

FEASIBILITY OF AADHAR-ENABLED RUPAY CARD FEASIBILITY AND THE EFFECT OF DEMONETISATION ON IT

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I. INTRODUCTION

National Payments Corporation of India (NPCI)¹ launched Aadhaar-enabled RuPay Cards with biometric authentication with Unique Identification Authority of India (UIDAI)² and presented it is a viable alternative to International Payment Settlement Systems but there are a few persisting issues involved in it. The main objective of NPCI is financial inclusion and these two systems will work together in Aadhaar-enabled RuPay card for distribution of Electronic Benefit Transfer (EBT).³ Government has been very ambitious by covering payment distribution under old age pension, National Rural Employment Guarantee Scheme (NREGS), credit of subsidy amount for purchases of LPG, kerosene and items distributed under public distribution system (PDS) under EBT. The Aadhaar Payments Bridge System (APBS) has been designed by NPCI which will use the Aadhaar-enabled cards using RuPay scheme to credit the bank accounts of the beneficiaries' part of this scheme with no frills account.⁴ Further this card will be used as an ATM to have Indian version of Master and Visa cards. The main aim of having system in force is to reduce the corruption level prevailing in India. The business correspondents will act as mini bank branches and in turn enable withdrawals, balance enquiry, using connectivity provided by Aadhaar-enabled payment systems (AEPS) –and it will identify the UID number.⁵ The new initiatives are likely reach the unbanked areas of the country but the complexities of this system, there are issues in financial inclusion, technology also challenges the system and market competition cannot be sidelined. There are mainly two persistent issues involved with financial inclusion i.e. competitive markets, and the challenges in bringing in financial inclusion.

¹ <http://www.npci.org.in/>

² "Aadhaar Authentication", UIDAI, <http://uidai.gov.in/auth>. Accessed 29 August 2015.

³ "Aadhaar e-KYC API Specification", UIDAI, http://uidai.gov.in/images/aadhaar_kyc_api_1_0_final.pdf. Accessed 29 August 2015.

⁴ "Aadhaar Payment Bridge (APB)", NPCI, <http://www.npci.org.in/apbs.aspx>. Accessed 28 August 2015.

⁵ "Aadhaar Enabled Payment Systems (AEPS)", NPCI, <http://www.npci.org.in/AEPSoverview.aspx>. Accessed 29 August 2015.

Also an important aspect being to drive open learning resources for the people to actually understand that the Aadhaar card can be used to encash money. This is also done by the bank to reduce corruption by an agent, to firstly spread awareness about the Aadhaar-enabled RuPay card and secondly the agent will be the bank employee who with bag of cash, check the cards and handover the money to peasants. Individual money will be in the card of father, mother, separate family members. Also the stores which give government subsidised fertilisers or seeds, government will only debit card and the peasants have to have money on bank account to get it. Prime Minister Narendra Modi's Jan Dhan Yojana People's Wealth Scheme will replace subsidies with direct benefit transfers and pay interchange. Modi said the banks should redouble efforts in financial literacy and seeding of Aadhaar numbers with bank accounts needs to improve.⁶ These peasants but might not understand the importance of credit history, transaction trails, online security and verification procedures, etc. The foreign banks are still reluctant to participate in financial inclusion because they have selective branch opening policies in bankable places. Unlike United States the Community Reinvestment Act (1997) and France, the law on exclusion, 1998 there is no government regulatory measure for this system.⁷ There are these two key objectives in catering to increase in spread of card payments and simultaneously reaching the unbanked, which has to be efficient and cost-effective.⁸ Punjab National Bank, Canara Bank, ICICI Bank, HDFC Bank, Citibank and HSBC have signed MOUs with NPCI to launch RuPay cards.⁹

II. ISSUES IN RELATION TO RUPAY CARDS

RuPay faces fierce competition from global players, mainly like MasterCard and Visa which has strong commercial linkages with various banks and retailers, which in turn also covers a wide range of value added services. Aadhaar-enabled RuPay card faces problems like transactions costs, services and access to international markets. There has to be more marketability to gain acceptance of this card by Merchants and to get financial inclusion.¹⁰ Since banks pay their fees not in foreign currency but in rupees which enables a cost advantage with no clear stated mechanism in using Point-of-Sale (POS) for the consumers to receive benefits. Also the consumers have to switch their

⁶“Pradhan Mantri Jan-Dhan Yojana”, Ministry of Finance, August 2014, http://www.pmjdy.gov.in/financial_literacy.aspx. Accessed 31 August 2015.

⁷ Government of India, Ministry of Communications & IT, Department of Electronics & Information Technology, Standards & Policies (2014) <http://deity.gov.in/content/standards-policies>. Accessed 28 August 2015.

⁸ RBI (2005): “Payment Systems in India”, Vision 2005-08, May, www.rbi.org.in. Accessed 6 September 2015.

⁹ Sangita Mehta, ‘Narendra Modi government to pay banks fee for pursuing financial inclusion plan’, Economic Times, 15 August 2014 http://articles.economictimes.indiatimes.com/2014-08-15/news/52845858_1_financial-inclusion-plan-government-owned-banks-5-banks. Accessed 28 August 2015.

¹⁰ “Committee on Comprehensive Financial Services For Small Businesses and Low income households”, Reserve Banking of India, 2014. Available at: <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CFS070114RFL.pdf>. Website last visited 04 June 2015.

existing trusted payment systems to RuPay card which also poses a problem for the Banks, so Banks should also be ensured benefit out of this enormous task otherwise Banks may hesitate to switch over their existing customer base to the RuPay system due.¹¹ Therefore it is better if new client base is brought about to this new system. Apart from cost disadvantages, co-branding and tie-up with other competitors is not ruled out. China's Union Pay had monopoly due to its country's structure, India being a democratic cannot bring about such harsh rules. RuPay-enabled cards would seek to bring individuals who were earlier involuntarily unbanked to the formal banking system through various channels. This could be achieved through Regional rural banks can issue RuPay debit cards on bank accounts linked with Aadhaar UID and bring unbanked individuals under banking system. This restates the importance of financial literacy drives to be linked with the disbursement of RuPay cards but there is also a level of insecurity in the minds of farmers and rural people to trust this card.

III. DISCUSSING THE PUBLIC AND PRIMARY DATA AVAILABLE IN REGARD TO RUPAY CARD

According to Haryana Government State Report of 2015-16, 1,900 ATM Rupay Debit Cards and 100 Rupay Kisan Cards have been issued to their customers having a tie-up with Apex Bank. Also 22, 37,466 (76.1%) Ration Cards have Aadhaar number of at least 1 member and 86, 46,676 (66.5%) beneficiaries' Aadhaar have been seeded. Annual Report of Micro Units Development and Refinance Agency Ltd. (MUDRA) for the financial year ended March 31, 2016 states that 1,775.20 lakh RuPay debit cards have also been issued to the account holders which can be used in ATMs and merchant establishments. The MUDRA card, a RuPay Debit card, operable on all ATMs and PoS machines where RuPay is operative. Through its digital banking solutions, Punjab Government simplified the entire process of grain procurement and reduced the time cycle from 15 days to 48 hours. They issued cards to customers and installed Rupay powered Electronic Data Capture (EDC) at the Mandi. With the swipe of a card at the Mandi, the EDC machine records quantity and rate of the grain procured and generates data files for payments.¹²

¹¹ Economic Survey 2015-16, Volume I, p.21 (<http://indiabudget.nic.in/es2014-15/echapter-vol1.pdf> - website last visited 01 April 2016).

¹² Charan Singh, et al., (2014), Financial Inclusion in India: Select Issues, IIM Bangalore Working Paper 474, Bangalore. (Available <http://ssrn.com/abstract=2532876>; Accessed on 4 June 2015)

TABLE 1: ACCOUNT OPENED UNDER PMJDY AS ON SEPTEMBER 02, 2015¹³**(All in Crore)**

Bank Type	Rural	Urban	Total Account	No of RuPay Debit Card	Balance in Account	% of Account With Zero Balance
Public Sector Bank	7.76	6.35	14.11	12.82	18207.10	43.55
Regional Rural Bank	2.76	0.47	3.23	2.37	3939.03	45.51
Private Bank	0.42	0.28	0.70	0.62	1108.88	43.66
Grand Total	10.94	7.10	18.04	15.82	23255.01	43.96

TABLE 2: ACCOUNT OPENED UNDER PMJDY AS ON SEPTEMBER 28, 2016¹⁴**(All in Crore)**

Bank Type	Rural	Urban	No of Account	No of Rupaya Debit Card	Aadhaar Seeded	Balance in A/C	% of Account with Zero Bal
Public Sector Bank	11.03	8.63	19.66(79.45%)	15.45		34550.69	24.27
Regional Rural Bank	3.63	0.59	4.22(15.06%)	2.84	10.66	7401.90	20.50
Private Bank	0.53	0.33	0.86(3.48%)	0.80	1.80	1580.08	36.47
Grand Total	15.19	9.55	24.74	19.09	0.36	43532.67	24.05
	(61.40%)	(38.60%)			12.82		

These two tables show the rise of Rupaya Debit Cards from September, 2015 to September, 2016 as the account opened under Pradhan Mantri Jan Dhan Yojna in Rural and Urban area both for Public, Regional and Private Sector Banks.

According to a primary survey done in a small group of eighty workers living at my University Campus in a small town Cuttack, Odisha in 2015, age varying nineteen to thirty seven years old, fifty five women and rest men, I realised most of them had Rupaya Cards but they don't have much idea about its facilities and benefits. These daily workers working on minimum wages were illiterate and their government gave them the Rupaya cards. Only six of them knew a little more than others because they had relatives who were farmers and used Rupaya Cards. So the sunny side is that Farmers are more aware of it. So rather than try to push urban-centric financial products on the poorer sections of society, it makes more sense to popularise and spread specific financial instruments aimed at that section of the population. One example of this could be an everyday recurring deposit scheme, or a financial plan that centers on harvest season. The Aadhaar seeding rate is 62% which while positive is "extremely slow."¹⁵ Inadequate Aadhaar seeding deprives customers to hatch on to Aadhaar-enabled payment system. India's domestic card service RuPay is an excellent card with better rates than foreign card payment processors for banks, merchants and

¹³ See pmjdy.gov.in

¹⁴ Ibid at 12

¹⁵ <http://www.pmjdy.gov.in/account-statistics-country.aspx> (Website last visited 1 June 2015).

end-users, but its lack of visibility make for less traction, say industry experts.¹⁶ There is no proper awareness or advertising in relation to the cards which should be done by NPCI to reach the common man. Also there were many workers who pointed out no use in a Rupay Card and few were worried that family members may misuse their cards. Especially women were worried about their husband misusing their card.¹⁷ Also the RuPay card distribution rate is low (47%) and general public, major rural Indian citizens face “issues of non-delivery and non-issuance of PINs”, according to MicroSave’s research.¹⁸

Processing of transactions happens domestically therefore usage of RuPay over Visa or MasterCard results in a lower cost of clearing and settlement for each transaction. But this transaction affordability should be driving higher growth which is currently not happening. Currently RuPay is accepted in more than 1.88 lakh ATMs in the National Financial Switch (NFS) network.¹⁹ Also private banks have a previous tie-ups with Master and Visa Cards so they are not pushing customers to use Rupay Card. National Payment Corporation of India has also networked with 5 lakh merchants in India and RuPay can be accessed at more than 8.75 lakh POS (point-of-sale) terminals across the country.²⁰ Accepted on 10,000 e-commerce websites, RuPay has tied up with MobiKwik, Citrus Pay, free charge, ItzCash and SBI Buddy, something that the larger public is unaware of, say people in the industry. But there has been a steering rise in usage of Rupay Cards in 2016 amongst economically weaker section of the society.²¹ The RuPay card also comes with an inbuilt accident insurance cover of ₹1 lakh for up to 90 days after the cardholder carries out a successful financial or non-financial transaction at a merchant establishment, an ATM or an e-commerce platform.²²

¹⁶ <http://www.newindianexpress.com/states/andhra-pradesh/2016/dec/08/cms-conference-on-digital-transactions-in-mumbai-today-1546911.html> (Website last visited 15 Dec 2016)

¹⁷ <http://www.aadhaarnews.com/rupay-excellent-product-no-visibility-industry/> Website Last Visited 15 Dec, 2016

¹⁸ “The Cost of Cash in India”, Institute for Doing Business in the Global Context, p.12.

<http://fletcher.tufts.edu/CostofCash/~media/Fletcher/Microsites/Cost%20of%20Cash/COC-India-lowres.pdf> (Web site last visited 2 June 2015).

¹⁹ RBI Annual Report, 2013-14, p.109 (<https://www.rbi.org.in/Scripts/AnnualReportPublications.aspx?year=2014> Website Last visited 2 June 2015).

²⁰ <http://www.aadhaarnews.com/npci-aims-financial-inclusion-74-rupay-card-holders-first-time-users/> Website Last Visited 3 June, 2016

²¹ <http://www.thehindubusinessline.com/money-and-banking/rupay-cards-gaining-currency-among-the-poor/article8135867.ece>

²² <http://www.aadhaarnews.com/rupay-cards-gaining-currency-among-poor/> Website Last Visited 15 Dec, 2016

IV. RISE IN THE USAGE OF RUPAY CARD

Currently, 36% of all debit cards in India are RuPay enabled, therefore Visa and MasterCard lost 36% share to Rupay Cards, in terms of number of cards. As per RBI's data, there are 603 million debit cards in India, out of which 222 million are RuPay enabled debit cards and 170 million out of Rupay Cards share are attached with Jan Dhan accounts, and 52 million are mainstream bank accounts.²³ Jan Dhan bank accounts have shown very less transactions, since maximum people who have opened Jan Dhan belong to rural areas and BPL families. Still, RuPay has now managed to garner 20% share in transactions, all over the country.²⁴ As per National Payment Corporation of India before demonetisation, there are 10 million transactions done everyday using debit cards in India, and 2 million of them are coming from RuPay cards.²⁵ Only 20% share in transactions is a big gap for RuPay right now; but the adaptation will bridge the gap soon. Visa and MasterCard charges a variable fee for every eCommerce and Point of Sale transaction, RuPay charges a fixed service charge fee of 90 paisa for every transactions: 60 paisa from the issuing bank, and 30 paisa from the acquiring bank.²⁶ Also, Visa and MasterCard charges Rs 3 per ATM transaction, meanwhile RuPay only charges 45 paisa. Additionally, RuPay is also set to launch their credit cards from December, 2016.²⁷ Tie-ups with like China Union Pay, Japan-based JCB Co and Discover Financial services are already done, for greater reach and usage. More than 250 banks have tied up with RuPay.²⁸

V. EFFECT OF DEMONETISATION ON RUPAY CARDS

As per, National Payment Corporation of India, RuPay card usage increased to 118.6% in the week following demonetisation that took effect from 8, November, 2016 mid-night at the same time as the on the whole debit and credit card transactions recorded an raise of 70.5%.²⁹ According to Reserve Bank of India (RBI data), the usage of RuPay card at point-of-sale (POS) terminals jumped to 200.6% to 46.6 lakh transactions during 9-15 November, 2016.³⁰ This compares with 15.5 lakh

²³ As on 23 March 2016 (<http://pmjdy.gov.in/account> - Website last visited 1 April 2016)

²⁴ As on 29 February 2016 (https://uidai.gov.in/images/news/ranking_of_states_as_on_29_feb_2016.pdf - Website last visited 1 April 2016)

²⁵ "Olanrewaju, "Tunde, "The Rise of the Digital Bank" July 2014 (http://www.mckinsey.com/insights/business_technology/the_rise_of_the_digital_bank) Website Last visited 3 June 2015.

²⁶ <http://www.aadhaarnews.com/3-reasons-why-rupay-may-end-the-monopoly-of-visa-mastercard-in-payment-gateway-solution/> Website last visited 15 Dec, 2016

²⁷ <http://www.aadhaarnews.com/npci-plans-to-launch-rupay-credit-card-by-march/> Website Last visited 16 Dec, 2016.

²⁸ <http://www.bot-tz.org/NFIF/National%20Financial%20Inclusion%20Framework.pdf> and

<http://www.firstpost.com/business/relief-for-govt-banks-sc-allows-voluntary-aadhaar-use-in-job-scheme-jan-dhan-pf-pension-2470596.html> (Web Site last visited 1 June 2015).

²⁹ <http://economictimes.indiatimes.com/industry/banking/finance/banking/rupay-card-usage-jumps-118-per-cent-in-1st-week-of-demonetisation/articleshow/55757235.cms> Website Last Visited 15 Dec, 2016

³⁰ Ibid at 31

swipes during 1 to 8 November, 2016. The government of India demonetised the old 500 and 1000 rupee notes from the midnight of 8, November, 2016 and also imposed limitations on cash withdrawals from banks as well as ATMs, and also requesting people to move to digital. RBI said a total of 65.6 lakh transactions were recorded through RuPay cards during 9-15 November, 2016.³¹ This includes 19 lakh spending through e-commerce platforms. Point of Sale (PoS) transactions witnessed a jump of 95 per cent in between 8, November, 2016 till 7, December, 2016. RuPay Card transactions were up 316 per cent and e-wallet 271 per cent.

TABLE 3

E-MONEY GAINS CURRENCY				
	Transactions/day	Nov 8	Dec 7	% Growth (Dec 7/Nov 8)
RuPay Cards (eComm + POS)	Number (Lakhs)	3.85	16	316
	Value (Cr)	39.17	236	503
e-Wallets	Number(Lakhs)	17	63	271
	Value (Cr)	52	191	267
UPI	Number	3,721	48,238	1,196
	Value (Cr)	1.93	15	677
USSD	Number	97	1,263	1,202
	Value (Lakhs)	1	14	1,300
		Oct Avg	Nov Avg	
PoS	Number(Lakhs)	50.2	98.1	95
	Value (Cr)	1,221	1,751	43

Source: Ministry of Electronics and Information Technology

The reason behind rise of Aadhaar enabled Rupay cards after demonetisation is the clearer move of monetary policy measures and lower costs of managing cash; and greater ability to capture data and create the right tax incentives and reduced money laundering and tax evasion.³² The National Payments Corporation of India (NPCI) will announce 15,000 winners of Rs 1,000 each for 100 days starting 25, December, 2016 as a part of Lucky Grahak Yojna where there will be 7,000 weekly awards, with a maximum award of Rs 50,000 each for merchants, under Digi Dhan Vyapari Yojna. All modes of digital payments- AEPS and RuPay Cards will be eligible under the scheme.³³

³¹ Ibid at 31

³² <http://www.news18.com/news/india/demonetisation-is-like-kennedy-saying-will-put-a-man-on-the-moon-amitabh-kant-1317954.html>, Accessed on 15 Dec, 2016.

³³ <http://www.dailypioneer.com/todays-newspaper/make-digital-payments-earn-rs-1-cr.html>, and <http://www.abplive.in/india-news/niti-aayog-to-provide-rs-5-lakh-per-district-to-boost-cashless-digital-payment-457731> Accessed on 17 Dec, 2016.

VI. CONCLUSION

National Financial Switch (NFS) and RuPay India card caters to larger commercial interest for banks to switch to RuPay. But price competition, value added services and co-branding with international payment systems are issues that still require consideration. But an existing account number and IFSC code that uniquely identifies a branch of any bank are not sufficient to do a legitimate transaction,³⁴ also the auditability of Aadhaar number to Aadhaar number bank transfer is identical to an account number to account number transfer and the costs of ABPS are less than the costs of NEFT or RTGS.³⁵ As on till 2005, forty-percent of the Indian population was unbanked, especially in the north-eastern and eastern region; this shows the potential of financial inclusion and intervention.³⁶ But this system is still premature to declare it to be a success and to say that RuPay would become an indigenous payment system, consumers also are intrusive to privacy issues related to this Aadhaar-enabled RuPay card. Thus reaching the unbanked areas, with no corruption objective makes this card a perfect endeavour by the Indian government at this uprising stage of Indian Economy. Further demonetisation and India moving towards being a cashless nation will also add a lot to rise of Rupay Cards. This will increase and create new customers for the financial services network and create common infrastructure that multiple players can come into being and lessen the printing costs and prompt people to use cards.

³⁴ "RuPay", NPCI, <http://www.npci.org.in/RuPayBackground.aspx>. Accessed 28 August 2015.

³⁵ "Role of Biometric Technology in Aadhaar Authentication", UIDAI, March 2012, http://uidai.gov.in/images/role_of_biometric_technology_in_aadhaar_authentication_020412.pdf. Accessed 30 August 2015.

³⁶ "Role of Biometric Technology in Aadhaar Authentication", UIDAI, March 2012, http://uidai.gov.in/images/role_of_biometric_technology_in_aadhaar_authentication_020412.pdf. Accessed 30 August 2015.