

## From Access to Usage: How RuPay Cards Shape Financial Inclusion Outcomes in India

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### Abstract:

*The global payment card network industry was initially dominated by just a few players. Among these global players, Visa® and MasterCard® enjoy a dominant market share. However, recently there has been an increasing trend towards domestic processing of payment transactions in many countries. These countries have launched their own payment gateways like Union Pay TM and RuPay. RuPay was conceived by NPCI, an initiative of the RBI and an umbrella for all retail payment system in India. The present paper is a descriptive study based on the secondary data obtained from NPCI, RBI, UPI which discusses the efforts of NPCI towards effective implementation of Ru Pay, the payment gateway of India. It further analyzes the key concerns arising from the new networks for existing global players and how they will have to alter their existing strategies to operate in this new environment. Further the paper provides with suggestions on the steps needed to be undertaken by these new domestic networks in order to succeed in an industry dominated by a few players.*

**Key words:** Financial inclusion, Payment gateway, Ru Pay

### Introduction

Financial Inclusion is the way the Indian Governments strives to bring the common man closer to the formal channel of economy thereby ensuring that every individual gets the benefits of the economic growth and is added in the mainstream economy. The main objective is to encourage the poor person to save, safely invest in

various financial products and to borrow from the formal channel in times of need. Innovation in payment systems is critical as it accelerates financial inclusion. Organizations that address financial inclusion as an opportunity and commit themselves to making it their strategic priority find themselves well placed to win the battle for the Indian consumer in this century.

**Table 1 Digital payments and per capita transactions in India Compared to Similar Countries**

Country	Non-cash payments transactions by non-banks per capita per annum	Non-cash payments transactions by non-banks per capita per annum
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	31,098

Source- NITI Ayog Report January 2017

Table 1 indicates that the digital payments and per capita transactions is lowest in India in comparison to other similar countries. Although as per the reports of NITI Ayog digital payments grew 55% by volume and 24.2% by value in 2016-17 over the previous year. Data from the Reserve Bank of India (RBI) suggests that the rate of adoption of digital

payments that accelerated following demonetisation had slowed in recent months. In April 2017, total digital transactions of Rs109.58 trillion, was down 26.78% from Rs 149.58 trillion in March 2017. The number of digital transactions fell too, declining 4.56% from 893.9 million in March 2017 to 853.1 million in April 2017. The

highest volume was recorded in December 2016, 957.5 million, according to RBI. Though there is significant increase in electronic transactions, the growth is not uniform across all segments of electronic payments nor is it visible at all locations across the country. RBI and Government of India are working on various initiatives in this regard which can offer significant growth potential for card industry in India. In India, 90 per cent of credit card transactions and almost all debit card transactions are domestic; the India Pay scheme was conceived by the National Payments Corporation of India as an alternative to the MasterCard and Visa card schemes, and to consolidate and integrate various payment systems in India. The vision of NPCI being able to provide citizens of our country anytime, anywhere payment services which are simple, easy to use, safe, and secure, fast and also cost effective. NPCI aims to operate for the benefit of all the member banks and the common man at large. The government of India had launched India's first domestic payment card network, Ru Pay, to compete with Visa Inc and Master card Inc.

The Rupay card was launched on 26th March, 2012 with the help of National payment systems in India. On 8th May, 2014 RuPay card was dedicated to the present president of India, Pranab Mukherjee.

**Scope of the Study** -The present paper examines and studies the role of RuPay in augmenting the digital payment system in India and hence accelerating the financial inclusion in India.

### Objectives of the Study

1. To study role of RuPay in augmenting financial inclusion in India.
2. To explore the need and significance of RuPay.
3. To study the current status of Ru Pay.
4. To evaluate the opportunities and challenges for Rupay card in Indian market.

### Research Methodology

The present paper is a descriptive study based on the secondary data. This paper will provide a examination of the literature on payment gateway of India -RuPay, with a special emphasis on the empirical articles, reports and statistical data from the authentic sources. For this study data and

information has been collected with the help of Books, Magazines, Newspapers, Research Articles, Research Journals, E-Journals, RBI Report, Report by NPCI and centre for financial inclusion in India etc.

### Review of literature

Until now not much work has been done on RuPay and its role in accelerating financial inclusion in India.

**Nayak Gayatri (2017)** concludes that NPCI-Rupay payment gateway is secure channel for online transaction. It follows two factor authentication, triple data encryption standard and the use of one time password prevents the system from attacks which may result in loss of integrity. The use of Secure communication tunnel will enhance the security of payment gateway. Other advanced encryption standards can be integrated in future.

**Gulati Kharote Birla Walecha (2016)** in their research report recommends and explores that the Reserve Bank of India has granted payment bank licenses to 11 firms. RuPay has also initiated new products to further financial inclusion like Cash@PoS through business correspondents and is already running a pilot. Further, RBI has granted licenses to 10 applicants to set up small finances banks (SFBs), which will provide basic banking to unserved and underserved sections. The core aim of financial inclusion of payment banks and SFBs is rightly aligned with the objectives and capability of RuPay and none of them have any existing relationships with the incumbent card schemes.

**Sushma Patel (2014)** examines that Indian customers find it easier to make payment through Debit Card and Credit Card rather than carrying too much cash. Use of cards has enhanced because product offering at a lower cost and that too with lucrative deals delighted with rewards scheme, bonus points etc.

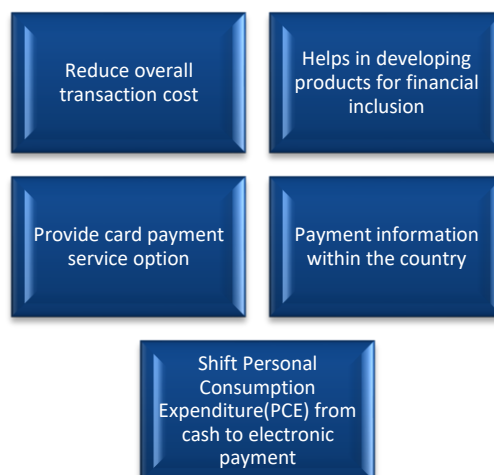
**P Manivannan (2013)** evaluates that Plastic money especially credit card is used by high income group. However fixed income group or salaried classes also start using it. The facility extended to both urban and rural area.

**Mandeep Kaur and Kamalpreet Kaur (2008)** in their article, "Development of Plastic Cards Market: Past, Present and Future Scenario in Indian

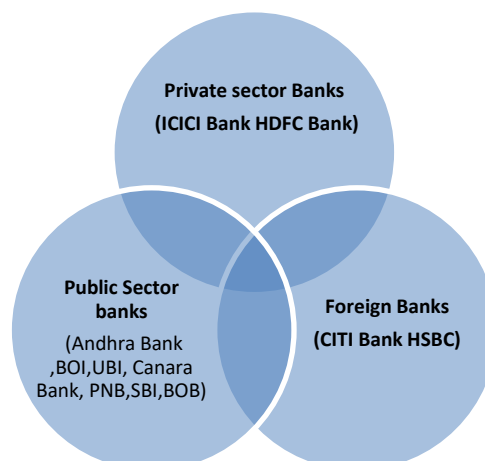
Banking” conclude Despite the strong advances in e-payment, an estimated 90 percent of personal consumption expenditure in India is still made with

cash which indicates tremendous growth potential of plastic cards.

## Objectives of RuPay:



**Figure 1 Banks Supporting RuPay in India**



As of March 2017, over 600 banks, including all major public sector banks, several private banks, co-operative and rural banks, issue RuPay cards. Banks in India are authorized to issue RuPay debit cards to their customers for use at ATMs, POS terminals, and e-commerce websites. About 25 million cards have been issued as of March 2014. RuPay cards are also issued at about 200 cooperative and rural banks to promote financial inclusion. It has been incorporated as a Section 25 company under Companies Act and is aimed to operate for the benefit of all the member banks and their customers. In RuPay, Banks pay a fee Rs. 2.5 for a 2000 transaction; this is Rs. 3.25 for global

gateways such as Visa and Master Card. With RuPay, Banks are not required to pay Rs. 25 lakh entry fee or 10-30 lakh quarterly fees that is international gateway charges from banks. According to the data published by NPCI, there are around 145,270 ATMs and more than 875,000 point of sale (PoS) terminals in India under the RuPay platform.

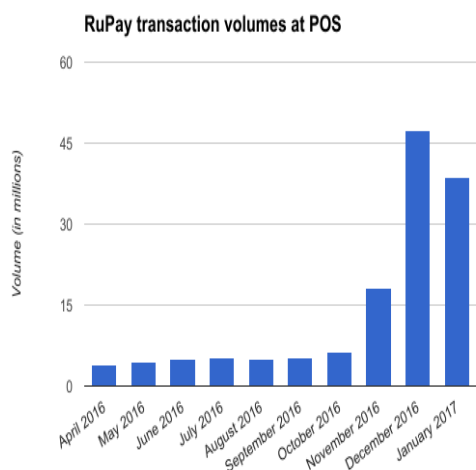
## Global Alliance

To increase acceptance around the world RuPay has form several agreements with other payment networks. Some major examples are Discover, Diners Club, JCB in Japan and Union Pay in China.

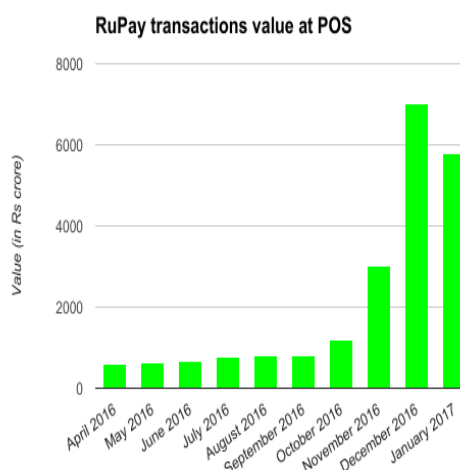
## Status of RuPay Usage

The reports of NPCI and RBI (2017) advocates that point of sale (POS) transactions have seen a major upward shift since the inception of RuPay . Graph 1 and 2 suggest that the value of rupay transactions

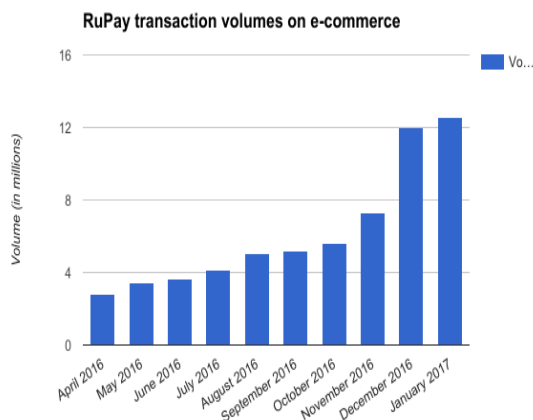
have increased from nearly 2 crores to Rs. 7000 crores and the volume of PoS Transactions have increased from around 5 million to 50 million in December 2016 which saw a minor drop down in the January 2017.



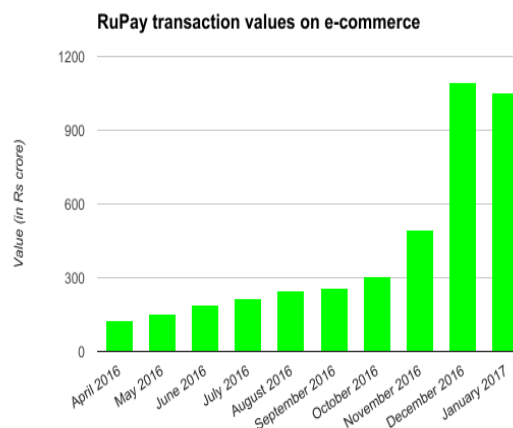
( Graph no. 1)



(Graph no. 2)



(Graph no. 3)



(Graph no. 4)

Source NPCI

Graph 3 and 4 suggest that the value of rupay transactions in ecommerce have increased from nearly Rs. 200 crores to Rs. 1000 crores and the volume of PoS transactions have increased from around 3 million to 13 million in December 2016 which saw a minor drop down in the January 2017.

For the period between April 2016 and January 2017, 61.79 million transactions took place on e-commerce websites using RuPay cards. The value of these transactions stood at Rs 4,139 crore. Meanwhile, RuPay card usage at POS terminals for the time period stood at 139.26 million transactions and the value of these stood was Rs 21,227 crore

## RuPay and financial Inclusion in India

### Pradhan Mantri Jan Dhan Yojana (PMJDY) -

- The program was launched in August 2014. This program also aims to provide access to easy credit, insurance and pension to the unbanked segments of the country, especially in the rural areas. All the participants under PMJDY were provided an inbuilt accident cover of Rs 1 lakh. Close to a 100 million RuPay cards were issued under this scheme.

### IRCTC RuPay Prepaid Cards -

- IRCTC (Indian Railway Catering and Tourism Corporation) in collaboration with the Union Bank of India launched the IRCTC RuPay Prepaid Card, that allows passengers to easily book train tickets in India. The card comes with several benefits like zero transaction cost on train ticket booking for the first 6 months.

### RuPay Mudra Card -

- Mudra (Micro Units Development and Refinance Agency Ltd) Bank launched the Pradhan Mantri Mudra Loan Yojana to provide advanced methods of funding to small scale industries in India. With the objective of "Funding the unfunded", the yojana has been structured keeping in mind the financial needs of the rural public. This innovative scheme collaborated with RuPay to make credit facilities easily accessible to

### Cash@POS-

- It is an another innovative program by RuPay that allows RuPay card holders to withdraw up to a certain limit amount from merchant POS terminals. Just as cash exchange with other merchants of good services.

### The RuPay Platinum Card-

- The card offers value added benefits such as cashback on utility bills, complimentary airport lounge access, and insurance cover among others.

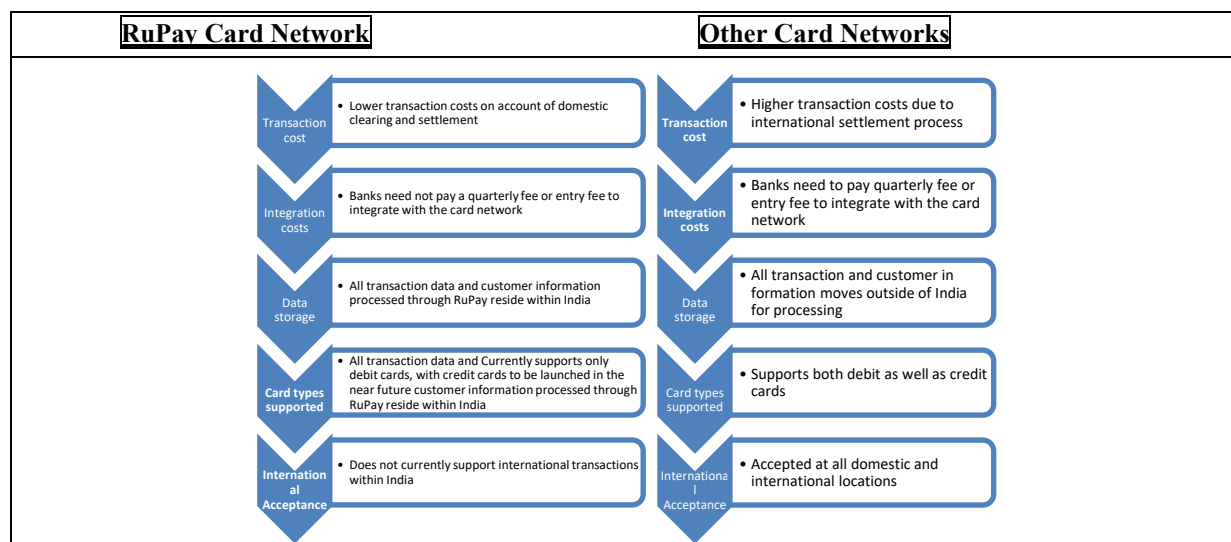
Source: NPCI

**RuPay Debit Cards:** RuPay debit cards are welcomed at more than 1.8 lakh merchant terminals in India. RuPay cards are offered by public sector, private banks, co-operative and rural banks. When you make a transaction with RuPay cards, the transaction fee that is charged to the merchant is 0.01%. RuPay debit cards are accepted in over 10,000 e-commerce sites and more than 8 lakh POS terminals.

**RuPay Credit Cards** NPCI decided to launch RuPay credit cards in 2016. To improve RuPay penetration in India, it is expected that the RuPay

credit card will raise to be a tough competitor for Visa or MasterCard services, which already have a well-established customer base in India. Currently, 13% of all transactions done at PoS terminals, ATMs and e-commerce websites are done using RuPay cards, with a steady rise in the number of transactions, every month. It has partnered with 10 different banks including, co-operative banks and public sector banks. The RuPay credit cards are set to be launched by September 2016. Around 10,000 RuPay credit cards will be issued at the time of its launch.

Figure 4 Differences between RuPay and other Card Networks



Source: NPCI

**Benefits to Indian Consumer** “RuPay cards work like all other cards from Master card and Visa and are accepted across a majority of ATMs, POS terminals and online platforms or e-commerce websites.” Currently, RuPay cards can be used at

technology, the global standard for debit and credit cards. RuPay cards are currently available as debit cards and credit cards will be available in the near future. RuPay was specifically built to address the needs of consumers, merchants and banks in India.

### Demonetization and RuPay Cards

Predictably, RuPay card usage at e-commerce sites and POS machines shot up during demonetization period. In “December 2016, RuPay saw 11.97 million transactions at online sites with a value of Rs 1,095 crore. POS machine transactions with RuPay cards stood at 47.27 million with the value of the transactions at Rs 7,005 crore. To give context, for the full financial year 2015-16, e-commerce transactions on the card network stood at 10.24 million transactions with a value of Rs 576 crore. Note that despite accounting for more than 40% of debit cards issued in the country, RuPay’s usage at online sites and POS machines is low. That can be attributed to the fact that a majority of debit cards issued were from the Jan Dhan Yojana financial inclusion programme.”

### Conclusion

RuPay, being a domestic scheme is committed towards development of customized product and service offerings for Indian consumers. There are under-penetrated/untapped consumers segments in rural areas that do not have access to banking and financial services. The correct pricing of RuPay products would make the RuPay cards more economically feasible for banks to offer to their customers.

About 240 banks, including all major public sector banks, currently issue RuPay cards to their customers, RuPay cards are also issued at about 200 cooperative and rural banks to promote financial inclusion. RuPay has significant opportunity to scale up and grab a significant share in overall cards business from the existing market leaders in Indian domestic market. This is already visible in their increased marketing efforts to brand

nearly all ATMs, POS terminals and over 10,000 websites in India. Indian consumers can apply for RuPay cards through any public, private, regional or co-operative bank. RuPay cards are enabled with EMV (Euro pay, Master card and Visa) chip

The benefits include the following; ability to be liked with other socio- economic initiatives, versatility, low cost, better suited for rural/untapped market.

the RuPay Platinum card, the launch of the RuPay credit card by September 2016, and the commencement of operations of 11 payments’ banks and 8 small finance banks over next 2 years.

- The demonetization move has definitely given a great boost to the circulation of RuPay cards as more accounts are intended to be opened and due to shortage in currency notes, the transaction size as well as the number of transactions would also increase. It comes as an ideal opportunity to promote the usage of RuPay cards as a lot of cashless transactions are expected to happen.
- In addition, relevant product variants would ensure that banks can target the hitherto untapped consumer segments. According to the latest news on the RuPay website, a Virtual RuPay card will be launched soon.
- Given the focus and strengths of the RuPay card in reaching out to a large segment of the Indian population, one can expect a very high penetration of these cards in the Indian domestic market.
- However, at this point in time, we cannot predict much about its international acceptance. In the long run, it may become the standard switch for domestic transactions and a tough competitor to international players such as Visa and MasterCard.
- RuPay also helps curb forex loss. For every transaction involving foreign card providers like Visa, MasterCard, American Express, there is the transaction fee on it going out of the country - an estimated 400 crore annually. With a domestic card service system, there is a tremendous amount of money that India can retain.



## Challenges

- The real challenge is the penetration in the mainstream business as most of the cards were issued during the Jan Dhan schemes and most of these accounts have zero balances. Also, the transaction size is very low.
- About a half of the population does not have a bank account despite the rollout of schemes like Jan Dhan Yojana and No-Frill accounts. The real difficulty lies in making the banking infrastructure strong and made available to the

remotest places in India. “As per the World Bank data, there are 13 bank branches per 100,000 of adult population.

- That makes it 7,692 customers per bank. But the distribution of these branches is uneven. With other products and services by RuPay like Kisan cards, Milk procurement cards and other services targeted at rural areas, the Indian banking system needs to reach every village to make the scheme a success and also help in empowering the economically-backward sections of the country.

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