

Dhanasri

UPI Ready Digital Banking for Auroville

Developed by tālam under CSR Trust
as a sandbox project to pilot
new **fintech** solutions for Auroville.

Why Dhanasri?

The future of money transfer in India is cashless



India Has Changed

India launched UPI on 11 April 2016 to move towards a cashless economy.



THE FUTURE OF PAYMENTS

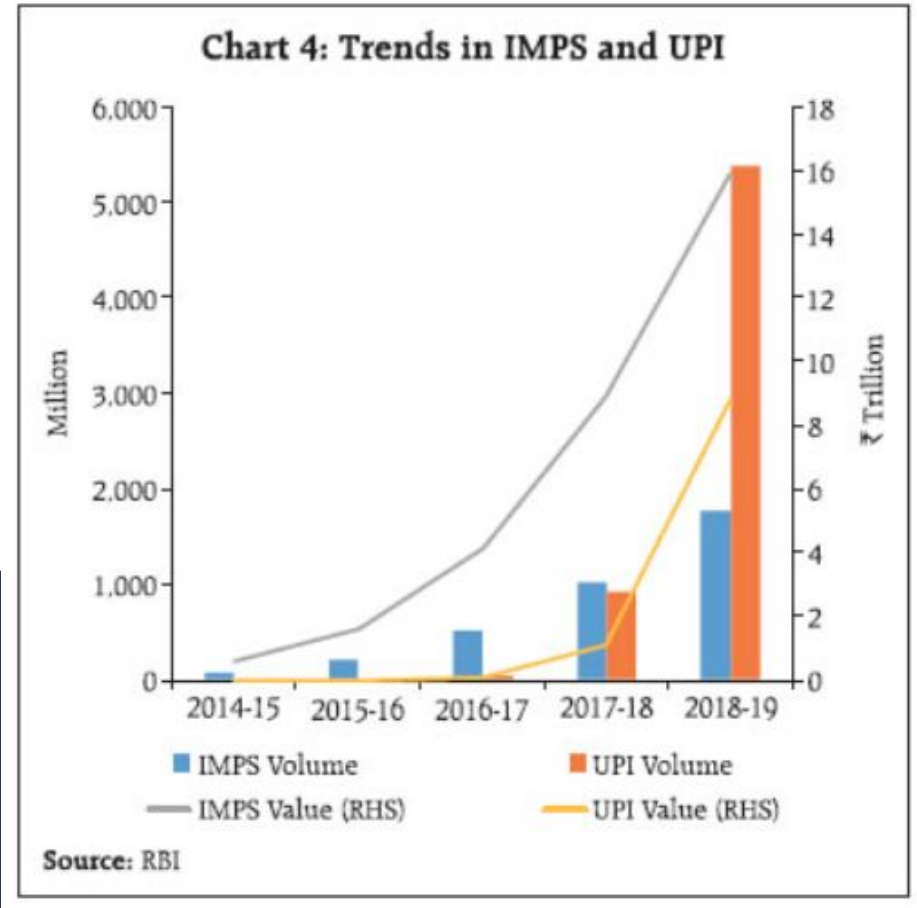
UPI is an instant real-time payment system developed by **National Payments Corporation of India (NPCI)** facilitating inter-bank transfers.

UPI Growth

Since its launch UPI has seen a mammoth rise in volumes by far exceeding the transactions done on the IMPS platform.

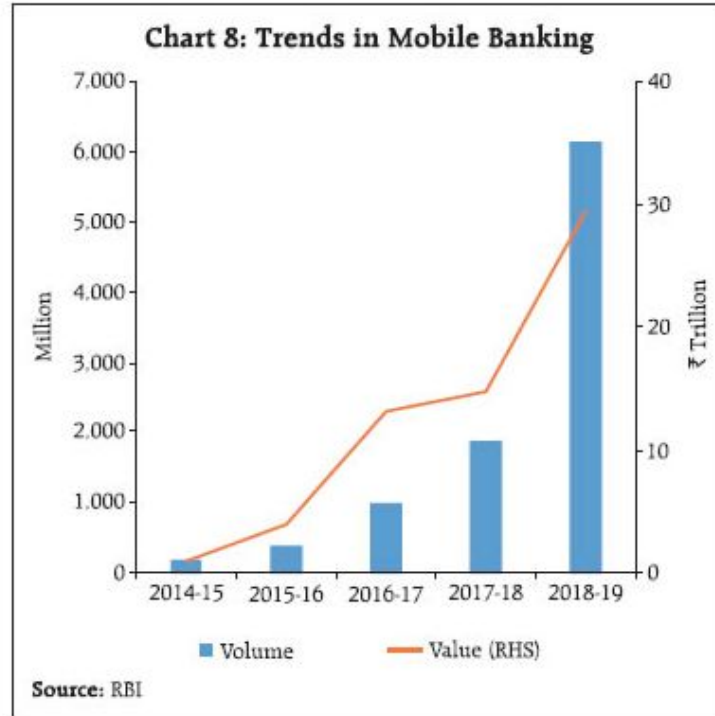
IMPS is precursor to UPI Launched by NPCI in 2010

UPI transactions have grown a staggering **57000%** since its debut in 2016 while card payments have only increased by 20% during the same time.



Mobile Banking

The volume of digital transactions using the mobile banking channel has witnessed sharp annual increases in India (227.7 per cent in 2018-19 as against 91.7 per cent in 2017-18).



Is Auroville Ready for India?



Dhanasri Offers A Solution

UPI Ready Digital Banking for Auroville

3 Main Features

1. Unique Bank Account Number
2. IFSC Code
3. UPI based QR Code and Address

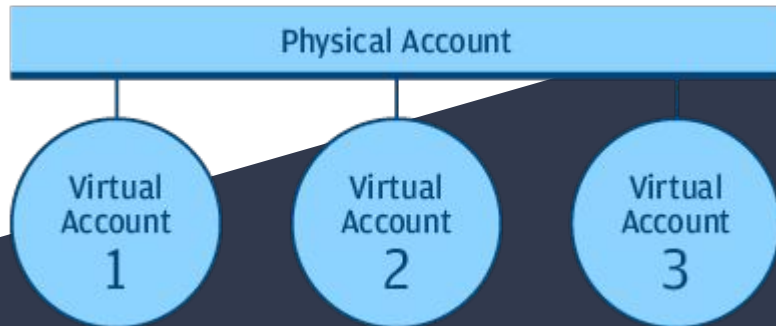
This pilot project is **only to receive** money digitally.



Virtual Bank Account (VBA)

Dhanasri is a software platform which has an actual bank account with **Yes Bank** of India. Through their API (Application Programming Interface) Dhanasri can create any number of Virtual Bank Accounts (VBA) and each VBA can operate like an independent bank account.

A VBA holder can receive money from any bank in India and track it in real time.

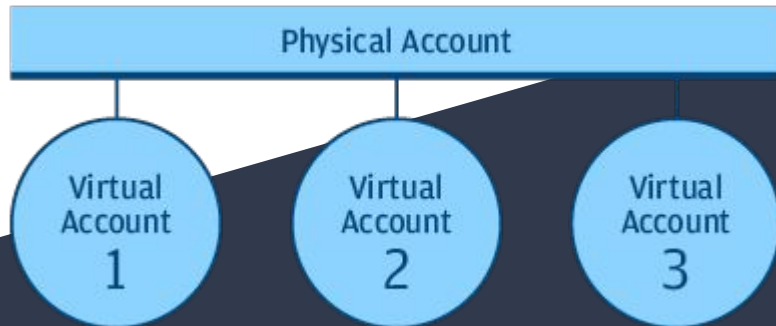


A VBA is similar to an FS account, but it has the power of an actual bank account. Any unit, service or activity in Auroville can use this facility to have bank accounts without having to go to an actual bank.

Why Yes Bank ?

The idea of VBA technology is relatively new in India and only two banks (Yes Bank and RBL Bank) are pioneering in this field and are providing necessary API (Application Programming Interface) for this technology.

<https://www.yesbank.in/digital-banking/payment-solution/api-banking>
<https://developer.rblbank.com/newproductsinfo/1604>



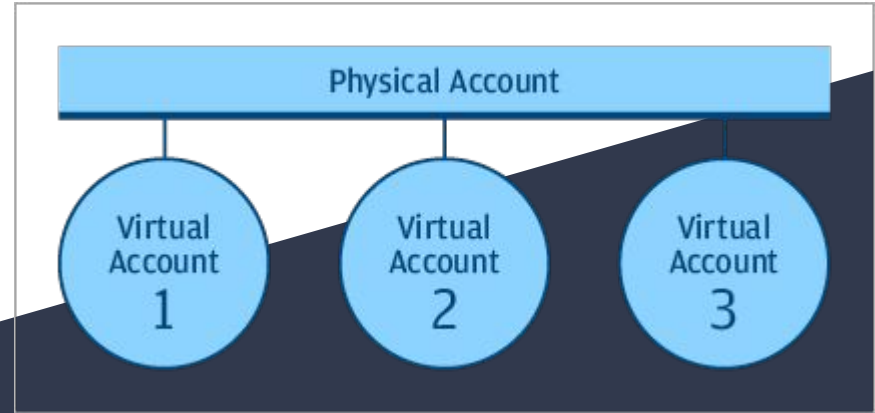
Outside India, banks like JP Morgan and HSBC offer virtual banking solutions in the USA, Singapore, Hong Kong and in many countries in Europe.

Other banks like SBI have started using VBA in personal banking, but they are yet to develop and provide API for corporate banking.

Dhanasri VBA Features

Each VBA will have:

1. Unique Bank Account Number
2. IFSC Code
3. UPI based QR Code and Address



All VBAs exist within Dhanasri and it is possible to design features according to the requirements of Auroville's evolving financial system.

VBA Advantages

1. Use modern UPI based digital payment channels like PayTM, Google Pay etc
2. Create individual virtual accounts that work like a normal bank account
3. Each virtual account will have a separate ledger
4. Easy real time tracking of each transaction by the VBA holder
5. The actual money will be coming into one common bank account
6. Privacy - Each VBA holder sees only their transactions and not others
7. Better internal transparency, accountability and therefore trust
8. Security - NPCI (National Payment Corporation of India) and Yes Bank are making the transactions safe and secure.
9. Automation of many manual steps involved in receiving money from outside.

Virtual Bank accounts are used by large organizations to decentralize operations while retaining centralized visibility and control and reducing the number of physical accounts.

Where we are

Stage 1: Virtual Accounts

We are at the final stages of getting our API based account go live with Yes Bank. This enables us to create thousands of virtual accounts and assign it specific Unit, Service or Activity of Auroville and enable them to receive money from customer, vendor or donor.

This is only a prototype for testing.

How does a VBA look like?

AUROVL is the prefix of all virtual accounts. After this prefix, we could have 28 alpha numeric values.

Account number: AUROVLTALAM
IFSC Code YESB0CMSNOC

We could also make it look more like traditional bank account number

Account number: AUROVL000 001 438 292
IFSC Code YESB0CMSNOC

Each virtual account also is a valid UPI address
AUROVLTALAM@yesbankLtd

Each UPI address can be converted into a scannable QR code like



What means are available to receive money through VBA?

1. **NEFT, RTGS, IMPS, Cheque or Cash deposit.** Provide the account number to customers, donors, vendors to receive money. They just add this as any other regular account number in their bank for NEFT, RTGS, IMPS transactions or write a cheque or deposit cash
2. **UPI Address.** Send the UPI address to payer who adds it to their Google Pay, or PayTM or PhonePe or BharatQR apps and transfer money from their mobile app
3. **UPI QR Code.** Display the QR code in stores, activities, ad hoc classes and event front offices for the payer to scan using their mobile apps and pay money

How many can each Unit hold?

0000 unique virtual accounts!

This means we could have millions and millions of virtual account numbers. More accounts than the entire credit card and debit card industry could have in the world today. But in reality we don't need so much.

A unit can have as many as needed for their operational purposes such as one for each location of store or project or event.

How long does it take to create virtual account?

A few minutes!

It is similar to creating an FS account.

Dhanasri platform admin can create new accounts with few clicks. Units, Service and activities can contact Dhanasri admin to create test account.

The UI for self-service operation is currently under design & development phase and will be available post pilot phase.

How many units are we going to include in pilot?

We are looking at a small number of different units, services and activities around 5 -7 to address and test various needs of different segments.

1. Matrimandir Indian donations
2. 4 units yet to be decided
3. 2 activities yet to be decided

What about GST?

It is the responsibility of the virtual account holder.

Units collect the GST included price from its customers and Dhanasri will pass through the money to the respective units. Each unit can file the GST as they do now for their sales.

How does Units receive their money in FS account?

Dhanasri will prepare a regular consolidated report on each Unit's income and transfer this money to Financial Service's ICICI bank account with a break up of how much money each Unit's FS Account need to receive.

How much will be the service fee?

We are still under negotiation with Yes Bank for the service charge. The current rate is 0.3% + GST per transacted amount with a cap of Rs100 as upper limit.

This is a pilot project to test viability of the technology and the financial sustainability of Dhanasri is yet to be worked out.

Are we doing something too radical or different?

No and Yes

No. Many units are operating their own bank accounts, our FS account numbers are in a way virtual bank account numbers, many units have their own online payment gateway account which provide UPI payment options. Auroville donation portal for instance is using a payment gateway created by ADPS trust, receiving money for several entities in Auroville through Auroville Unity Fund bank account and transfers it to individual FS accounts. These solutions are fragmented where the bank treats each unit as a separate legal entity and money is locked in several accounts.

Yes. we do something new that was not possible until a couple of years ago. By using virtual accounts and leveraging UPI addresses we improve our existing money flow system in a more transparent, legally more cleaner and efficient way.

Who else in India is doing similar things?

IIM Udaipur is using Yes Bank virtual accounts for fee collection of its different programs under different virtual accounts.

Isha Yoga foundation is using Yes Bank virtual accounts for its different centres in India.

Franklin Templeton for receiving payments for mutual funds

Akshaya Patra, an NGO, for many of its operations.

When did the project begin?

Who are we in contact?

The project was initiated at around when UPI was launched by NPCI in India in 2016. First we worked with IDBI, then CitrusPay followed by Yes Bank, SBI, Corporate Bank, PayU, Razorpay etc but solutions were not exactly what we were looking for.

Attended Fintech conference and came to know the partners of Razorpay is Yes Bank. Revived the relationship by escalating the requirements to Vice President digital and corporate banking and things worked out. Currently, tālam is in touch with senior level executives of Yes Bank's Corporate banking and Digital Banking divisions to pilot this feature in Auroville.

We are a few steps away from getting in touch with NPCI directly. We want to reach there after we have some successful pilot products in Auroville in Fintech.

When are we ready to test this pilot project?

Tentatively on 28th February subject to approval from Yes Bank.

Thank you!

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25th Feb 2020

Team tālam

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As an activity under CSR, tālam has an extended team support from CSR, specifically, Tency and Hemant who have been advisors and supporters of our initiatives.

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