# Payments Newsletter Bharat QR - Towards universalization of digital payments

September 2017







### Dear Readers,

It is my pleasure to bring to you the latest edition of our Payments newsletter, where we demystify the recently launched and highly anticipated Bharat QR payment system, while analyzing its impact on various stakeholders in the Payments Ecosystem.

In addition to our views, we have also incorporated use cases for the Bharat QR and links to relevant articles from leading publications into the newsletter.

I hope you will find this to be a good and insightful read.

For details or feedback, please write to

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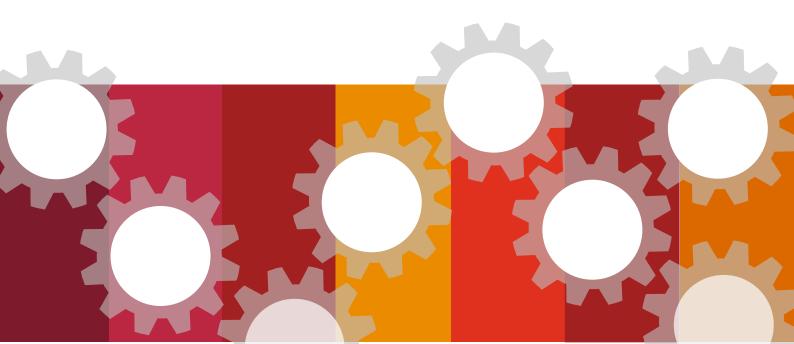
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# Introduction

The digital payments industry in India is expected to grow 10-fold to touch \$500 billion by 2020 and contribute 15 percent of the GDP. Along with other initiatives such as UPI, Aadhaar Pay, BHIM- the Bharat QR was launched to encourage the acceptance of cashless transactions throughout the country. Bharat QR was devised based on the direction set by the Reserve Bank of India (RBI) in September 2016 on its Payments Vision 2018, which outlines innovation, interoperability, and security as the three pillars to facilitate India's transition to a less—cash society.

BharatQR is a common QR code jointly developed by all the four major card payment companies—MasterCard, Visa, RuPay and American Express, under instructions from the Reserve Bank of India (RBI). It is the world's first interoperable payment acceptance solution which makes use of QR codes (a 2-D machine readable matrix code used to store information such as text, URL which can be read by a QR code reader or camera phone ) for payments to merchants.



#### Advantages of using Bharat QR

**Cost Effective**: The use of traditional point of sale (POS) machines has many strings attached in terms of cost of owning and operating card swipe

machines. BharatQR now completely removes the need for such hardware, a simple display of the QR code is all that it takes to start accepting payments. This low cost framework ensures the QR solution is scalable and easy to use.

Interoperable: A customer of any bank is now able to pay with an app with the Bharat QR feature using their credit, debit or prepaid cards. The merchants also gets identified by one QR code irrespective of the card network used for payment and this will result in deepening of acceptance infrastructure. The underlying specification for Bharat QR also allows for it to be implemented in other countries with customizations to meet local requirements, thus being able to deliver a globally interoperable solution across Banks and card networks.

**Secure:** Along with having a seamless customer experience, the fact that a customer does not have to physically present his card or even part with any of his banking details such as card number or CVV ensures greater comfort from a security perspective to the customer. The customer's card credentials remain in his/her control throughout the transaction and transaction authentication is done securely by him on his own device.

According to RBI, 32 million credit cards and 804 million debit cards were being used in the country in July 2017 but only 2.8 million POS machines with which merchants can accept card payments. BharatQR code is a great step in overcoming this impediment, making offline digital payments easier than ever before.

# Universalizing Bharat QR

To ensure pan India usage and acceptance of Bharat QR, integration with other payment modes would be critical. NPCI, MasterCard and Visa developed BharatQR with provisions for three additional fields: 1) Bank account and IFS code, 2) Unified Payments Interface, and 3) Aadhaar. These additional fields provide banks the option to populate them into the QR enabling larger scale.

We explore integration of Bharat QR with some of the existing payment modes-

- module in existing BHIM UPI and provide a choice to customer to choose payment mode e.g. the Bharat QR API should allow the customer to choose VPA/Aadhaar number of the Merchant to complete the payment
- BBPS Concerned departments can print a dynamic QR code (with bill amount) in utility bills being dispatched to the customer
- Dynamic QR code provisioning in traditional POS Service provider can explore the capability to build and display the dynamic QR code in the traditional POS swipe machine for the customer to capture and initiate payments
- *USSD* Currently, BharatQR code works on Android and iOS platform and not on Windows. A deployment option via USSD is being worked out to support non-smartphone users.

Further, new use cases can be explored where citizens can initiate payments using Bharat QR. A concerted effort at the Ministry level such as Ministry of Petroleum and Natural Gas can encourage payments at their fuel stations through

Bharat QR, India Post can deploy Bharat QR at its branches, Railways can deploy QR codes at ticketing counters and Road Transport department at their bus ticketing counters.

Universalizing Bharat QR as a common payments instrument, would require a holistic strategy comprising elements of people, process & technology

# People

The Stakeholders in the ecosystem who understand the benefits of Bharat QR's interoperability, features and capabilities need to educate both the merchant and the customer and encourage adoption to ensure pan India penetration of Bharat QR. Concerted effort need to be put by Banks, Ministries and state departments to educate and incentivize merchants as well as customers. Customized training material needs to be developed for rural and urban customer segment including small merchants.

#### **Process**

The existing merchant on boarding process needs to be streamlined for the ease of implementation. Stakeholders need to work on refinement/extension of standard operating procedures of Bharat QR. Consensus needs to be built among all stakeholders for a uniform standard process for merchant on boarding and Bharat QR code generation. Continuous feedback gathering input segregation should be followed for product enhancement.

#### **Technology**

Stakeholders need to build an infrastructure for issuing side for greater adoption of the product. Presently many banks are still in the development stage of their individual Apps that enables to scan and pay using Bharat QR. Banks are expected to work on digitization of the merchant on-boarding process.

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# Way Forward

BharatQR has the potential to significantly accelerate the growth of electronic payments acceptance in the country. Such an open loop and interoperable system that leverages not only the technology backbone of existing network companies but also their partnership with the government promises creation of a robust, safe & secure digital payments ecosystem.

For Bharat QR to become a universal mode of payments, the ecosystem needs to evolve in a way that will enable quick and easy generation of QR code for each merchant. The key would be to ensure rapid deployment of merchants on this platform along with implementation on bank apps as well as the BHIM App.

# Critical success factors for implementation

• The typical TAT for merchant onboarding ranges from minimum 4 to as high as 10 days. This process can be made efficient through 'KYC Lite'

- onboarding. Acquiring Banks may also want to consider the option of having both savings as well as current account holders to be on boarded as merchants where e-KYC based onboarding of merchants can be explored
- Establish a decentralized mechanism to generate QR code for acquired merchants that can be accessible at a local level for faster onboarding of merchants with DIY capabilities such as downloading of Bharat QR code
- Use of digital channels such as e mail or SMS with the downloadable link to their Bharat QR code can be explored for merchants towards streamlining of the On-boarding process.
- Stringent due diligence and risk assessment process at the acquiring bank typically delays the onboarding process and tends to exclude small/micro merchants. Acquiring banks can work on refining their due diligence and risk assessment processes basis the nature of business and volume of expected transactions from different segments of merchants

# Critical success factors for Bharat QR implementation

Efficient onboarding of merchants

2

Decentralized process of QR generation

3

Transparent dissemination of QR codes 4

Inclusion of a wider merchant base

(With inputs from Mihir Gandhi, Abhishek Lahiri, Neha Jaeel, Prateek Negi)

# Transformations across the industry

# BharatQR launched by Visa, Billdesk across 50 utility service providers

### **Economic Times**

Digital payments network Visa has partnered with payment gateway entity BillDesk, to enable around 59 service providers to start accepting BharatQR payments.

(Read more)

# SBI Card to debut contactless payments

### **Economic Times**

SBI Card customers could soon make payments by merely tapping their smartphone on a swipe machine.
(Read More)

# Andhra Pradesh power companies adopt BharatQR

### **Economic Times**

Two major power distribution companies of Andhra Pradesh have started acceptance of electricity bill payments digitally via BharatQR, becoming one of the first discom companies to adopt this mode of payment. (Read more)

### ItzCash enables Bharat QR on its PoS

### Times of India

ItzCash, a leading fintech company, has rolled out 'Bharat QR code' feature across its retail network. With this, users can scan and devices by simply flashing their cell phones. (Read More)

# Tata Power Introduces QR Code for bill payments

# Times of India

Tata Power has introduced a QR code service for bill payments in the mega polis, the company said in a statement. (Read More)

# Bharat QR code now enabled on POS machines for 12000 merchants

### Financial Express

Bharat QR Code is the world's first interoperable payment acceptance solution, and Bijlipay has become the first Indian Point-of-Sale (PoS) devices providing company to enable it on the screens of PoS machines. (Read More)

# Government plans big push to boost BharatOR and BHIM usage

## **Economic Times**

The government is going all out to expand the use of two mobile payment solutions – Bharat QR and BHIM by retail merchants to achieve its target of 25 billion digital transactions by March 2018.

(Read More)

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