (UID), named as "Aadhaar", to all residents of India that is (a) robust enough to eliminate duplicate and fake identities, and (b) can be verified and authenticated in an easy, cost-effective way. Now more than 119 Crores people in India have been issued Aadhaar numbers, covering around 99% of adult population. India is one of the very few countries to have such a huge database of demographic and biometric data of her citizens. By leveraging such database, many great social and developmental missions can be achieved in India in the future. Aadhaar has the power to establish the identity of a person he/she claims to be, through the Aadhaar number and the biometric (fingerprint/iris) authentication of the person. Aadhaar is expected to be the foundation for many revolutions in our country. Based on Aadhaar based biometric authentication, BHIM Aadhaar Pay has been launched as a cashless payment mode in India. This study is to find out various aspects of BHIM Aadhaar Pay, how it works, and its advantages to various stakeholders, challenges and to explore how it can bring a revolution in the country in transforming India to a less-cash economy.

LITERATURE REVIEW

India is a largely cash based economy, where business and public still prefer cash transactions. Cash transactions account for around 80% of all retail payments. Compared to other countries, like China, Mexico and Brazil, India ranks very low relating to Non-cash transactions by non-banks per capita per annum as well as number of pay points (for digital payments) per million people, as given in Table-1. Too much dependence on cash has impacted government's ability to widen tax compliance and improve tax collection. Government of India is taking a number of initiatives for improving the level of digital payments. Digitization of transactions will benefit the poor, the middle class, the businesses and ultimately the nation. India is far behind peers on digital transactions, and digitization will create a multiplier benefit in efficiency of capital and resource allocation through greater transparency and traceability of transactions. This will also help in improving the tax collection, which can be further used for various social welfare schemes. NITI Aayog constituted a Committee of Chief Ministers for suggesting measures to seamlessly enable all sections of the population to migrate to the digital mode of payment and to recommend measures that would enable our country to leapfrog into the advanced digital payment systems at par with the best global standards.

The digital payments and per capita transactions in India are one of the lowest compared to similar countries as indicated in the following table:

TABLE 1

Country	Non-cash payments transactions by non-banks per capita per annum	No. of pay points per million people
India	11	1.080
China	26	16,602
Mexico	32	7,189
South Africa	70	7,267
Brazil	142	25,241
UK	355	30.078
Singapore	728	31,096

Source: NITI Aayog Report, Jan 2017

CASH WITH THE PUBLIC IN INDIA

Indians love cash and they are very much comfortable with it. "A bird in the hand is worth two in the bush"! For Indians, cash is far better than any other mode of payment. Particularly in rural India, still cash is the king, so far as modes of payments are concerned. The dependency on cash also has another aspect. May be, with cash transactions businesses are able to hide actual transactions to avoid tax liability. Cash transactions are also source of corruption in many government departments. Currency with the public in India is almost back to normal levels, after the Demonetization process in November 2016. Currency with the public stood around ₹ 15.48 lac Crore as on 27th Oct 2017, as per RBI data. The position of currency with the public pre-demonetization and post demonetization is given in the table-2.

TABLE 2

Date	Currency with public (in ₹ Lakh Crore)
13-Oct-17	15.33
15-Sep-17	15.04
18-Aug-17	14.89
21-Jul-17	14.68
23-Jun-17	14.5
12-May-17	14.03
14-Apr-17	13.28
31-Mar-17	12.68
10-Feb-17	10.97
20-Jan-17	9.87
6-Jan-17	8.98
23-Dec-16	7.82
4-Nov-16	17.97
14-Oct-16	16.98

Source: Times of India, 20.11.2017

MODES OF DIGITAL PAYMENTS IN INDIA

In India at present following modes of digital payments are available:-

1. PoS, ePoS, mPOS MicroATM, ATM etc. using Debit/Credit Card – In India, technology-wise there are two types of ATM/Credit cards- Magnetic stripe card & EMV Chip cards. There are around 3.5 Crore credit cards & 83 Crore ATM/Debit cards in India as on September 2017, as per report of RBI. Major card networks in India are RuPay, Visa & MasterCard. RuPay is gradually gaining market share in India and it is going to become one of the leading card network brand in the world in the future.
2. Aadhaar Enabled Payment System (AEPS): MicroATMs/ATMs/BHIM Aadhaar Pay. Payment is made based on Aadhaar linked bank accounts, using MicroATM (by BC/Bank Mirta), ATM with fingerprint reader or BHIM Aadhaar Pay.
3. Mobile phone based: Both Smart Phone (Mobile Banking, UPI/BHIM, Mobile wallets, etc.) and Feature phone (*99#).

Out of the above mentioned modes of payment, BHIM Aadhaar Pay is the latest mode of digital payment in India and it works on Biometric authentication.

WHAT IS AADHAAR?

Aadhaar, which means 'foundation', is a 12 digit unique-identity number being issued to all Indian residents by UIDAI based on their biometric and demographic data. The Unique Identification Authority of India (UIDAI) is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 ("Aadhaar Act 2016") by the Government of India, under the Ministry of Electronics and Information Technology (MeitY). UIDAI is responsible for managing Aadhaar numbers and Aadhaar based online authentication process. Aadhaar is the world's largest biometric ID system, with over 1.18 billion enrolled members as of 20.11.2017. World Bank Chief Economist Paul Romer recently described Aadhaar as "the most sophisticated ID programme in the world". Aadhaar has many uses and it can be used to avail services like Government & Non-Government Services, Subsidy Benefits, Pensions, Scholarships, Social Benefits, Banking services, Insurance services, Taxation services, Education, Employment, and Healthcare etc.

IMPORTANCE OF THE STUDY

BHIM Aadhaar Pay is relatively a new concept in India. Prime Minister Sh Narendra Modi launched this BHIM Aadhaar Pay service in May 2017 at Nagpur as an initiative to encourage digital payments. After demonetization in November 2016, there was a sudden increase in the cashless transactions in our country. India is a "cash rich" country where the public simply love cash. In such situation, cashless transactions or a less-cash economy is a huge challenge. This study is an attempt to explore various aspects of this new mode of cashless payment, its advantages & disadvantages and how it will make India a less-cash economy.

RESEARCH METHODOLOGY

This study is based on extensive research on available secondary sources such as various reports/whitepapers/notifications of Reserve Bank of India, Government of India, NABARD, NPCI (National Payment Corporation of India), UIDAI, various Public Sector Banks official web sites, etc. and on experience in use of the BHIM Aadhaar Pay app for making actual payments. We have extensively used the BHIM Aadhaar Pay app of Oriental Bank of Commerce for the purpose of this study during the period October to December 2017.

WHAT IS BHIM AADHAAR PAY?

BHIM Aadhaar Pay is a payment solution which enables the Merchants/shopkeepers to accept payment, in a cashless mode, by using a smartphone and a biometric device, from the customers having Aadhaar linked bank accounts through biometric authentication. BHIM stands for **BH**arat Interface for **M**oney. The Merchant uses the BHIM Aadhaar Pay, a mobile application along with a biometric device to scan the fingerprint of the customer who makes the payment. Customer selects the bank name, provides his/her Aadhaar card number and puts his/her finger on the biometric device to authenticate the transaction. Customer's bank account is debited with the amount and Merchant's bank account is credited in real time with the Aadhaar Pay transaction. SMS of Debit & Credit on the transaction is sent in real time to Merchant (seller) & customer (buyer), **irrespective of transaction amount**. Such transaction is entirely **paperless** and no paper receipt is generated for the transaction, making it an "**eco-friendly**" mode of payment. Payment of any amount between ₹ 1/- and ₹ 2000/- can be made using this mode of payment. Customer does not need any debit or credit card to carry or does not require any PIN or password etc. to remember to authenticate such transactions. Since the transaction is authenticated using customer's fingerprint which is matched with Aadhaar database, it is very secured mode of payment.

FEATURES OF BHIM AADHAAR PAY

- ❖ BHIM Aadhaar Pay works on Aadhaar Enabled Payment System (AEPS) platform of Unique Identity Authority of India (UIDAI).
- ❖ Customer having account in any bank linked to Aadhaar number can do the transaction.
- ❖ Transaction is authenticated by Aadhaar based biometric authentication.
- ❖ Merchant having BHIM Aadhaar Pay of any bank can accept payment from any bank customer.
- ❖ Customer is supposed to have or remember his/her Aadhaar number.
- ❖ Transaction from Re 1 to ₹ 2000/- can be made, using BHIM Aadhaar Pay.
- ❖ Incentive scheme by NABARD is now available for bank and the Merchant for BHIM Aadhaar Pay transactions.
- ❖ The Biometric Device (fingerprint scanner) must be STQC certified. (Some banks provide the Biometric Device to Merchant at nominal charge or for free, depending on monthly rental structure and special offers/schemes offered by the bank).
- ❖ Cost of a biometric device (STQC certified) is around ₹ 2000/- to ₹ 2500/- in the market.
- ❖ BHIM Aadhaar Pay works on Internet platform. A good Android smartphone along with an Internet connection with reasonable speed is a must for Aadhaar Pay to work.

HOW BHIM AADHAAR PAY WORKS

BHIM Aadhaar Pay transactions can be classified into two categories: On-us Transactions and Off-us transactions, depending on whether the BHIM Aadhaar Pay providing bank (called the acquirer bank) and the bank of the customer making the payment (called the Issuer Bank) are the same bank or different banks.

On-us Transactions (Acquirer & Issuer Bank both are same, say SBI)

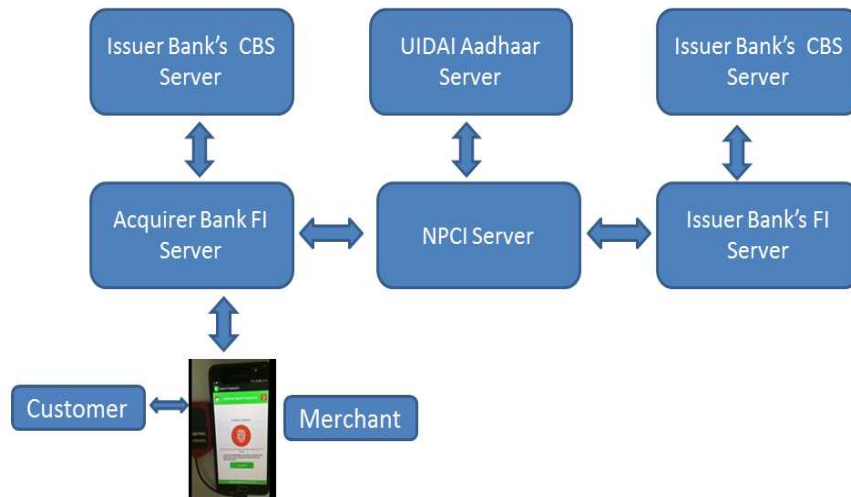
For example, Aadhaar Pay Merchant is of SBI (Acquirer bank) and the customer is also account holder of SBI (Issuer bank). Customer provides his/her Aadhaar number and fingerprint on Merchant's Aadhaar Pay app along with Bank name & amount to be paid. While Aadhaar card number and fingerprint are checked for authentication at the Aadhaar database (UIDAI Server), the customer's bank account is debited and Merchant's bank account is credited in the CBS Server of the bank (SBI).

Off-us Transactions (Acquirer & Issuer Bank are different. Say, for example, OBC is the acquirer bank and SBI is the issuer bank).

The Merchant (seller) is having BHIM Aadhaar Pay app of OBC and the customer (buyer) is of SBI. Here the customer's Aadhaar Number and fingerprint data will be matched at UIDAI Server (through NPCI Mapper) and the account of customer will be debited at CBS Server of SBI, while the Merchant's Account will be credited in real time in CBS Server of OBC.

It may be noted that the authentication is done at UIDAI Server, while switching and settlement of transaction is done by NPCI (National Payment Corporation of India). The full process flow of BHIM Aadhaar Pay transaction is illustrated in the Diagram given below:

DIAGRAM 1



BHIM Aadhaar Pay Process Flow

ADVANTAGES OF BHIM AADHAAR PAY

i) Advantages for the Merchants

- No setup cost or much running cost. (Some banks may have monthly rental).
- No scope for cloning of Card by counter staff
- Merchant can avail loans based on sales/account balances from banks/FI
- Attractive incentive scheme by NABARD on Transactions by using BHIM Aadhaar Pay. Merchants having a large number of such transactions can get a reasonable amount of incentive.

ii) Advantages for the Customers

- Secured mode of payment, as it requires fingerprint of the customer.
- No need to carry cards or remember PIN/Passwords etc.
- Risk of card loss or related frauds eliminated

iii) Advantages for the Banks

- Real-time settlement of transaction. No reconciliation problem.
- Cashless transaction, reducing bank's operational cost.
- Banks will have floating funds, as customers will use account for shopping (instead of withdrawing cash from ATM/Bank).
- This will reduce workload at branch and rush at ATM for withdrawing cash.
- Fee based income for banks

iv) Advantages for the Government

- More and more transactions will happen through bank accounts, which will lead to more tax collection and also Merchants will have to pay tax honestly
- Transparent and efficient Governance

v) Advantages for the Country

- Country will move towards a less-cash economy
- Monitoring of business can be easier and this will help all stake holders
- Appropriate Planning & Regulations can be made
- Public will have a secured & efficient mode of payment
- Paperless and Eco-friendly transaction

CHALLENGES WITH BHIM AADHAAR PAY

- ❖ Attitude of Merchants/Businesses to adopt to a digital mode
- ❖ Merchants who are so far comfortable with cash transactions may resist to change.

- ❖ Since BHIM Aadhaar Pay is a mobile app which can be used only in smartphones, small street vendors like vegetable/fruits vendors, beggars or less educated shopkeepers etc. may not be able to use it.
- ❖ Merchants may fear that they will have to make tax payment on income and they may not have the intention to use it.
- ❖ Since BHIM Aadhaar Pay works on Internet, network coverage or connectivity may be a challenge in some areas.
- ❖ Educating the Merchants & the public on such huge scale is a huge challenge for the country.

INCENTIVES FOR PROMOTING BHIM AADHAAR PAY

Incentive of 0.5% of the transaction value per transaction for Aadhaar based biometric merchant transactions up to ₹ 2,000/- will be provided (minimum incentive ₹ 1/- and maximum ₹ 10/- per transaction) by NABARD. The maximum incentive per merchant per month will be restricted to ₹ 2000/-. (The incentive of 0.5% can be utilized to defray operating costs to the extent of 0.25% for the bank and the balance 0.25% be passed on as an additional incentive to the merchant). This incentive scheme is valid up to 31.03.2018.

Government of India is making best efforts to make the public in general and Merchants in particular adapt to this new digital culture of BHIM Aadhaar Pay. All Banks are putting their sincere efforts in educating the Merchants and the public in general to get acquainted with Aadhaar Pay. More and more business transactions through the banking channel have so many advantages for the business as well as for the banks and the Government. If the Merchant receives all its payments using Aadhaar Pay (which is ultimately through his/her bank account), instead of getting cash, then banks can easily finance to Merchants/businesses as and when required. More cashless payments in any business mean collection of more taxes for the Government. This will also promote a transparent business environment in the country. Banks can also have a better idea on the size of the business of the Merchant/business depending on its total sales figures. Now due to heavy cash transactions in some of the businesses, it is difficult to assess the exact size of the business as the businessman may not be transparent enough, as there is scope of hiding his/her business transactions done through cash.

Transaction Limits (for Individual Merchants), as specified by SBI

For Customers/Buyers

₹ 2,000/- per transaction

₹ 5,000/- per day per Aadhaar number

₹ 20,000/- per month per Aadhaar

For Merchants/Sellers

₹ 25,000/- per day per Aadhaar Number

₹ 1,00,000/- per month per Aadhaar number

MDR/Switching Fees/Interchange Fees on BHIM Aadhaar Pay Transactions

- **MDR:** MDR of 0.25% will be applicable for BHIM Aadhaar Pay transactions
- **Switching fees:** Switching fee of ₹ 0.25 (excluding service tax and other applicable tax) is applicable for successful Aadhaar Pay transaction.
- **Interchange Fees:** The acquiring bank will pay an interchange fee of 0.05% + applicable tax of the transaction amount to the issuing bank per successful transaction.

Government of India, as a measure to encourage cashless mode of payments, has instructed all banks to rollout BHIM Aadhaar Pay within deadlines. All Banks have been given specific targets by Government. Accordingly, bank branches are now onboarding merchants in their vicinity to use BHIM Aadhaar Pay with their smartphone and biometric reader which would present a significantly cost-effective alternative compared to the traditional PoS infrastructure. NITI Aayog CEO Sh. Amitabh Kant recently made a statement that debit and credit cards as well as ATMs will be redundant in next three-four years and people will use their mobile phones for financial transactions. There are about 5 Crores Merchants in the country at present and 30 lac PoS Machines for a population of more than 130 Crores. Faster adoption to BHIM Aadhaar Pay will create a very cost-effective and efficient infrastructure across the country and we can "pole vault" (not just "leapfrog"!) to a paperless, less-cash (though not cashless) society soon.

With growing trends of frauds with ATM/Debit/Credit cards, which are reported regularly in the media, BHIM Aadhaar Pay is a far better option for customers or the public as a mode of payment, since the payment is based on biometric authentication. He/she does not require carrying so many cards or remembering so many PINs/passwords etc. and the best part is that when he/she goes outside his/her home, he/she does not bother to carry wallet, since his/her fingerprint is playing the role of the wallet now! Further he/she is not even worried for losing the ATM/Credit cards. Therefore, BHIM Aadhaar Pay will be the smartest way to make payments by the public.

CONCLUSIONS

As per Government of India instructions, all bank accounts need to be linked with Aadhaar Number by 31.03.2018; otherwise, operation in accounts may be ceased. This will force all bank customers to link their bank accounts to their Aadhaar numbers. This will lead to greater usage of BHIM Aadhaar Pay for payments. Imagine when all bank accounts will be linked to Aadhaar number, a customer can do shopping anywhere – be it a small panipuri stall or a beauty parlor or a fast-food restaurant, by carrying no cash or card, just by giving his/her fingerprint. This will lead to a win-win situation for all. The present limit of ₹ 2,000/- per transaction may be reviewed by the Government and probably it may further be increased (to ₹ 10,000/- or even more) in the future. So far as cashless transactions are concerned, India is going to have an exciting time ahead. BHIM Aadhaar Pay will prove to be a game changer in retail payment space and I am sure this will bring a revolution and make India a less-cash society.

REFERENCES

1. NITI Aayog Interim Report of the Committee of the Chief Ministers on Digital Payments, Jan 2017, viewed on 09.11.2017, http://niti.gov.in/writeread-data/files/new_initiatives/Digi%20Report%20-%20Final.pdf
2. Switching fees/Interchange fees/MDR on BHIM Aadhaar Pay, viewed on 19.11.2017. <https://www.npci.org.in/sites/default/files/circular/Circular-18-switching-fee-Interchange-MDR-on-AePS-and-Aadhaar-Pay.pdf>
3. Subudhi, Srihari (2016), Unified Payment Interface (UPI) for Less-cash India, International Journal of Research in Computer Application and Management, ISSN 2231-1009, VOLUME NO. 7 (2017), ISSUE NO. 02 (FEBRUARY)
4. Hebbar, Nistula (2016), Modi urges country to become a cashless society, viewed on 10.11.2017, <http://www.thehindu.com/news/national/Modi-urges-country-to-become-a-cashless-society/article16710453.ece>
5. https://economictimes.indiatimes.com/articleshow/61608359.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst, viewed on 12.11.2017.
6. Debit, credit cards, ATMs will be redundant in 4 yrs, says Niti Aayog CEO, Viewed on 11.11.2017, <http://www.businesstoday.in/current/economy-politics/debit-credit-cards-atms-will-be-redundant-in-4-yrs-says-niti-aayog-ceo/story/263755.html>
7. <http://uidai.gov.in/>
8. <https://www.npci.org.in/>
9. BHIM Aadhaar Baroda Pay, viewed on 10.11.2017, <https://www.bankofbaroda.com/bhim-aadhaar-pay.htm>
10. BHIM Aadhaar SBI, viewed on 11.11.2017, <https://mab.sbi.co.in/mu/BHIMAAadhaarSBI.html>

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