2016

Training Module on Enabling Digital Payments in Rural India

National Institute of Rural Development and Panchayati Raj,
Ministry of Rural Development, Government of India.
Rajendranagar, Hyderabad-500030.

December, 2016

Published by:
National Institute of Rural Development and Panchayati Raj,
Ministry of Rural Development, Government of India.
Rajendranagar, Hyderabad - 500 030. Tel : Telefax: 040-24008473
Website: http://www.nird.org

अमरजीत सिन्हा
AMARJEET SINHA

सत्यमेव जयते

सचिव
भारत सरकार
ग्रामीण विकास मंत्रालय
ग्रामीण विकास विभाग
कृषि भवन, नई दिल्ली–110001
SECRETARY
Government of India
Ministry of Rural Development
Department of Rural Development
Krishi Bhawan, New Delhi-110001
Tel.: 91-11-23382230, 23384467
Fax: 011-23382408
E-mail: secyrd@nic.in

December 9, 2016

FOREWORD

The Department of Rural Development is using the IT/DBT platform to reach wages of MGNREGS workers to their accounts. It is also using the platform to ensure transfer of funds to beneficiaries of rural housing scheme, Pradhan Mantri Awaas Yojana (Gramin) (PMAY-G).

The challenge of the Department is to promote less cash and cashless transactions after the money reaches the bank accounts. For doing this the Department has the objective to provide cashless transaction option by any means to all MGNREGA active workers (10.88 crores), Pradhan Mantri Awaas Yojana beneficiaries (1 crore), Women Self Help Group Member (3.3 crores). We will try to reach every beneficiary to explain how cashless works, to promote behaviour change and to handhold before March, 2017.

The present training and capacity building will require the support of all concerned at the field level to handhold poor households and facilitate use of cashless systems at their level. Coordination with Banks, NPCI, Panchayats, other Departments of Government are all necessary to move on the Mission for less cash and cashless transactions among the poor.

Amarjeet Sinha

(Amarjeet Sinha)
9 December 2016

डॉ. डब्लु.आर. रेड्डी, आई ए एस
महानिदेशक

Dr. W.R. Reddy, IAS
Director General

राष्ट्रीय ग्रामीण विकास एवं पंचायती राज संस्थान
(ग्रामीण विकास मंत्रालय, भारत सरकार)
राजेन्द्रनगर, हैदराबाद - 500 030, तेलंगाना राज्य, भारत.
NATIONAL INSTITUTE OF RURAL DEVELOPMENT & PANCHAYATI RAJ
(Ministry of Rural Development, Government of India)
Rajendranagar, Hyderabad- 500 030, Telangana State, India.
Tel (O) : 040-24008441, Fax : 040-24015277
E-mail : wr.reddy@nic.in

PREFACE

In the wake of demonetization and emphasis on digital payment mode, especially in regard to government sponsored rural development programmes, there has been necessity to orient the rural people on various means of digital payments across the country. These digital payment methods are more authentic and simple while transacting. This in turn leads to cashless economy in rural India to reduce several of malpractices and contain social evils. Given the social milieu of rural society in India, providing them most user-friendly learning material/tools is a challenging task. In this regard, NIRD&PR, in consultation with Ministry of Rural Development, brought out this document titled **Training Module on Enabling Digital Payments in Rural India** consisting of advantages of cashless transactions, types of digital transactions etc. The best advantage of the training material is that it simple and user friendly in view of pictorial depictions by explaining each step involved in digital transactions.

I wish the Master Trainers and the Resource Persons use this material to their best advantage and enable the rural people to acquire the requisite capacity to migrate to digital transactions leading to cashless or less cash economy for overall prosperity of the Nation.

(W. R. Reddy)

Table of Contents

1. Acronyms Used

Term	Acronym
Aadhaar Enabled Payment System	AEPS
Mobile Application	App
Mobile Personal Identification Number	MPIN
National Rural Livelihood Mission	NRLM
Personal Identification Number	PIN
Unified Payment Interface	UPI
Unstructured Supplementary Service Data	USSD
Value Added Services	VAS
Automated Teller Machine	ATM
Mobile Money Identifier	MMID
Third/Fourth-Generation Cell-Phone Technology	3G/4G
Subscriber Identity Module	SIM
Short Message Service	SMS
One Time Password	OTP
Virtual Payment Address	VPA
Indian Financial System Code	IFSC
Immediate Payment Service	IMPS
National Electronic Funds Transfer	NEFT
Real Time Gross Settlement	RTGS

Term	Acronym
Person to Person	P2P
National Payments Corporation of India	NPCI
iPhone Operating System (Apple)	iOS
Code Division Multiple Access	CDMA
Value Added Services	VAS
National Unified USSD Platform	NUUP
Global System for Mobile	GSM
Point-of-Sale, or Point of Service	PoS
Mobile Point of Sale	mPOS
Intrabank	On-us
Interbank	Off-us
Unique Identification Authority of India	UIDAI
Business Correspondent	BC
Issuer Identification Number	IIN
Public Switched Telephone Network	PSTN
Quick Response Code	QR Code
Know Your Customer	KYC
Basic Savings Bank Deposit Account	BSBDA
Customer Service Point	CSP

2. Advantages of Cashless Transactions

- Convenience and ease of transaction and is more secure compared to making transactions involving cash withdrawal.
- Drive the development and modernisation of the payment system, promote transparency and accountability, reduce transaction costs, and decrease the size of the grey or informal economy.
- Help business people grow their customer base and resource pool, far beyond the limitations of their immediate geographic area.
- Adds up to environment as no tree will be cut for printing paper money.
- Reduces Corruption

Overall they boost the rural economy and enables better development of the rural masses.

3. Unified Payment Interface (UPI)

3.1 Prerequisites

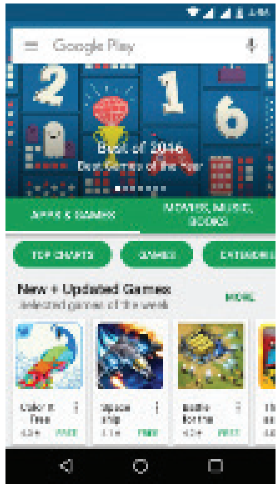
1. Make sure your mobile number is registered with your bank and you have mobile banking enabled.
2. If you already have an account and you have not linked your mobile number with your account in the bank, then:
   - You can visit your nearest bank branch and register your mobile number.
   - Alternatively, you can go to any ATM, present your bank account card (debit, credit, etc.) and choose the option to register your mobile number.

Things needed for a Payer/Receiver to make Digital Transactions using UPI

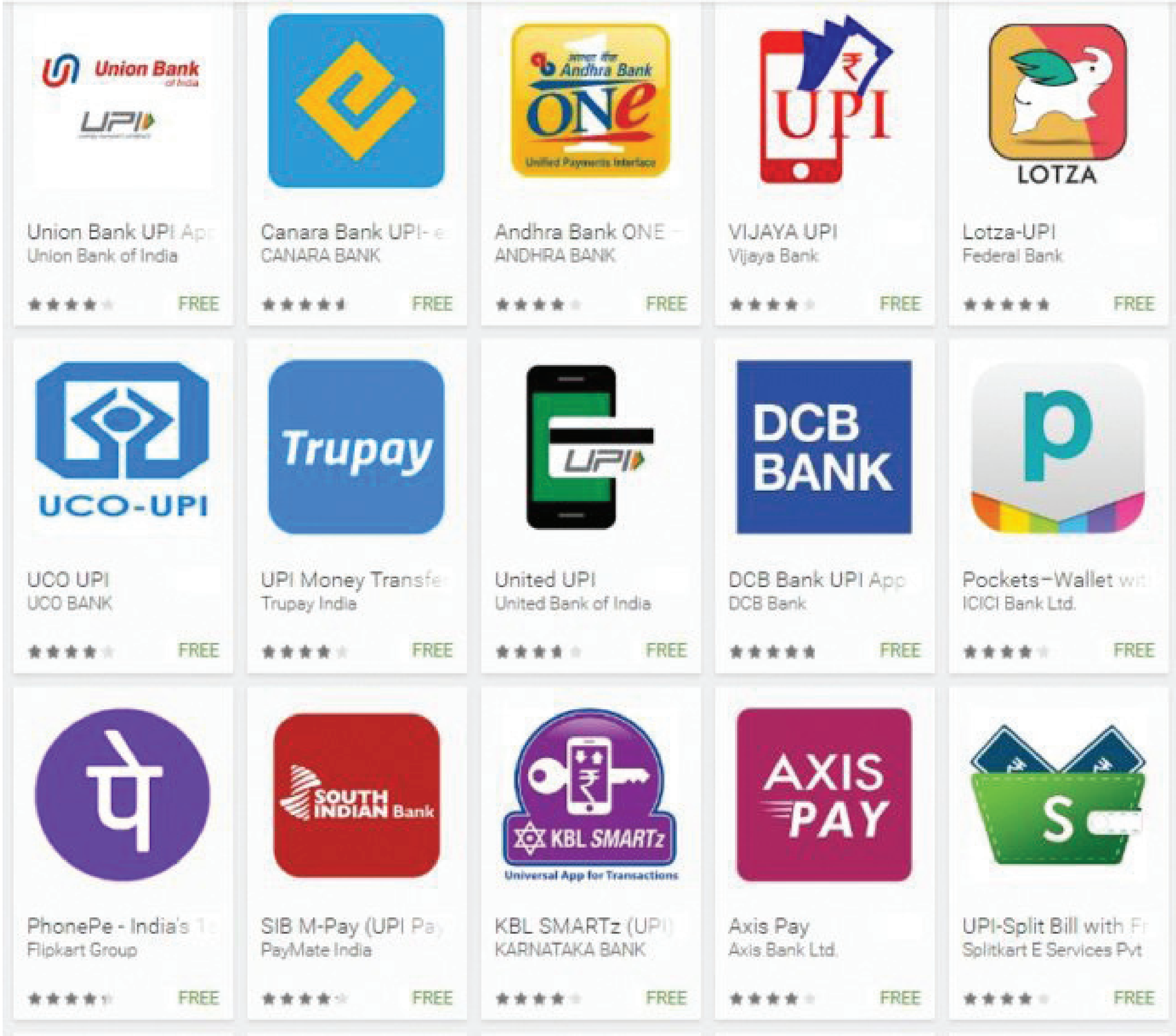
	Payer / Buyer		Receiver / Merchant	
Smart Phone	✔	For downloading and using UPI enabled Banking App	✔	For downloading and accessing UPI enabled Banking App
Mobile App	✔	Downloaded from Google Play Store, App Store to use UPI App services	✔	Downloaded from Google Play Store, App Store to use App Banking services
Feature Phone	✘	Does not work since does not allow download/storage of any Mobile App	✘	Does not work since does not allow download/ storage of any Mobile App
Bank Account	✔	Payer's Bank account/s needs to be added in UPI App for funds transfer to Payee	✔	For receiving payments
Aadhaar	?	Optional. VPA can be created using Aadhaar number also. as unique identifier	?	Optional. UPI enables funds transfer also by providing (Account No + IFSC) or (Mobile No. + MMID) or Aadhaar Number
Virtual Payment Address (VPA)	✔	Payer will need to create a unique VPA to transfer money from UPI App	✔	Ideally, Payee will need to create a unique VPA to receive money via UPI App
MMID / Other Code	✘	Not Required	?	Optional Needed in case of transfer to payee via (Mobile No. + MMID)
PIN	✔	You need App login and UPI Pin every time to authorise the transaction. OTP you need while setting the UPI Pin (it is one time)	✔	Need login credentials to securely login in the App
Mobile number registered with Bank	✔	Bank Account is to be linked to Mobile Number for initiating payments	✔	For successfully accessing Bank Account on Mobile for receiving account updates
Mobile Network	✔	Service provider is needed to support funds Transfer (MTNL, BSNL, Airtel, Vodafone etc.)	✔	for banking services such as SMS, IVR, etc., for Account updates via Mobile Network
Internet	✔	To execute funds, transfer process between the payer and the receiver	✔	To execute banking transaction (exchange of information) between multiple parties.

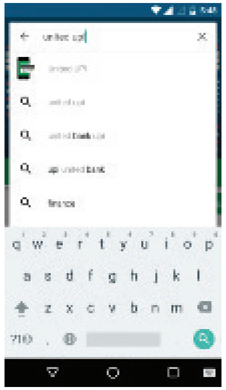
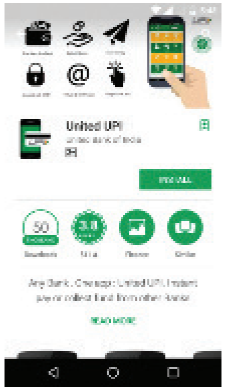
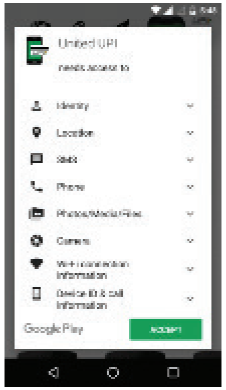
3.2 Steps Involved

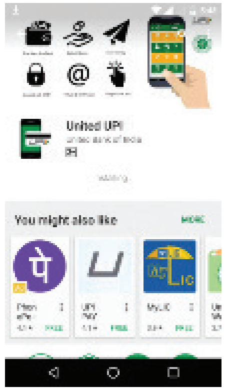
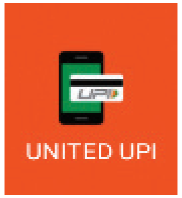
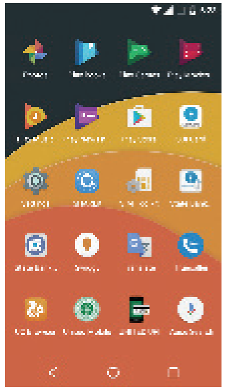
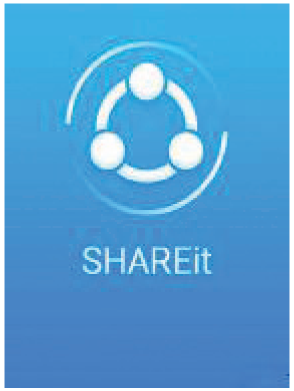
3.2.1 Download App

<table>
<tr>
<td>I. Open Play Store from your Mobile App Gallery</td>
<td> 
</td>
</tr>
<tr>
<td>II. Search for the App
Type the name of the specific App you wish to download on the Search Bar (eg: UPI SBI BANK APP, UPI SBI, etc.)
or
Type “UPI APP” in search bar. List of all UPI Apps provided by Banks will be displayed for choice.</td>
<td>
</td>
</tr>
</table>

III. Some of available Apps on the Google Play Store which support UPI (for reference)



IV. If you entere UPI APP, a list will be displayed for your selection. Select the App that you want to install/use from the list of Apps displayed	
V. Click 'Install'	
VI. Click 'Accept'	

VII. Downloading and Installation of 'App' begins	
VIII. App icon appears in your App Gallery	 
*Alternate method to get App on your phone is to Use SHAREit App	

What is SHAREit?

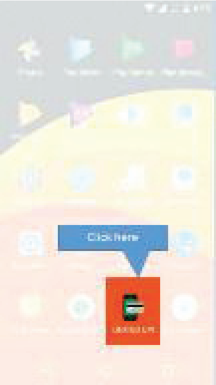
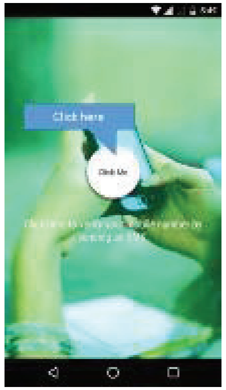
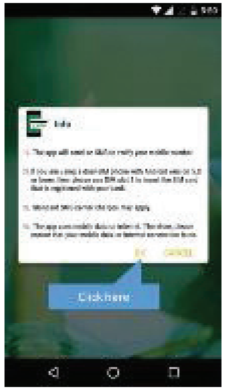
SHAREit is a free application to transfer files from a Wi-Fi compatible device to another similar one. Users can use it to transfer files including photos, videos, music, contacts, apps and any other files.

Features:

- ✓ Free Application
- ✓ Available for Android, iOS ,Windows Phones, etc.
- ✓ Transfers files directly by ad-hoc wifi connections
- ✓ Offers faster speed than Bluetooth and NFC
- ✓ Secure transfer of files.

3.2.2 Register Yourself on App

- If you are using dual SIM mobile device then make sure you choose the SIM and number which is registered with your Bank Account. The application will automatically send an SMS from the SIM chosen (in case of dual SIM phone usually SIM 1) to form the device hard binding (All transactions which will happen through this App will be done by mapping with this Mobile Number. eg: OTP will be received on this Mobile Number for authenticating transaction).

I. Open UPI App from your Mobile App Gallery	
II. Click Ok to Send SMS to verify Mobile Number (SIM 1 in case of dual SIM phone)	
III. Click on ‘Register’	

I. Enter Details (As asked. Eg: Name, Date of Birth (DOB), Email Id,)

* *Some Apps may give multiple options like Facebook or Gmail Login. Accordingly enter details and click on 'Submit'*
* *You may receive OTP via SMS on your phone. Enter OTP and click OK/Confirm*
* *Some Apps may ask you to add bank accounts First and then create the Virtual Payment Address (VPA). For some, it may be reverse.*

***Security Question**

i. Some App may give you any option to select 1 or 2 security questions among the ones given in drop down menu.

ii. Give answers for questions you select.
(Remember or note down these answers. As these security questions are used at the time of password reset.)

***Set App Login Password**

This step may appear in the beginning or after few steps

i. User needs to set up the App login password to access the UPI Application

- **Password should be alphanumeric with a SPECIAL CHARACTER. Alphabets must have at least one UPPER CASE and one LOWER CASE letter. Eg: aBc_123**
- **Length of the Login password must be at least 6 characters**
- **Remember password to login next time.**

***HELP** can be obtained by clicking on '?'

ii. Click on 'Continue'

iii. Check 'Privacy Policy and Terms and Conditions'

iv. Click 'Continue'

3.2.3 Virtual Payment Aaddress (VPA)/ Virtual ID Creation

i. You may choose Your Unique ID (Aadhar No., Mobile No., Email) as your Virtual Payment Address (VPA)

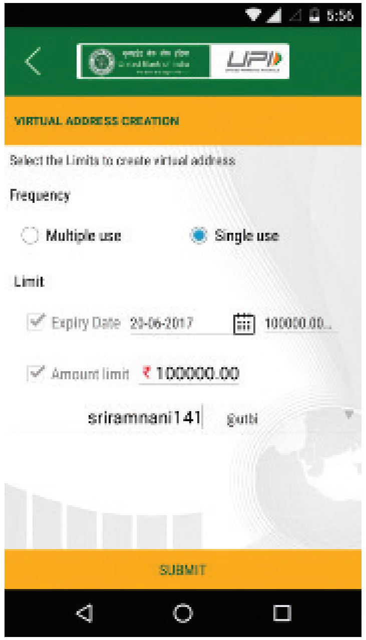
* *Creation of a virtual address is as simple as creating an email ID*

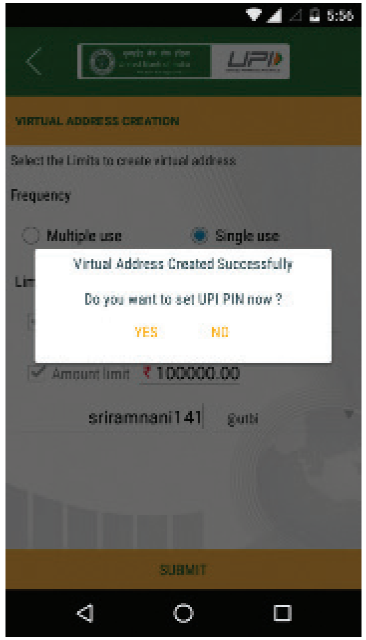
* There is no criteria for creating a VPA. If a VPA is already used (App will notify), you need to create a different one

* User may also create multiple VPAs

* To Transfer funds or Collect money, you may share your VPA.

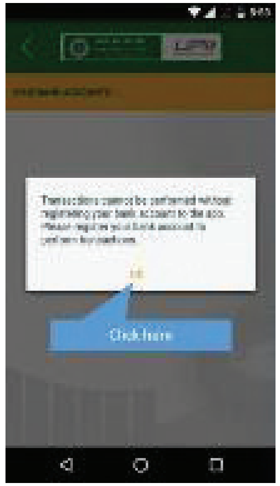
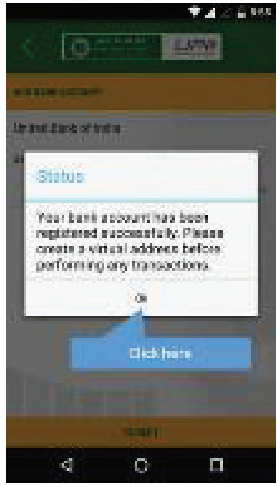
    - VPA is unique.



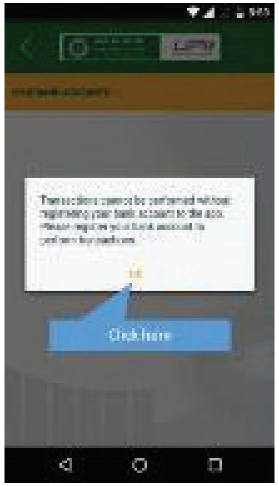


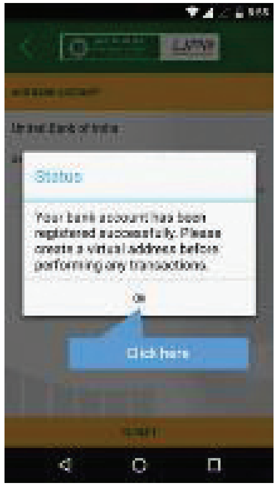
3.2.4 Add Bank Accounts

- **This option enables the user to add their Bank accounts**

I. Select Your Bank (All accounts linked to your mobile number are visible)	 
II. Give Account Details For First Time	  

3.2.5 Link the UPI Virtual ID with Your Bank Account(s)

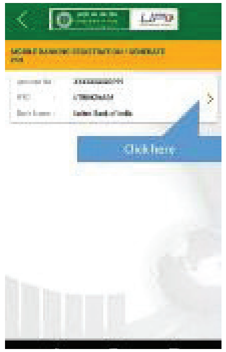
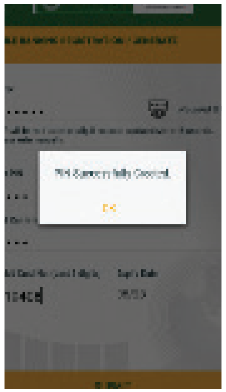
I. List of accounts linked to your Mobile Number is fetched from the Bank selected on the previous step and is displayed	 
II. Click on the drop-down menu shows the list of Accounts	

III. Select the Account you wish to link	 
IV. Set the Limit (Maximum possible transfer amount) of the VPA	

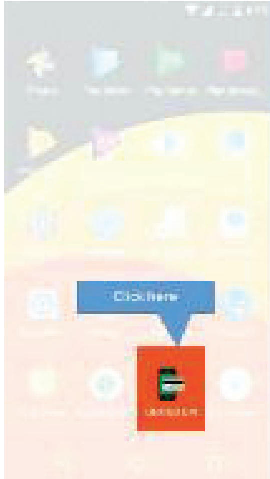
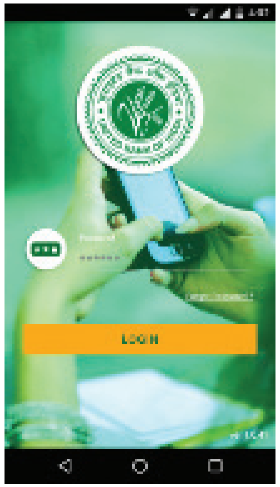
V. Set as Primary (In case of multiple VPAs): YES/NO and Submit	
VI. VPA is successfully added	
VII. On successfully adding of accounts under a Bank, a message is displayed as under: ‘Bank Added Successfully’ * Repeat the process to link your multiple bank accounts with the same UPI virtual address * You may choose and set one Default Bank Account	

3.2.6 Set M-Pin for Validating Transactions

(* In Case No MPIN is set for the account/or in case of change of MPIN/ MOBILE BANKING REGISTRATION)

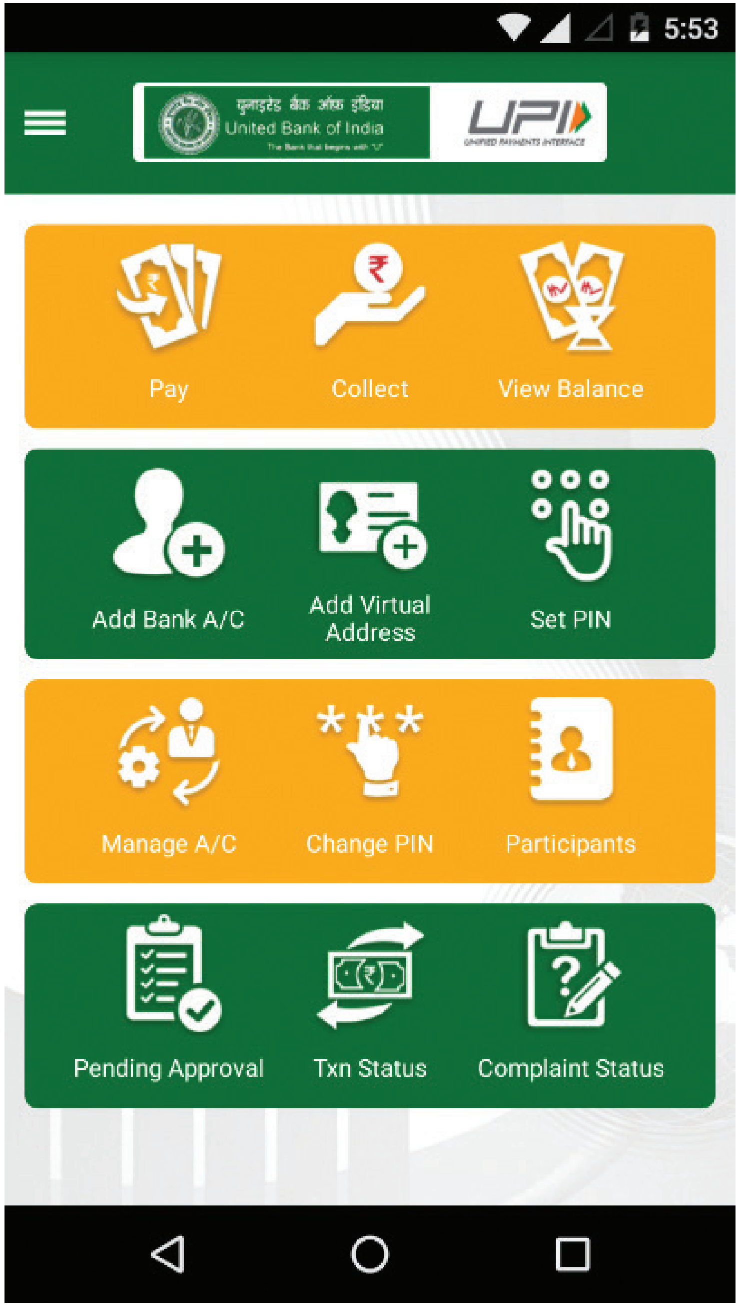
Create MPIN	
i. Enter MPIN ii. Enter last 6-digit of the Debit Card Number (linked to the account) iii. Enter Month and Year of Expiry iv. Tap ‘YES’ v. An OTP will be generated and sent to the registered Mobile Number vi. Put received OTP	
vii. MPIN will be set successfully. MPIN will be asked for authorising transactions	

3.2.7 Login

i. Open App by clicking on the App Icon in the Mobile App Gallery	
ii. Enter the created Login Password iii. Click on 'Login'	

iv. If you have forgotten your Password, reset it by tapping on ‘Forgot Password’ v. It will ask you to select the SIM (in case of dual sim phone). Select the one for which you have registered	
vi. You will be directed to the page where it asks for the 1 or 2 Security questions which you have set at the time of Registration	

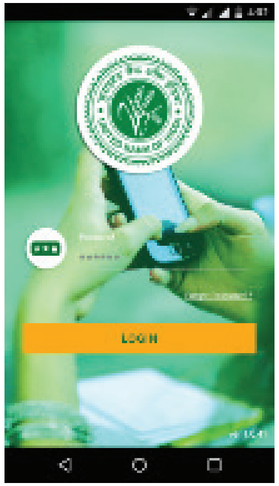
Sample Main Dashboard Look



3.3 Transactions

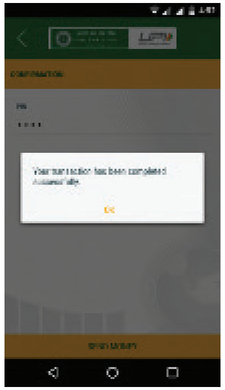
3.3.1 Send/Pay Money

*** This option allows the user to pay money to a beneficiary.**

i. Open UPI App from Mobile App Gallery	
ii. Click Send/Pay money	

iii. Select the VPA (this can be Mobile No., Aadhar No., email ID or the customised VPA that you had created and which is linked to your bank account/s) iv. Select your account from which you wish to pay (in case of multiple accounts)	
v. Select/Add Payee's Account (Payment can be made via one of the 5 ways by tapping on the drop down menu) 1. Virtual Address (VPA) of Beneficiary or 2. Account number+ IFSC of Beneficiary or 3. Beneficiary Mobile Number + MMID or 4. Aadhaar Number or 5. Beneficiary List – You can maintain beneficiaries and select them using this option	

vi. Enter the purpose/description of transaction	
vii. Click ‘Submit/Pay’	

viii. Click ‘Confirm’	
ix. MPIN will be asked for authorising the transaction. Enter the MPIN and tap on ‘YES/NEXT/OK’	
x. Successful message will be displayed as a pop up on the screen.	

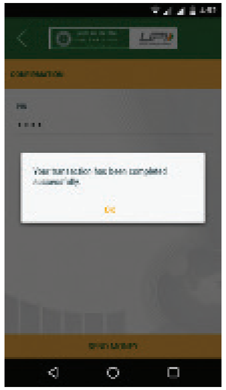
3.3.2 Request Money

(This option allows the user to collect money from someone.)

i. Click on ‘Collect/Request’	
ii. Payee enters the Virtual ID (VPA) of the payer from whom you will receive money. Or you may Enter the VPA of the remitter or choose from the beneficiary list from the drop down menu	

iii. Select Bank/Account to which you wish to receive amount to	
iv. Enter the amount you need to receive	

v. You may enter remarks/description of transaction details (eg:-milk bill, doctor bill)	
vi. Press ‘Submit’	

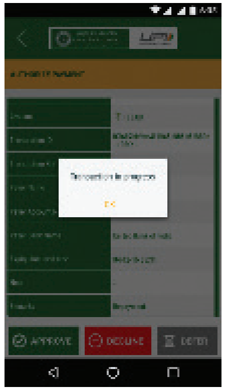
vii. Click ‘Confirm’	
viii. Pop up message is displayed on successful completion.	
ix. Payer will receive your request for money	

3.3.3 Authorise Payment (Payer's End)

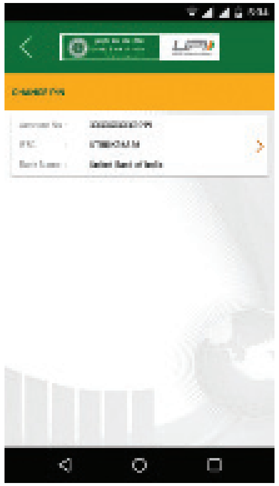
Pending Requests (This option allows the User to view the list of the pending collect requests received)

i. Click on 'Pending Request' option from the dashboard	
ii. The payer will identify your credentials as a payee	

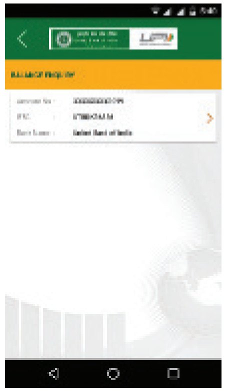
iii. Review the details entered	
iv. Payer to click 'Approve / Reject'	

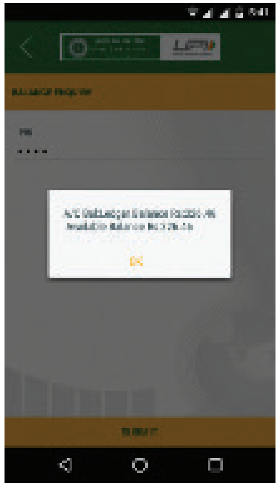
v. The payer will then enter his UPI MPIN and click on 'Yes'	
vi. Press 'Submit' to complete the payment process.	
vii. You will receive a confirmation of transaction. Along with an SMS.	

3.3.4 Additional Services

3.3.4.1 View Account Details	
1. This option enables the user to change their login password	
2. This option enables the user to change the MPIN	 

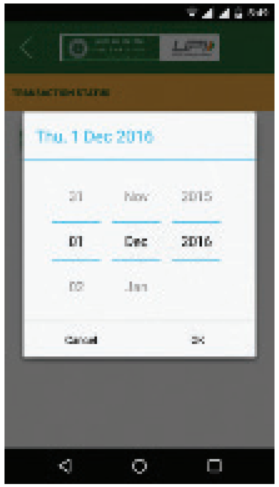
3.3.4.2 How to check Balance?

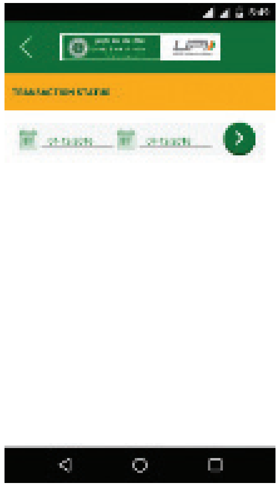
1. Click on “My Balance”	
2. Select the VPA and the Account 3. Click on ‘Balance Enquiry’	
4. Enter MPIN	

5. Click on ‘Submit/Yes’	
6. The balance will be displayed	

3.3.5 Transactions/ Bank Statement

***This option enables to view all types of transaction (Debit, Credit and others) done by the user.)**

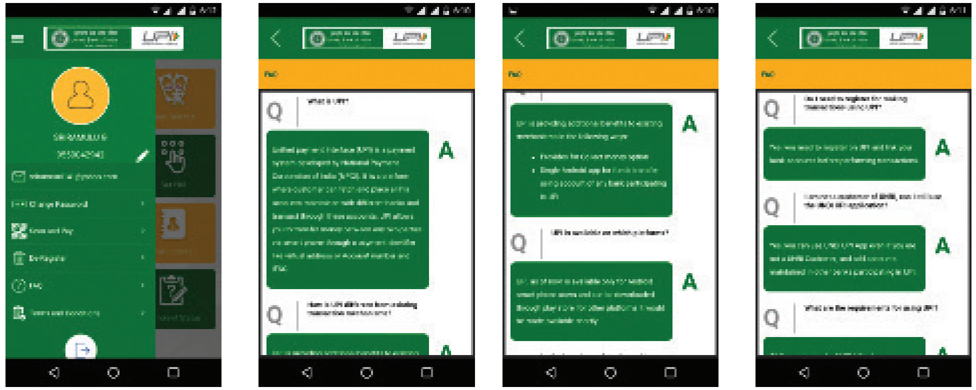
1. Click on 'Transactions'	
2. Choose the period for which the transactions shall be displayed. Eg:- Todays' Transactions, Last 5/10 days Transactions or Enter date (In case it is for a specific period - From (date) and To(date))	 

3. Click on ‘Submit’	
4. Screen will display the details (Amount, Date, Time, Reference Number, Description, etc.) along with the Status (Success/Pending)	

3.3.6 Address your Disputes and Complaints

1. Click ‘Complaint Status’ / ‘Log a Dispute’ / ‘View Disputes’	
2. You can choose to list your transaction by choosing the date range and select from the list of transactions displayed 3. Confirm the transaction details, enter the reasons of dispute or complaint, and press the raise complaint button to register your complaint 4. You will receive a confirmation message	

3.3.7 FAQs

Frequently asked question and answers on UPI	

3.3.8 App Settings

App Settings enables the user to choose the language. Our empower is available in Hindi and English (Or Regional languages)	

3.4 Frequently Asked Questions on UPI

Q) What is UPI?

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single Mobile Application (of any participating bank), merging several banking features, seamless fund routing and merchant payments into one hood. It also caters to the 'Peer to Peer' collect request, which can be scheduled and paid as per requirement and convenience.

Q) What are the services and unique features provided by UPI system?

Below is the list of services:

- Immediate money transfer through mobile device round the clock 24*7 and 365 days.
- Single Mobile Application for accessing different bank accounts
- Single Click 2 Factor Authentication – Aligned with the Regulatory guidelines, yet provides for a very strong feature of seamless single click payment.
- Virtual address of the customer for Pull & Push provides for incremental security with the customer not required to enter the details such as Card No., Account number; IFSC, etc.
- Bill sharing with friends.
- Best answer to Cash on Delivery hassle, running to an ATM or rendering exact amount.
- Merchant Payment with Single Application or In-App Payments.
- Scheduling PUSH and PULL Payments for various purposes.
- Utility Bill Payments, Over the Counter Payments, Barcode (Scan and Pay) based Payments.
- Donations, Collections, Disbursements Scalable.
- Raising Complaint from Mobile App directly.

Q) What do I require to have a UPI App?

Any smart phone user who has an account with a UPI- partnered Bank can download a UPI App.

Q) How many banks have tied up with NPCI or onboard for UPI?

Initially, 29 banks had tied up with NPCI for the launch. However, only 21 banks have been able to meet the criteria so far.

AVAILABLE APPS (28 BANK APPS)

Andhra Bank, Axis Bank (Axis Pay), Bank of Maharashtra, Bhartiya Mahila Bank, Canara Bank (Canara Bank UPI), Catholic Syrian Bank, DCB Bank, Federal Bank, ICICI Bank (UPI Collect), TJSB Sahakari Bank, Oriental Bank of Commerce (OBC UPI), Karnataka Bank, UCO Bank (UCO UPI), Union Bank of India (Union Bank UPI), United Bank of India, Punjab National Bank (PNB UPI), South Indian Bank, Vijaya Bank, YES Bank, SBI App, and other banks.

Q) Does a customer need to register before remitting funds using UPI?

Yes, a customer needs to register with his/her PSP before remitting funds using UPI and link his accounts

Q) Does the customer need to register a beneficiary before transferring funds through UPI? What details of beneficiary will be required?

No, registration of Beneficiary is not required for transferring funds through UPI as the fund would be transferred on the basis of Virtual ID/ Account+IFSC / Mobile No+MMID / Aadhar Number. (Please check with your PSP and Issuing bank with regard to the services enabled on the App).

Q) Does customer need to have a bank account or this can be linked to a card or wallet?

No, customer cannot link a wallet to UPI, only bank accounts can be added. UPI provides only inter/intra bank account transfers and does not support transfer between wallets as such.

Q) Can I use more than one UPI application on the same mobile if they are linked to different bank accounts?

Yes, one can use more than one UPI application on the same mobile and link both same as well as different accounts.

Q) How do I register in UPI enabled Application?

The steps in Registration are:

- Download the UPI application from the App Store / Banks website
- Create his/ her profile by entering details like name, virtual id (virtual payment address), password, etc.
- Go to "Add/Link/Manage Bank Account" option and links the bank and account number with the virtual id (VPA)

Q) What is a VPA?

The Virtual Payment Address or VPA is an address given to the user of UPI payment system. We have to use VPA to transfer fund. The virtual payment address replaces the bank account details.

Q) What are the features of VPA?

You can choose it and change it anytime. A VPA is linked to the bank account address. Since it is not your actual payment address but act as the payment address (bank account details). It is called as the virtual payment address.

- You can have many virtual payment addresses
- You can change it whenever you wish
- No two VPA would be the same
- You can link many accounts with one VPA but you have to set an account as the default.

Q) What are benefits of VPA?

- ➢ You do not give bank account number to receive money
- ➢ It is easy to remember compared to the bank account number and IFSC
- ➢ To be more secure, you can change the it whenever you suspect
- ➢ You can get VPA of your choice.

Q) Can I change my VPA?

This address is highly flexible. You can choose it and change it anytime.

Q) What is a M-PIN?

Just like an ATM has a 4 digit pin for authenticating transactions, M-PIN works as a security password for authenticating or authorising financial transactions using Mobile Applications.

Q) How do I generate it?

Customer has to self-generate M-PIN while registering for any Bank's Mobile App on UPI. Once the banking UPI App is installed and user has completed registration on hi mobile, he has to generate an M-PIN for authenticating transaction.

Q) What are the various options for generating an M-PIN?

User selects the bank account from which he/she wants to initiate the transaction. User clicks one of the option:

a) Mobile Banking Registration/Generate MPIN

- ✓ User receives OTP from the Issuer bank on his/her registered mobile number

- ✓ User now enters last 6 digits of Debit card number and expiry date
- ✓ User enters OTP and enters his preferred numeric MPIN (MPIN that he would like to set) and clicks on Submit
- ✓ After clicking submit, customer gets notification (successful or decline).

Q) Does the beneficiary also have to register for UPI for receiving funds?

In case of Virtual ID transaction, the beneficiary needs to have a Virtual ID and in turn be registered with UPI but in case of Account+IFSC or Mobile+MMID, Aadhar number, the beneficiary need not be registered for UPI. (Please check with your PSP and Issuing bank with regard to the services enabled on the App)

Q) Can I link more than one bank account to the same virtual address?

Yes, several bank accounts can be linked to the same virtual address depending on the functionality/ies being made available by the respective PSPs.

Q) What are the different channels for transferring funds using UPI?

The different channels for transferring funds using UPI are:

- Transfer through Virtual ID
- Account Number + IFSC
- Mobile Number + MMID
- Aadhar Number
- Collect / Pull money basis Virtual ID

Q) What if my account is debited but the transaction does not go through?

UPI provides for real time reversals for technical declines and amount would be transferred back to the payer account immediately

Q) Can I put a stop payment request for funds transferred by UPI?

No, once the payment is initiated, it cannot be stopped.

Q) Where do I register a complaint with reference to the UPI transaction?

You can also raise your grievance or check status of UPI transaction through the UPI App of the participating banks.

Q) What is the limit of fund transfer using UPI?

At present, the upper limit per UPI transaction is ₹ 1 Lakh.

Q) If I change my UPI App, will I be required to register again or can I carry the same virtual address?

In case of change in UPI App, a person needs to re-register and it depends on the PSP whether same virtual ID can be used with necessary checks they can establish.

Q) What happens if I forget my pin?

In case someone forgets the MPIN, he needs to re-generate new PIN.

Q) How do I change M-PIN?

Process for change of mobile PIN.

- ✓ User enters his old MPIN and preferred new MPIN (MPIN that he would like to set) and clicks on Submit
- ✓ After clicking submit, customer gets notification (successful or failure)

Q) Will I be able to use UPI after I change my SIM or Mobile?

In case of change in SIM/ Mobile/ Application of the PSP, customer would require to re-register themselves for UPI.

Q) Will I be able to use UPI across all Mobile platforms?

Yes, UPI is available on Android and it will be made available on iOS soon.

Q) What is the timeline to approve a collect request by a payer?

The timeline to approve a collect request needs to be defined by the requester.

Q) In case my Mobile is used by another person, will there be any security breach?

In any transaction through UPI, PIN would be required which needs to be fed through the mobile at the time of any transaction making it safe and secured.

4. Unstructured Supplementary Service Data (USSD) *99# Facility

4.1 Prerequisites

- ✓ Make sure your Mobile (all basic/feature or smart phones. Except CDMA) number is registered with your bank
- ✓ Fill and submit a form for registration of mobile to enable USSD transactions via Mobile

	Payer/Buyer		Receiver(Merchant)	
Smart Phone		Optional. Works on a GSM enabled Feature phone or a Smart Phone. Does not work on CDMA phone		Optional. For doing balance enquiry, getting status updates on phone
Mobile App		Not Required		Not Required
Feature Phone		Works on a GSM enabled basic feature phone. Does not work on CDMA phone		Checking Balance in bank account/s, etc. Does not work on CDMA Phones
Bank Account		Required for transferring money from Bank Account		To receive money from the payer's Bank Account
Aadhaar		Ideally funds are transferred to receiver via his (Mobile No + MMID)		Optional in case transfer is made through Aadhaar Number
MMID / Other Code		Unique MMID not needed for the payer		Unique MMID is not mandatory
PIN		MPIN is needed to authorise transaction		Authentication not needed via MPIN, OTP, etc.
Mobile number registered with Bank		Bank Account is to be linked to Mobile No. for initiating payments		Bank Account is to be linked to Mobile No. for receiving payments and for receiving Bank Account notifications
Mobile Network		Supporting funds Transfer over the network (MTNL, BSNL, etc.)		GSM mobile network is needed for transaction processing
Internet		Not required		Not required

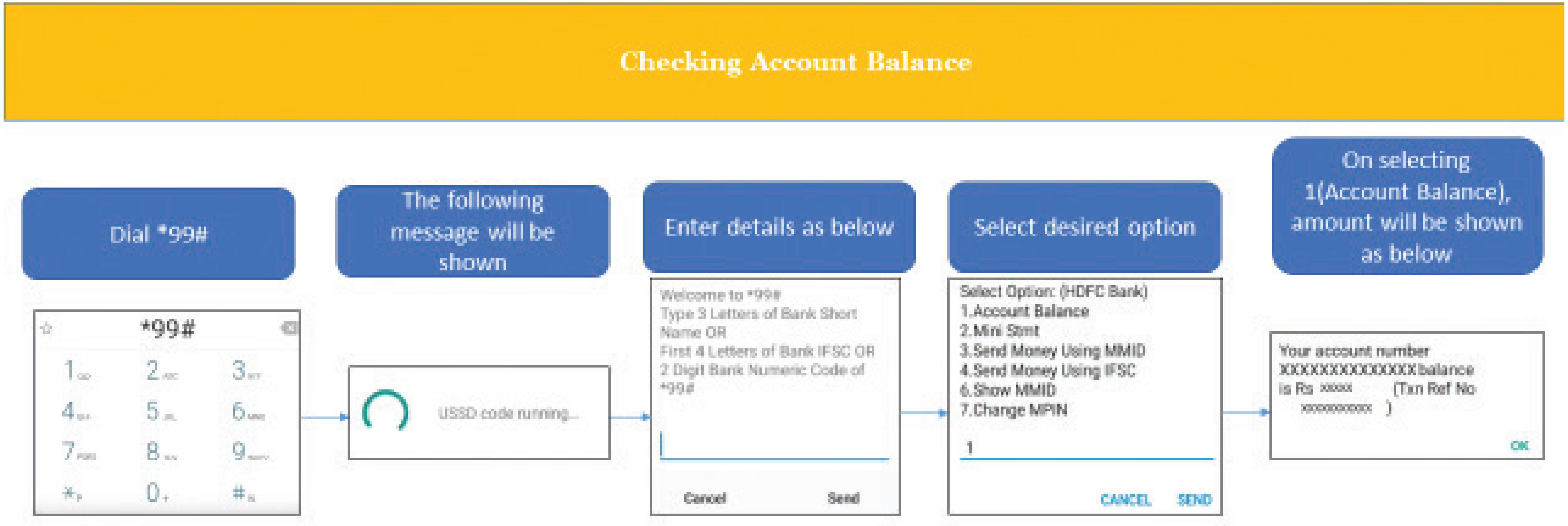
4.2 Services

*99*46*1# for Balance Inquiry

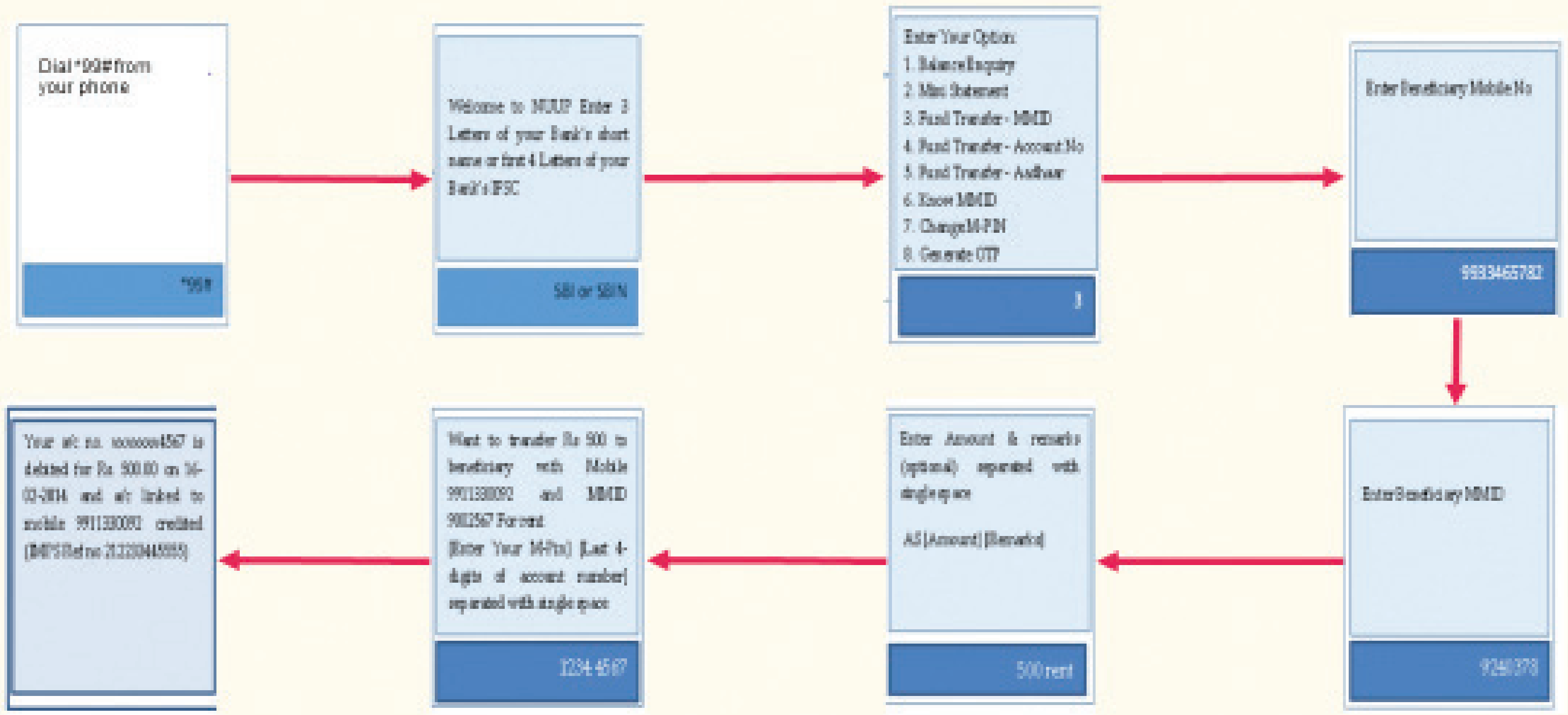
*99*46*2# for Mini Statement

*99*46*3# or *99*46*4# for Instant Money Transfer

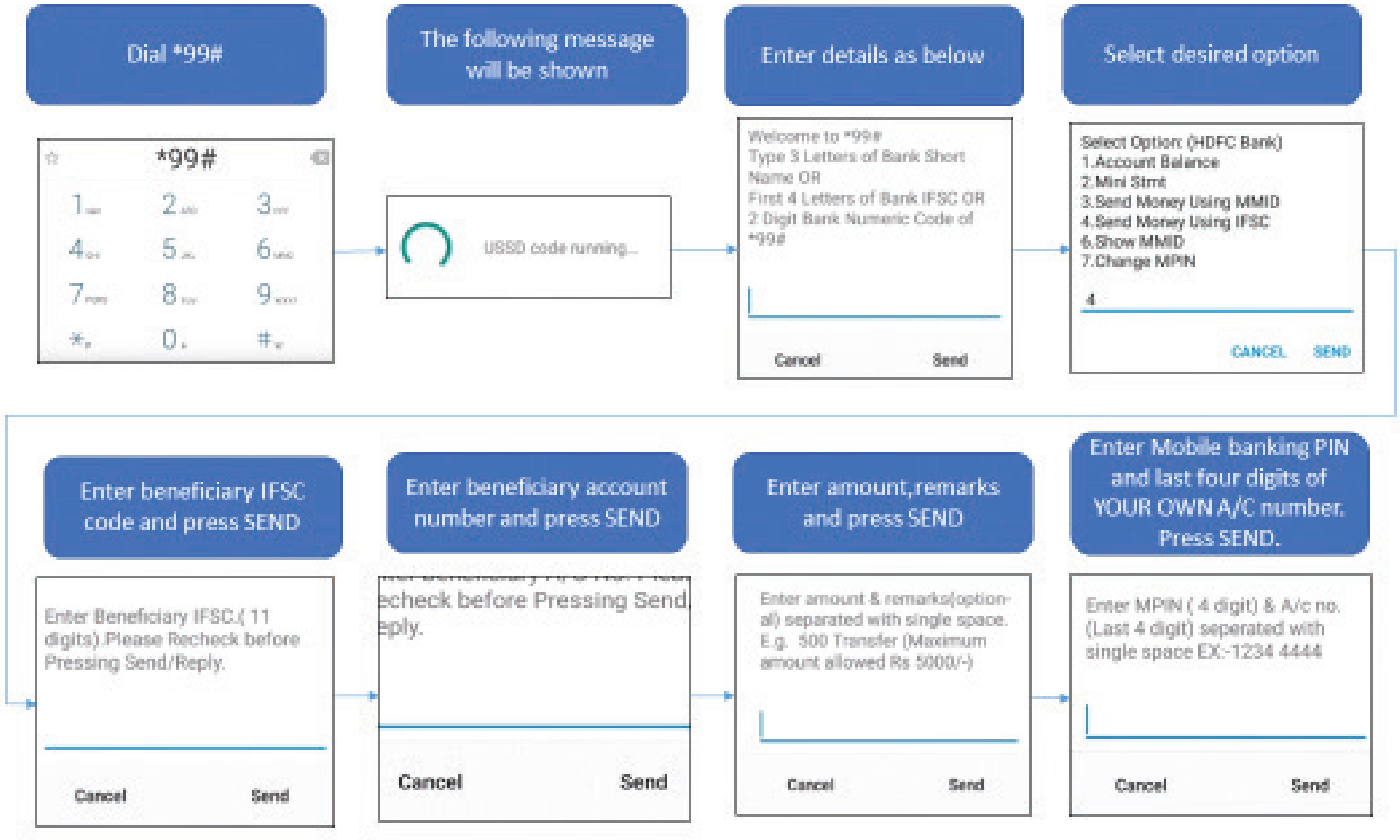
4.3 Steps Involved



Making a transaction



Sending Money using IFSC code



4.4 Frequently Asked Questions on USSD

Q) What are the various services available under *99#?

*99# service can be used by the customers for the following purposes:

a) Financial

b) Non-Financial

c) Value Added Services (VAS)

Q) What are the services covered?

Financial Services

- ✓ Fund Transfer using Mobile Number and MMID of the beneficiary
- ✓ Fund Transfer using IFSC and Account Number of the beneficiary
- ✓ Fund Transfer using Aadhaar Number of the beneficiary

Non-Financial Services through use of Mobile

- ✓ Balance Enquiry
- ✓ Mini Statement
- ✓ Know MMID* (Mobile Money Identifier)
- ✓ Generate or set MPIN
- ✓ Change MPIN
- ✓ Generate OTP for 2nd factor of authentication for different transactions

Q) What is MMID?

Mobile Money Identifier is a 7 digits code allotted by the bank when user registers for mobile banking. The first four digits are the unique identification number of the bank offering IMPS.

Q) Does the customer need to have Internet/GPRS or Data card for using USSD services?

Customer does not need to have a GPRS or any such data connection on their mobiles. They can use the service from any GSM mobile connection which has a calling feature.

Q) Is there any limits on Fund Transfer through NUUP (National Unified USSD Platform)?

The maximum limit of fund transfer per customer on NUUP is ₹ 5000 per day.

Q) How many transactions are allowed per session?

Only one transaction is allowed per session.

Q) What are the charges for using NUUP Transactions?

There are no charges on NUUP transactions.

Q) What is the short code for NUUP?

Customer needs to dial short code *99*(Bank ID)#.

Q) Can I use this service if my Mobile Number is not registered with the Bank?

No, mobile no needs to be registered with the bank.

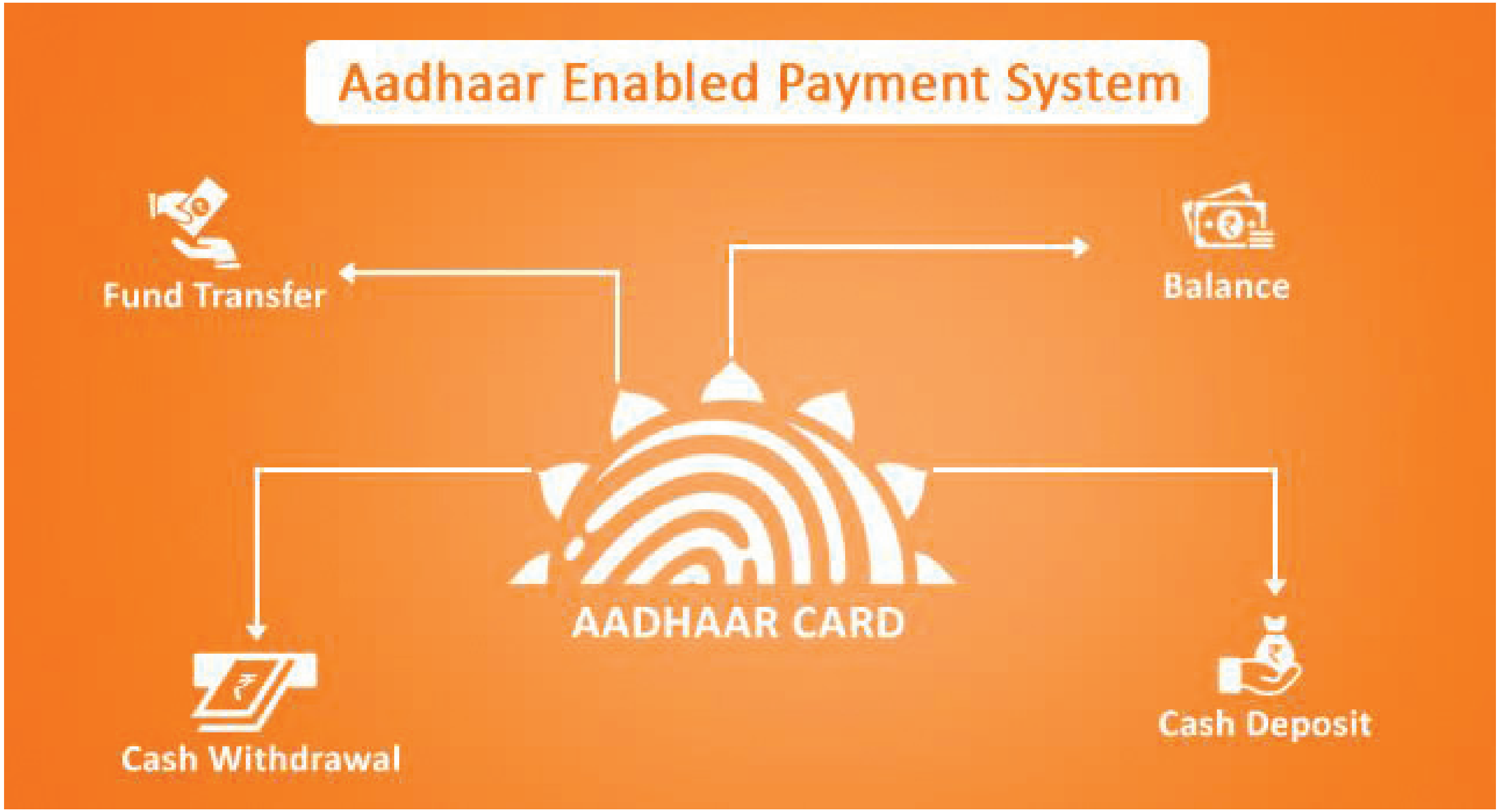
Q) Will it work on only Java enabled mobile phones or will it require some software to be downloaded to use the service?

NUUP does not require any JAVA or software to be downloaded on the mobile. It can work on the basic GSM mobile

Q) Does it work on CDMA mobiles?

No, only works on GSM mobiles.

5. Aadhaar Enabled Payment System (AEPS)



5.1 Prerequisites

	Payer/Buyer		Receiver(Merchant)	
Smart Phone	✗	Not Needed	✗	Not needed
Mobile App	✗	Not Needed	✗	Not needed
Feature Phone	✗	Not Needed	✗	Not Needed
Banking/ Business Correspondent	✗	Not Needed. Required at the Merchant's side	✓	Required for operating on AEPS MicroATM device. Usually, merchant is the BC
Bank Account	✓	Money will be transferred from this Payer's account	✓	Money is transferred to Merchant's Bank Account
Aadhaar	✓	Aadhaar No is required	✓	Merchant's Bank Account is to be mandatorily linked to his Aadhaar Nunmber
MMID / Other Code	✗	Not Required	✗	Not required
PIN	✗	Not needed but can be required in case of Card Based Transactions	✗	Not Needed

	Payer/Buyer		Receiver(Merchant)	
Aadhaar number registered with Bank	✔	Aadhaar No to be mapped to Bank account for authentication	✔	Merchant's Bank Account is to be mandatorily linked to his Aadhaar Number
Mobile Network	✘	Not Needed	✘	Not Needed
Internet	✘	Not Needed	?	Optional. Can happen via PSTN or Mobile GSM (SIM) also
Fingerprint/ RIS Scanner	✘	Not Needed	✔	Optional. Required for biometric authentication with Aadhaar
Mobile number registered with Bank	?	Optional. If he wants to receive alerts and confirmations for the transactions, he will also then need a mobile phone	✔	Not mandatory, but needed to get the receipts/ SMS
AEPS ATM/ Micro ATMs	✘	Not Needed	✔	Needed to initiate payments using Aadhaar no, fingerprint scanner

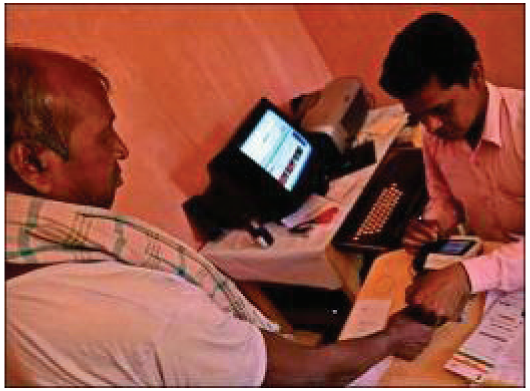
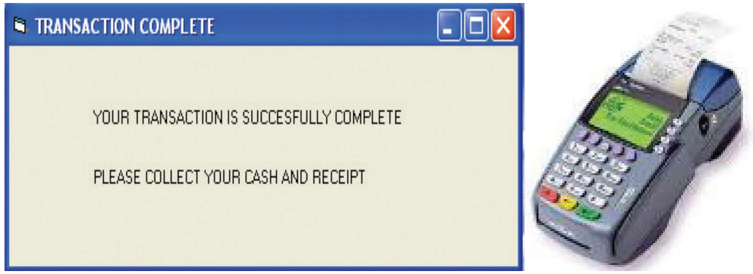
5.2 Steps Involved

5.2.1 For Transactions

<table>
<tr>
<td>Step I: Go to Micro-ATM</td>
<td>
</td>
</tr>
<tr>
<td>Step II: Select option like

Cash withdraw
Deposit Cash
Pay
Check Balance
Mini Statement
</td>
<td>
</td>
</tr>
</table>

Step III: Enter Pin Number	
Step IV: Enter Location Code	
Step V: Enter your Adhaar Card Number	

Step VI: Scan your finger print	
Step VI: See ‘Transaction Successful’ message	
Collect Receipt	

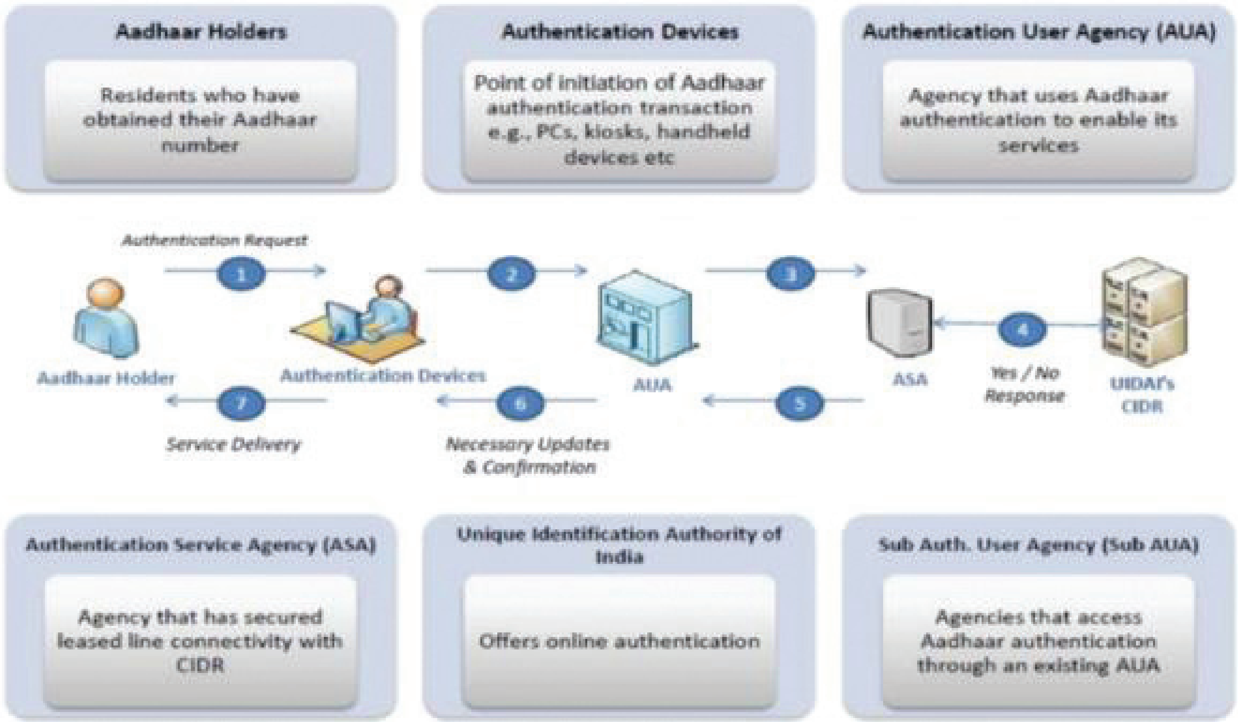
5.3 Frequently Asked Questions on AEPS

Q) What is AEPS?

AEPS is a new payment service offered by the National Payments Corporation of India to banks, financial institutions using 'Aadhaar'. AEPS stands for 'Aadhaar Enabled Payment System'.

Q) How does AEPS work?

Aadhaar Enabled Payment System (AEPS) is a bank led model, which allows online financial inclusion transaction at Micro-ATM through the Business correspondent of any bank using the Aadhaar authentication. This system is designed to handle both ONUS and OFFUS requests seamlessly in an effective way by enabling authentication gateway for all Aadhaar linked account holders.



Q) What is Aadhaar?

Aadhaar is a unique identification number issued by the Unique Identification Authority of India (UIDAI) to any resident of India.

Q) Can any customer be a part of AEPS?

Any resident of India holding an Aadhaar number and having a bank account may be a part of the Aadhaar Enabled Payment System.

Q) Does the customer needs to have a bank account for availing AEPS?

Yes, the customer needs to have a bank account for availing AEPS.

Q) What is the process for enabling AEPS?

Customer should have an Aadhaar (Unique ID as issued by UIDAI) number linked with any bank account (bank should be a part of AEPS network) where customer has an account. The registration process shall be as per the procedures laid down by the bank providing AEPS service.

Q) Is the beneficiary customer also required to register for AEPS?

No.

Q) Can AEPS happen within which accounts?

AEPS only support transactions between Aadhar linked Bank Acounts.

Q) What is a Business Correspondent (BC)?

Business Correspondent (BC) is an approved Bank Agent providing basic banking service using a MicroATM (terminal) to any bank customer wishing to avail their bank BC service.

Q) What are the transactions supported by AEPS?

Four types of transactions are supported by AEPS.

- ✓ Balance Enquiry
- ✓ Cash Withdrawal
- ✓ Cash Deposit
- ✓ Fund Transfer

Q) What is required for transacting via AEPS?

Aadhaar No., Bank's IIN, Fingerprint and Aadhaar No. of beneficiary

Q) What is an IIN?

IIN is a six digit number which identifies your Bank with which you have mapped your Aadhaar number.

Q) Can a customer link more than one account to the same Aadhaar Number?

Yes. The customer can link the same Aadhaar number to more than one account subject to bank offering that feasibility. However, only one account per customer in the bank will be the primary Aadhaar linked bank account into which all respective AEPS transactions will be effected.

Q) Is there any limit on the value of transactions in AEPS?

Aadhaar based accounts would be opened on the basis of simplified KYC guidelines. The bank with which you have linked your Aadhaar Number would set the appropriate limit per transaction or in a given day.

Q) How are the Customer's IIN & Aadhaar Number added in the respective fields on the MicroATM terminal?

At the MicroATM Terminal, the customer has two options. He can either manually input the required information in the respective fields or he can swipe a RuPay ATM & MicroATM card with Aadhaar number that would extract the relevant data from card and present for further transaction processing.

Q) What is POS?

A Point of Sale-PoS device is used to facilitate customers to make Cash Deposit, Cash Withdrawal, Fund Transfer and Balance Enquiry. The POS device may be a MicroATM.

Q) What is Mobile Based PoS?

The mobile has an Application that allows customers to enter the customer and transaction details. The mobile is linked to the printer-cum-scanner through Bluetooth which scans the fingerprint data put in by the customer. When the transaction is completed, the customer receives a transaction receipt stating the finality status.

Q) What is a POS based Model?

This model has an in-built keypad, printer and scanner. The customer can enter their details using the keypad and verify the same on the screen. They can place their finger on the scanner and accept the receipt upon successful completion of the transaction.

Q) When does the settlement happen?

The cutover of AEPS transactions happens to 23:00 hours each day. All transactions before this time are included in the settlement for that particular day.

Q) How is the settlement affected?

The settlement is affected by NPCI's Real Time Gross Settlement (RTGS). As a joining procedure, the participating banks need to submit a mandate for crediting and debiting their RTGS accounts with the RBI in favour of NPCI. On the basis of this mandate NCPI would affect the settlement by debiting/ crediting respective bank's Current Account/s with such sums as may be specified by the NPCI in its settlement instructions. The draft for all the documents will be provided by the AEPS NPCI team when a bank envisages interest in joining the network.

Q) Which banks are members of AEPS?

Currently, the banks that are members of AEPS are ICICI Bank, Union Bank of India, Bank of India. A link is provided in AEPS section of NPCI website which will host current banks under certification.

6. Physical Point of Sale (PoS) and Mobile based Point of Sale (M-PoS)

6.1 Prerequisites

	Payer/Buyer			Receiver / Merchant			
		m-PoS	**p-PoS**	**m-PoS**		**p-PoS**	
Smart Phone	✘	Not Required. However, required for receiving updates, alerts	Not Required. However, required for receiving updates, alerts	✔	Needed to connect the Mobile Point of Sale device	✘	Not needed
Mobile App	✘	Not Required	Not Required	✔	Mobile App to support the Mobile PoS Attachment/ device	✘	Not needed
Feature Phone	✘	Not Required. However, required for receiving updates, alerts	Not Required. However, required for receiving updates, alerts	✘	Not Supported	✘	Not needed
Bank Account	✔	Bank Account is needed	Bank Account is needed	✔	Bank Account is required	✔	Money is transferred to Merchant's Bank Account (Current Account)
Aadhaar	✘	Not Required	Not Required	✘	Not Needed	✘	Not Required
Debit/ Credit/ Prepaid Cards	✔	Cards to swipe on Point of Sale Device	Cards to swipe on Point of Sale Device	✘	Not Required	✘	Not Required

	Payer/Buyer			Receiver / Merchant			
		m-PoS	p-PoS	m-PoS		p-PoS	
PIN	✔	Pin for Card required	Pin for Card required	✘	Not Needed	✘	Not Required
Aadhaar number registered with Bank	✘	Not Required	Not Required	✘	Not Needed	✘	Not Required
Mobile Network	?	Not Required. However it is required for notifications for account updates	Not Required. However it is required for notifications for account updates	✔	Mobile Network needed	✔	Device needs to be connected via a phone line / mobile network
Internet	✘	Not Required	Not Required	✔	Data exchange over internet network for processing transaction	✔	Data exchange over internet network for processing transaction.
Card Swipe Attachment	✘	Not Required	Not Required	✔	Hardware is needed to connect to Mobile	✔	Physical PoS Device Needed with Merchant
MMID / Other Code	✘	Not Required	Not Required	✘	Not Needed	✘	Not Needed
Mobile number registered with Bank	?	Not Required. However required for notifications for account updates	Not Required. However required for notifications for account updates	?	Not Required. However required for notifications for account updates	?	Optional. For getting notifications/SMS alerts

6.2 Steps Involved

6.2.1 For Merchant / Receiver

I. Plug in the Device	
II. Launch the application	
III. Swipe Customer Card	

<table>
<tr>
<td>IV. Enter the Mobile number / email address of customer</td>
<td>
</td>
</tr>
<tr>
<td>V. Obtain your Customer Signature</td>
<td>
</td>
</tr>
<tr>
<td>VI. Check the SMS received</td>
<td>
</td>
</tr>
</table>

6.2.2 For Buyer/ Payer

<table>
<tr>
<td>Get a Debit/ Credit card form the Bank</td>
<td>
</td>
</tr>
<tr>
<td>Ask seller to Swipe your debit/credit card on the POS machine.
(Two type: Swipe and Insert)</td>
<td>

</td>
</tr>
</table>

Check the Amount Entered to be paid entered by the seller and put PIN.

Make sure no one sees your PIN.

I. Generate Receipt


SureGifts

ARTEE INDUSTRIES LTD (PARK N SHO
P) - P/H
26/01/2015 15:21:17 2044628T
SUREGIFT PAYMENT
www.suregifts.com.ng

APPROVED
CUSTOMER COPY
RefCode 00053
TIN 2044628T
Voucher Code 49452614

APPROVED Transaction successful.
****
N 200.00
****

ARTEE INDUSTRIES LTD (PARK N SHO
P) - P/H

TAMSLITE 5.0.2
www.iisysgroup.com
014545934

6.3 Frequently Asked Questions on Point of Sale Transactions

Q) What does PoS mean?

Point of sale commonly known as "Checkout" is the location where transaction occurs for the sale of goods or services and customers can pay for their purchases. It is an alternative for an electronic cash register and is referred as POS Terminal, which is nothing but a combination of both the hardware and software used for the checkouts.

Q) What does Point of sale Hardware do?

Point of sale hardware is equipment for POS system, which includes card-reading machines, printers, cash registers and computer systems.

Q) How do credit/debit card machines work?

Credit card machines are typically connected to the Internet, phone line, mobile device or computer to send data to the processor. For most credit card processors, funds are transferred from the customer's bank to the business's merchant account. In some cases, the credit card processor uses a merchant account and holds funds on your behalf, and then directly deposits them into your checking account at your discretion.

Q) What is the difference between a credit/debit card machine and a POS system?

A card machine is simply a card reader and PIN pad whereas a PoS system is a complete checkout terminal that comes with a credit card machine, monitor or tablet, cash register, printer and other peripherals. POS systems also come with additional software or Apps that track inventory, monitor sales, generate discounts, create financial reports, help with marketing and other features

Q) What is a merchant account?

A merchant account lets businesses accept credit cards. It transmits payment data from a customer's bank to your bank and authorises credit card transactions. Merchant accounts are offered by the credit card processor or directly by a financial institution, typically a bank. Usually, businesses will have to apply and get approved for a merchant account. As mentioned above, however, not all credit card processors require a merchant account.

Q) Can I use an iPhone, iPad, Android and other mobile devices with a credit card machine?

Some credit card machines are compatible with tablets, but the most common way to accept credit cards with an iPhone, iPad, Android and other mobile devices is by using a credit card swiper. This small dongle attaches to the headphone or auxiliary plug on a mobile phone or tablet, and processes credit cards using the processor's Mobile App. Another way to accept credit cards using a mobile device is by using a virtual terminal, a feature that lets you manually input credit cards into the App.

Q) What is NFC?

NFC technology lets businesses accept credit cards without swiping them. To accept mobile payments, you'll need an NFC-enabled credit card machine, such as Apple Pay, Android Pay or Samsung Pay.

Q) What are debit cards?

Debit cards are another payment method. When goods or services are purchased with a debit card, the funds are removed from the customer's checking account. In addition to standard ATM cards, many banks also issue Visa® Check Cards and/or MasterCard® Check Cards - both of which can be used at the point of sale or online.

Q) What are the major types of debit card transactions?

Debit card transactions can be accomplished through PIN debit (requires the consumer to enter a PIN), signature debit (no PIN required), online bill payment and online debit. Debit card transactions are the fastest growing point-of-sale payment method today. The acceptance of this payment method continues to remain popular because customers and merchants both appreciate the convenience and ease of using debit cards to purchase merchandise and services.

Q) What is the difference between PIN debit and signature debit?

The difference between these two debit choices is whether a PIN (personal identification number) is used at the point of sale. When a PIN is used, the payment is immediately withdrawn from the cardholder's available funds. When a signature debit transaction occurs, funds are not withdrawn until the transaction processes - usually 2 to 4 days after the sale.

Q) What is the process flow involved in a swipe transaction?

To complete transaction via debit/credit card, the card is swiped at the Card reader (PoS) and the amount is entered followed by a PIN to be manually punched in by the card holder. Upon authentication the receipt is generated and payment completed.

Q) What are the connectivity choices available for a PoS?

IP (Internet Protocol), PSTN (Public switched telephone network) and GPRS

Q) What is the difference between the various connectivity choices?

IP

Card payment terminals connected directly to a local area network (LAN) or wide area network (WAN). This will require a broadband connection and provides card processing authorisation in approximately 5 seconds.

PSTN (Public Switched Telephone Network)

Card payment terminals connected through a telephone line. This involves telephone line rental and provides card processing authorisation in approximately 30 seconds. We recommend one telephone line per terminal.

GPRS (General Packet Radio Service)

Card payment terminals connected through a mobile network (using a SIM card) enables you to take the terminal to wherever the customer needs to pay and provides card payment authorisation in approximately 10 seconds.

Q) What is an mPOS solution?

A mobile Point of Sale (mPOS) is a consumer grade handheld device (e.g. a smart phone or tablet) with wireless connectivity that is used for the acceptance of payment cards. An mPOS solution typically comprises:

- A mobile device – consumer grade mobile phone or tablet device with wireless connectivity
- Card Reading functionality (contact, contactless or both)

- Mobile App/s supporting the payment functionality
- Server-side software
- CVM capture capability (e.g. PIN entry, signature capture)

Q) Is an mPOS solution required to deliver a receipt to the cardholder?

An mPOS solution must support delivery of a receipt to the cardholder.

Q) Do I need to have an internet data plan for the application to work on Android devices?

Yes, your Android device will require an internet data connection (CDMA, GPRS, EDGE, 3G, 4G) or access to an active Wi-Fi network.

Q) What is MDR?

It is the percentage of the transaction amount that the acquiring bank charges to the merchant for providing authorisation to accept credit cards.

Q) What are the components of MDR?

Merchant discount rate = Interchange fee + Processing fees + Network brand fees

Merchant discount rate is what merchant pays to acquirer. Interchange fee is what acquirer pays to issuer. Processing fees are those paid by issuing and acquiring bank to their processors. Network brand fees are those paid by issuing and acquiring bank to the card associations such as Visa/MasterCard.

Q) What is the Merchant Establishment Agreement?

A contract between a business and a credit card service provider. The merchant agreement states the rules and responsibilities that apply to each party regarding payment card acceptance, authorisation, processing and settlement. The merchant agreement also sets out the fees and charges that the merchant will pay the service provider. It explains how the service provider determines the rates for handling payment card transactions, and it defines the terms under which each party may renew or cancel the contract.

Q) What is a QR Code?

QR code (abbreviated from Quick Response Code) is the trademark for a type of matrix barcode (or two-dimensional barcode). A barcode is a machine-readable optical label that contains information about the item to which it is attached. This code was so named because the main purpose of the code development was to create a code that could be read quickly.

Q) What are various uses of QR codes?

QR codes can be used on various mobile device operating systems.

QR codes can be used to store bank account information or credit card information, or they can be specifically designed to work with particular payment provider applications.

QR codes can be used to log in into websites

Q) How to scan the QR Code and complete payment transaction?

For your phone to be able to read QR Codes you will need to have a QR Code scanning App or QR Code scanning software installed on it.

Steps:

- Go to the Google Play store and download the free QR Code Reader App – the file size should be around 3MB depending on your smart phone.
- Launch the App.

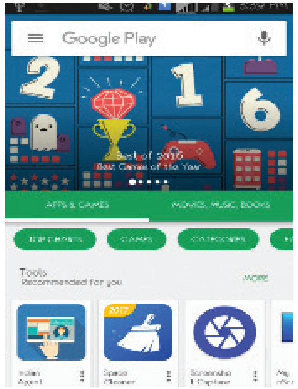
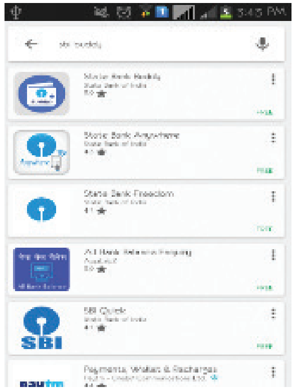
It will automatically scan the QR code and provide/fill in required information and complete the transaction.

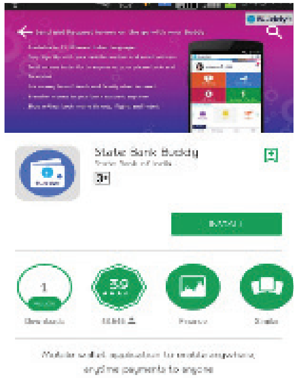
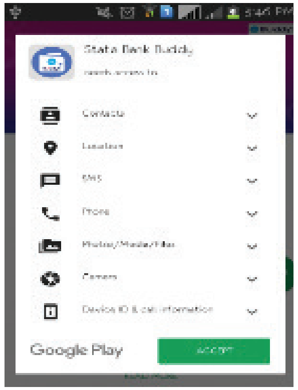
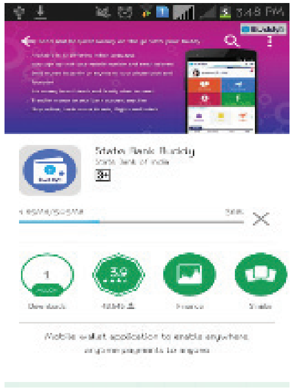
7. Mobile Wallets

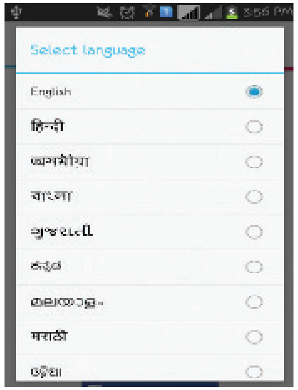
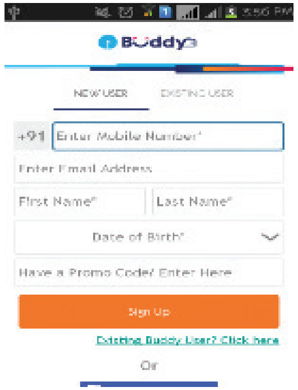
7.1 Prerequisites

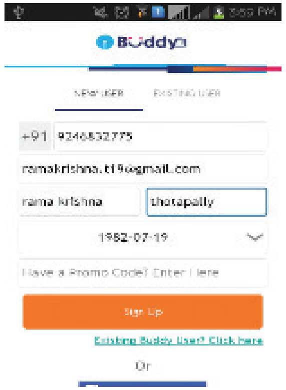
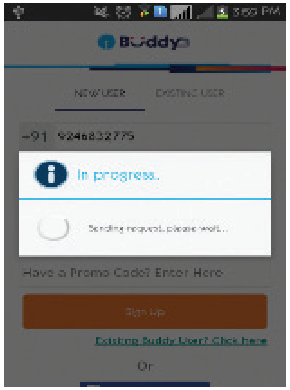
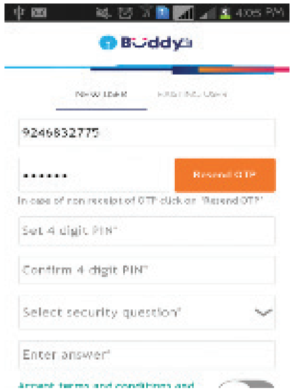
	Payer/Buyer		Receiver(Merchant)	
Smart Phone	✔	For downloading and using Mobile App (services) of the wallet provider	✔	For downloading and using Mobile App (services) of the wallet provider
Mobile App	✔	Downloaded from Google Play Store, App Store to use Wallet services	✔	Downloaded from Google Play Store, App Store to use App services
Feature Phone	✘	Does not allow download/storage of any Mobile Apps	✘	Not supported
Bank Account	✔	To load/transfer money to mobile wallet from the payer's Bank Account	✔	Money is transferred to the wallet of the merchant
Aadhaar	✘	Not Required	✘	Not needed
MMID / Other Code	✘	Not Required	✘	Not needed
PIN	✔	Authentication medium is needed. Can be Login, OTP or MPIN	?	Not needed. However, authentication needed for Wallet App login
Mobile number registered with Bank	✔	For use of mobile OTP/authentication for funds transfer from bank account to wallet account	✔	For access to banking updates/notification and bank account
Mobile Network	✔	Service provider needed to support funds Transfer (MTNL, BSNL etc.)	✔	Service provider needed to support funds Transfer (MTNL, BSNL etc.)
Internet	✔	To execute funds transfer process between the payer and the merchant	✔	To execute funds transfer process between the Merchant and the payer

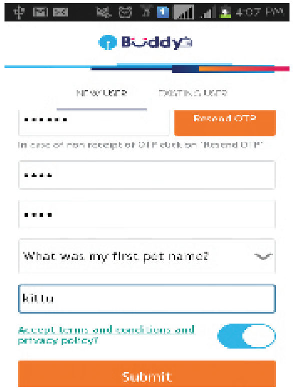
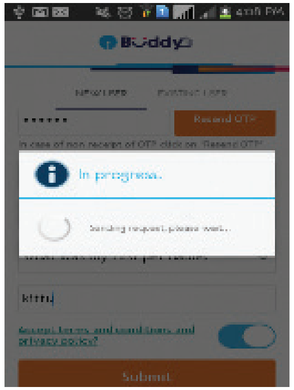
7.2 Steps Involved

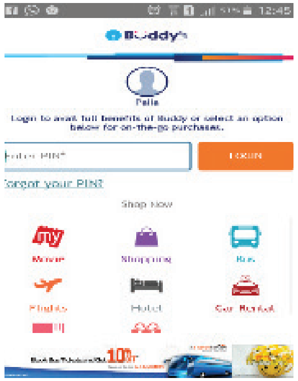
I. Open Play Store from your Mobile App Gallery	
II. Type the name of the App you wish to download on the Search Bar (SBI Buddy) and Click 'Install'	
III. Select State Bank Buddy	

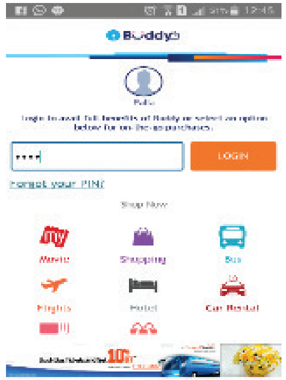
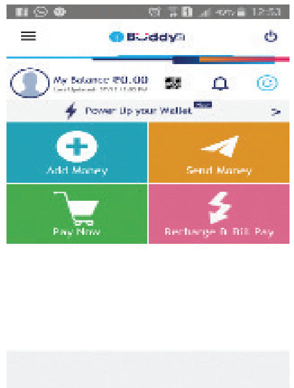
IV. Click ‘Install’	
V. Accept Conditions	
VI. Installation is in progress	

<table>
<tr>
<td>VII. Opening Wallet</td>
<td></td>
</tr>
<tr>
<td>VIII. Choose Default Language to load ‘App’</td>
<td>
</td>
</tr>
<tr>
<td>IX. Enter Details of Mobile and Primary Details</td>
<td>
</td>
</tr>
</table>

<table>
<tr>
<td>X. Enter your Primary Details to have Wallet Account</td>
<td>
</td>
</tr>
<tr>
<td>XI. Send OTP and automatically authenticate you</td>
<td>
</td>
</tr>
<tr>
<td>XII. OTP authenticating your details</td>
<td>
</td>
</tr>
</table>

XIII. Enter Security Details	
XIV. Registration is in Progress	

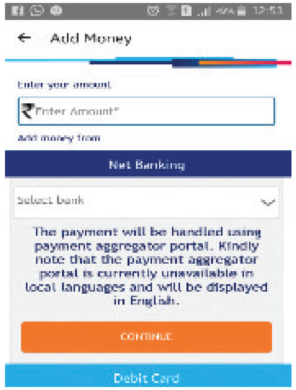
I. Enter SBI Buddy Wallet 4 digit PIN	

II. Enter 4 digit PIN and Login	
III. Login is in progress	
IV. This is our Wallet Home Screen with 0 balance	

<table>
<tr>
<td>

V. Enter Amount to Add to your wallet

</td>
<td>



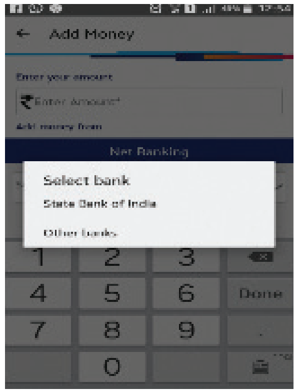
</td>
</tr>
<tr>
<td>

VI. Select the Banking Account you wish to load money from. Methods are mentioned below.

✓ By Internet Banking – Internet Banking has to be enabled for this with the Bank.

✓ Credit Card / Debit Card / Prepaid Card

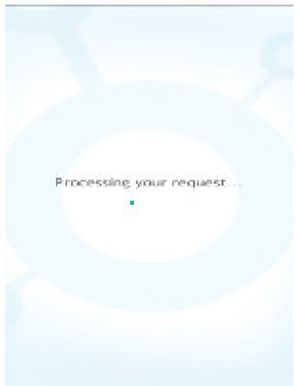
</td>
<td>



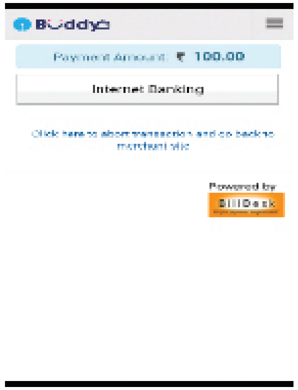
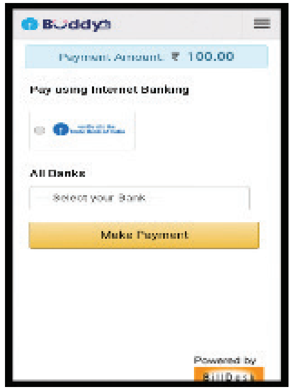
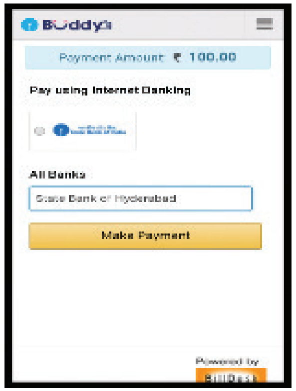
</td>
</tr>
<tr>
<td>

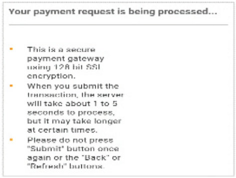
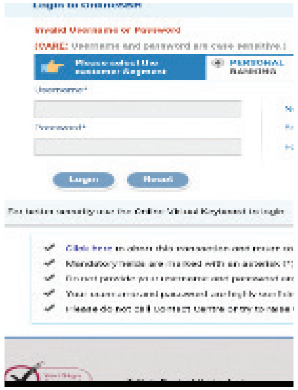
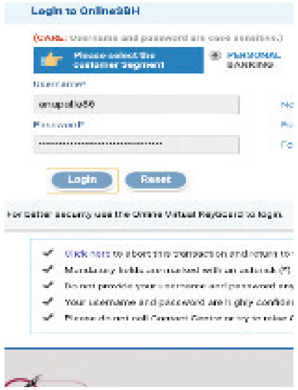
VII. Processing State

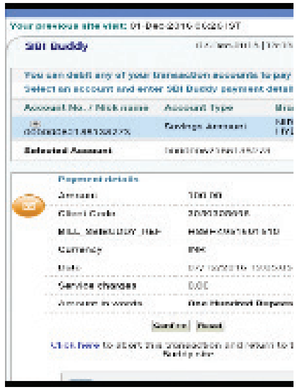
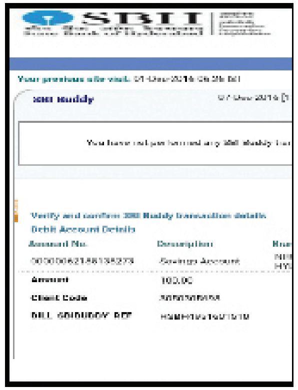
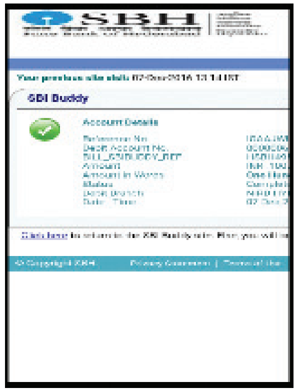
</td>
<td>

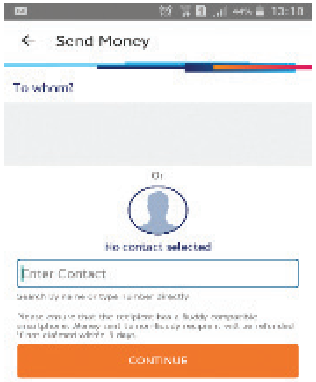
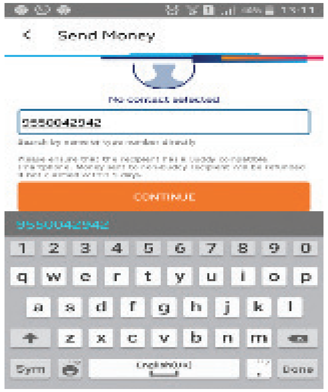


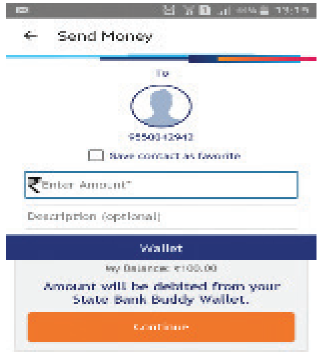
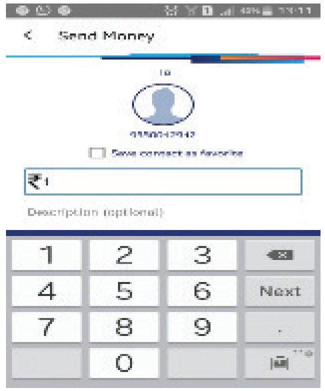
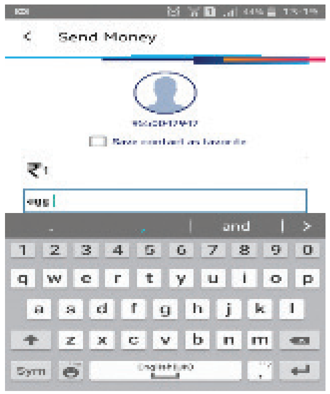
</td>
</tr>
</table>

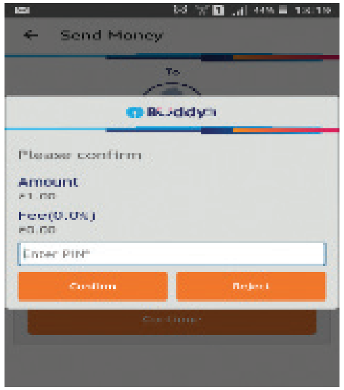
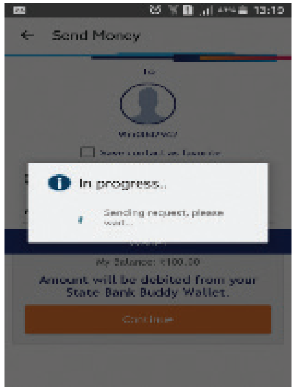
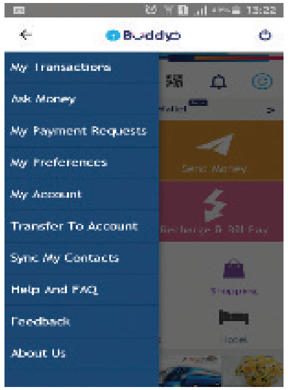
VIII. Here Internet Bank Option is Chosen	
IX. Select Your Internet Banking Branch	
X. Bank Selection	

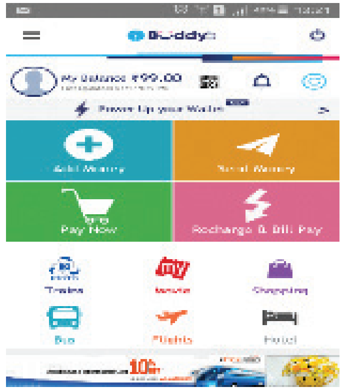
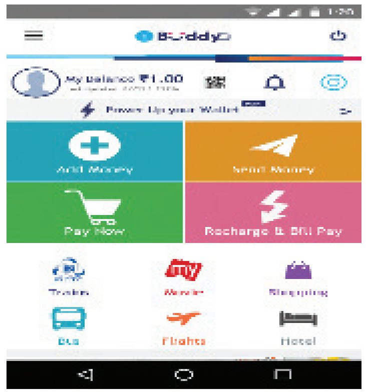
XI. Process State of Internet Banking	
XII. Login page of Internet Banking	
XIII. Login to Internet Banking	

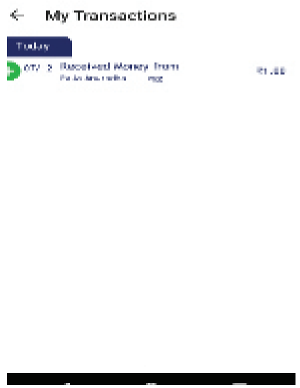
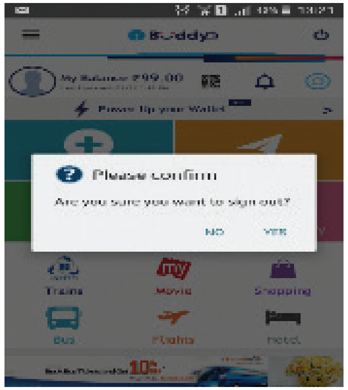
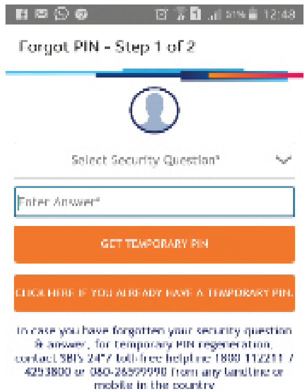
XIV. Confirm Amount to Transfer to Buddy from Internet Banking	
XV. OTP accepted	
XVI. Success Transaction Status XVII. Our Wallet is credited ₹ 100	

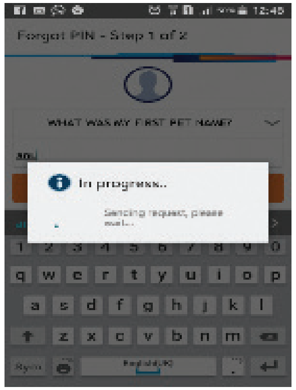
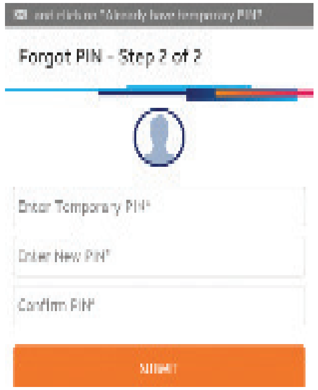
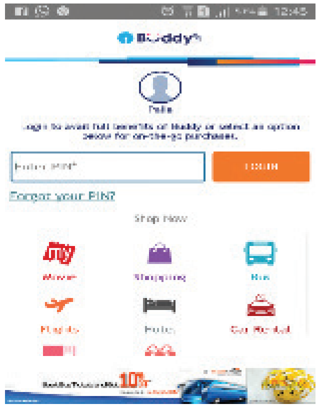
If you wish to transfer money to someone click 'Send Money' Option	
XVIII. To Whom you wish to send Money?	
XIX. Enter Mobile Number of others account who have this Wallet	

XX. Showing 'Enter Amount' Screen	
XXI. Enter the amount to transfer	
XXII. Purpose of transferring money of ₹1 to others	

XXIII. Our Wallet PIN to confirm Money Transfer to others Account	
XXIV. Money Transfer is in progress	
XXV. Check the Transaction Details by selecting My Transactions	

XXVI. Transferred ₹ 1 to others Account. The Transaction Details showing	
XXVII. Our Wallet Amount of ₹ 1 is deducted after successful transfer	
XXVIII. ₹ 1 has been received in the wallet of the receiver	

XXIX. Money is credited to others account	
XXX. Exit from App	
If you Forgot your Wallet PIN you can regenerate new PIN XXXI. Click on get Temporary PIN	

XXXII. PIN generation is in progress	
XXXIII. It Sends One Temporary PIN to your registered Mobile Number XXXIV. Use that PIN and Enter New	
XXXV. Login with New PIN into your wallet	

7.3 Frequently Asked Questions on Mobile Wallets

Q) What is a Payments/Mobile Wallet?

Mobile wallets are essentially digital versions of traditional wallets that someone would carry in their pocket. They offer payment services through which the individuals / business can receive/ send money via mobile devices. While there are many variations, usually they can hold digital information about credit and debit cards for making payments, store coupons and loyalty programmes, specific information about personal identity and more.

Q) What are the basic requirements to start using a wallet?

Bank Account, Smartphone, 2G/3G connection and Wallet App.

Q) How to start using wallet? What are the steps for accessing mobile wallets for the first time?

- ✓ Choose the wallet services available in the market
- ✓ Download the Application of wallet as chosen in above step
- ✓ Complete the registration process by providing details like Name, Email ID, Mobile No.
- ✓ Mobile Number verification code is sent by the wallet company to verify the Mobile No.
- ✓ Input the verification code during the registration process as requested by application in previous step
- ✓ Mobile wallet is created but it has to be loaded with some amount to use it for shopping
- ✓ Mobile wallet can be loaded using Credit card, Debit card, Net banking, ATM card & IMPS. Mobile Wallet can be topped up with cash at designated location
- ✓ Once mobile wallet is loaded it can be used for Fund transfer, shopping and other transactions

Q) How much time does it take for funds to get credited in beneficiary's account through Mobile Wallet?

Instantly

Q) Can I make a transaction using Wallet without preloading money?

No. Wallet functions like a prepaid or a debit card. You can only make transactions and of value not exceeding the money loaded in your wallet.

Q) Can I make payments to any e-commerce website using Mobile Wallet?

Yes, you can make payments on many e-commerce websites, which are enabled to accept money through wallet companies. You can use these wallets to pay your mobile, DTH, electricity, other utility bills and shop for groceries, clothing and much more from the registered merchants.

Q) Which are the major mobile wallets in India?

Several online wallet services have emerged in the young emerging mobile wallet market of India. The more famous ones are Paytm, M-pesa, MobiKwik, Freecharge, PayU and Oxigen.

Currently, Paytm has a chunk of market share in the number of registered users and volume of transactions via the service provider.

Q) What are the advantages of Mobile Wallet?

You do not have to worry about carrying cash anywhere. More so, no one is going to give you a candy or two instead of a one-rupee coin when short on change. You will tender the exact amount, to the last paise, using an online wallet.

You do not have to worry about losing your money even if you lose your mobile. This is because to unlock you mobile (Security PIN), to access the App (Login credentials/MPIN) and make transactions (OTP etc.). There are security measures which cannot be bypassed.

You can avail various offers such as cashback, discounts, coupons, etc., from the wallet provider while transacting.

In addition to the above-mentioned merit, you cannot lose your online wallet unless you lose your mobile. It is quicker than internet banking, with one-tap payments and you do not end up exposing your bank details on various merchant sites.

Q) What are the disadvantages of Mobile wallet?

Mobile wallets can only be used by people who've access to a reliable internet connection. The number of merchants associated with mobile wallets is on the rise, but they are still not enough. Mobile wallets cannot be used for high-value purchases as each of them have caps on the spending and depositing limits. Only intra-wallet transfers are allowed, No inter-wallet transfer is allowed.

Q) What is the monthly transaction limit?

Most of the mobile wallet service providers have a monthly limit of depositing amounts up to INR 10,000. But a few service providers like PayTM have the option to deposit amounts up to ₹ 1,00,000 if you have a verified account. Accounts can be verified using a KYC document.

Q) What is the monthly consumer wallet limit?

₹ 20,000 per month for all. ₹ 1,00,000 per month with KYC

Q) What is the monthly merchant wallet limit?

₹ 50,000 per month with self declaration. ₹ 1,00,000 per month with KYC

Q) Do I need to maintain a minimum account balance in a wallet?

No minimum balance, you can even have ₹ 0 balance.

Q) Can I transfer money from wallet to Bank Account?

Yes, but it depends on wallet service provider. Normally, 4% is charged for amount less than 10000, but is subjected to service provider.

e.g.: Paytm charges 4%, SBI Buddy charges 2%.

8. Deen Dayal Antyodaya Yojana – National Rural Livelihood Mission (NRLM).

Resource Materials for promoting Cashless Transactions among Self Help Groups

8.1 Dimensions of Cashless Transactions

1. All SHG members have individual bank accounts
2. All individual bank accounts are linked with Aadhaar and mobile number
3. Bank account of SHGs are seeded with Aadhar number of signatories
4. All transactions of SHG are performed cashless routed through Business Correspondent, Mobile Application or through digital wallet
5. All SHG member have active Rupay Debit Card
6. SHG member or one person from her household is trained and are able to be make cashless payments at retail stores using debit card, digital wallet app or USSD Mobile App.

8.2 Implementation

8.2.1 Opening Account of SHG Members

8.2.1.1 Opening Account at Bank Branch

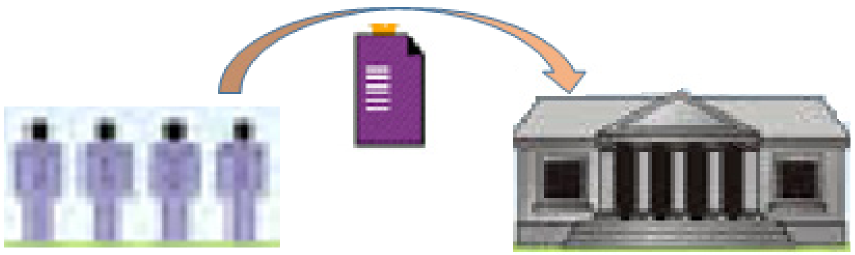
SHG members who do not have their individual account can open their accounts by visiting the nearest bank branch. SHG members may opt for the same bank in which the Self Help Group maintains their account, though not compulsory. Steps for opening bank account at bank branch are as follows:

i. Fill up bank account opening form
ii. Submit application form along with copies of valid Know Your Customer (KYC) documents. The following documents are accepted by banks for opening of bank account-

- Passport
- Voter's Identity Card
- Driving License
- Aadhaar Letter/Card
- NREGA Card
- PAN Card

iii. Individuals who do not have any officially valid documents can open 'small accounts' with banks. A 'Small Account' can be opened on basis of self-attested photograph and putting her signature/thumb print in presence of bank officials. Such accounts will have limitation in terms of aggregate deposit (not more than one lakh) aggregate withdrawal (not more than ten thousand in a month) and balance (not more than fifty thousand at any point of time). Such account will be valid for twelve months during which the account holder will have to submit a valid KYC document. Post submission of such documents, the account will be converted to Basic Savings Bank Deposit Account (BSBDA). There is no minimum balance requirement for opening these accounts

iv. Collect pass book from the bank branch



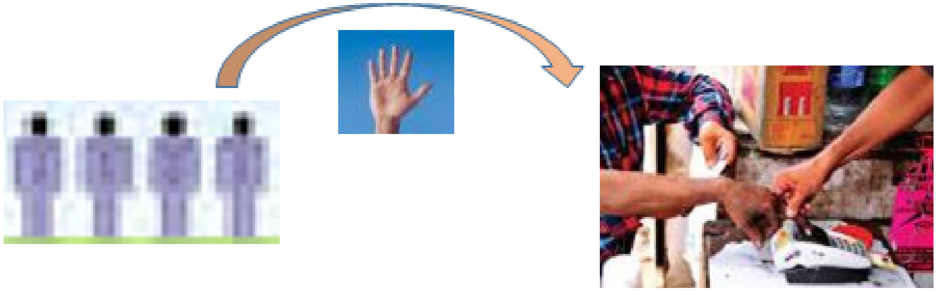
8.2.1.2 Opening account at Customer Service Points/ Business Correspondent Outlets

SHG members who have Aadhaar card may also open their individual account at Customer Service Points or Business Correspondent Outlets. Steps for opening bank account at the CSP/ BC Outlet are as follows:

i. Fill up bank account opening form

ii. Authenticate identity using biometric (finger print)

iii. Account number will be issued after authorization by the designated bank branch.



8.3 Linking with Aadhaar and Mobile Number

For initiating digitial payments, it is important to link individual accounts with Aadhaar and Mobile Number. The following steps may be followed for the purpose.

8.3.1 Seeding of Aadhaar and Mobile Number at Bank Branch

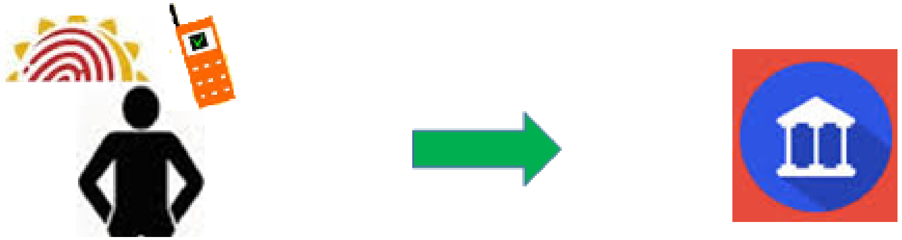
SHG members can seed their account with respective Aadhaar number and Mobile Number at the bank branch.

i. Fill up the consent form for seeding of Aadhaar

ii. Attach a self-attested copy of the Aadhaar card and submit at the bank branch

iii. Usually the process takes about 2-3 days for the system to update the Aadhaar number

iv. SHG members having mobile can submit an application to the bank branch to update their Mobile Number in their respective bank account.

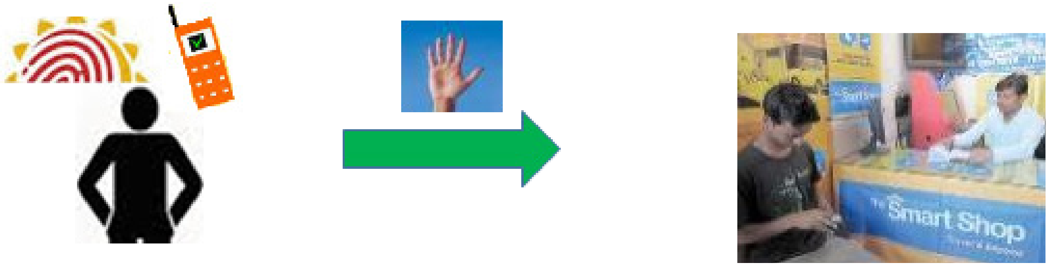


8.3.2 Seeding of Aadhaar and Mobile Number at CSP/ BC Outlets

SHG members can also seed their account with respective Aadhar number and Mobile Number at the CSP/BC outlets.

i. Fill up the consent form for seeding of Aadhar

ii. Individual members are required to authenticate Aadhar seeding with their biometric (finger print)

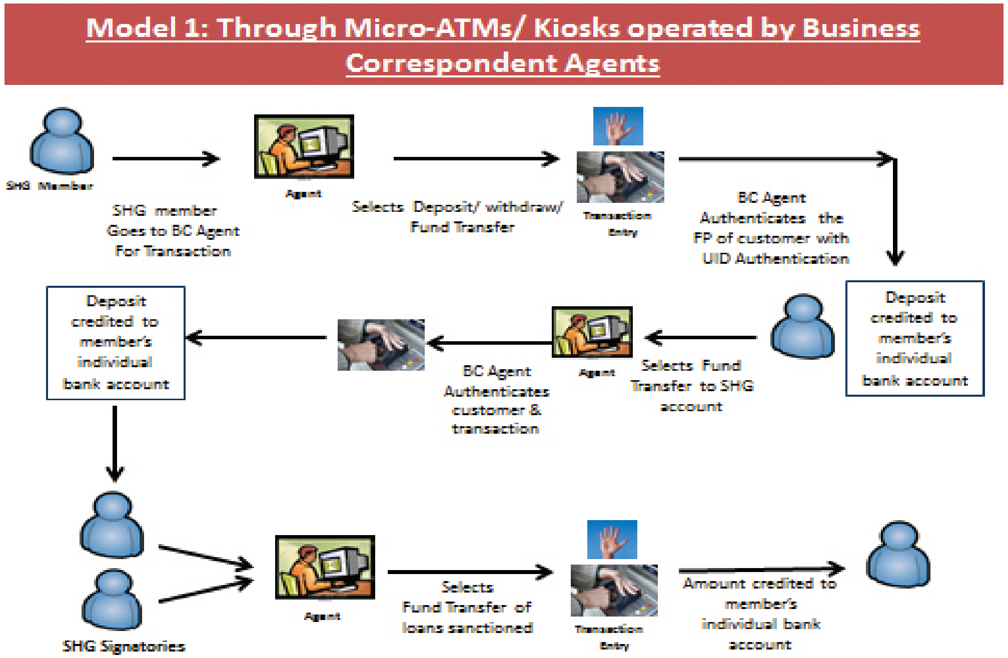


8.4 Aadhaar Seeding of SHG Account

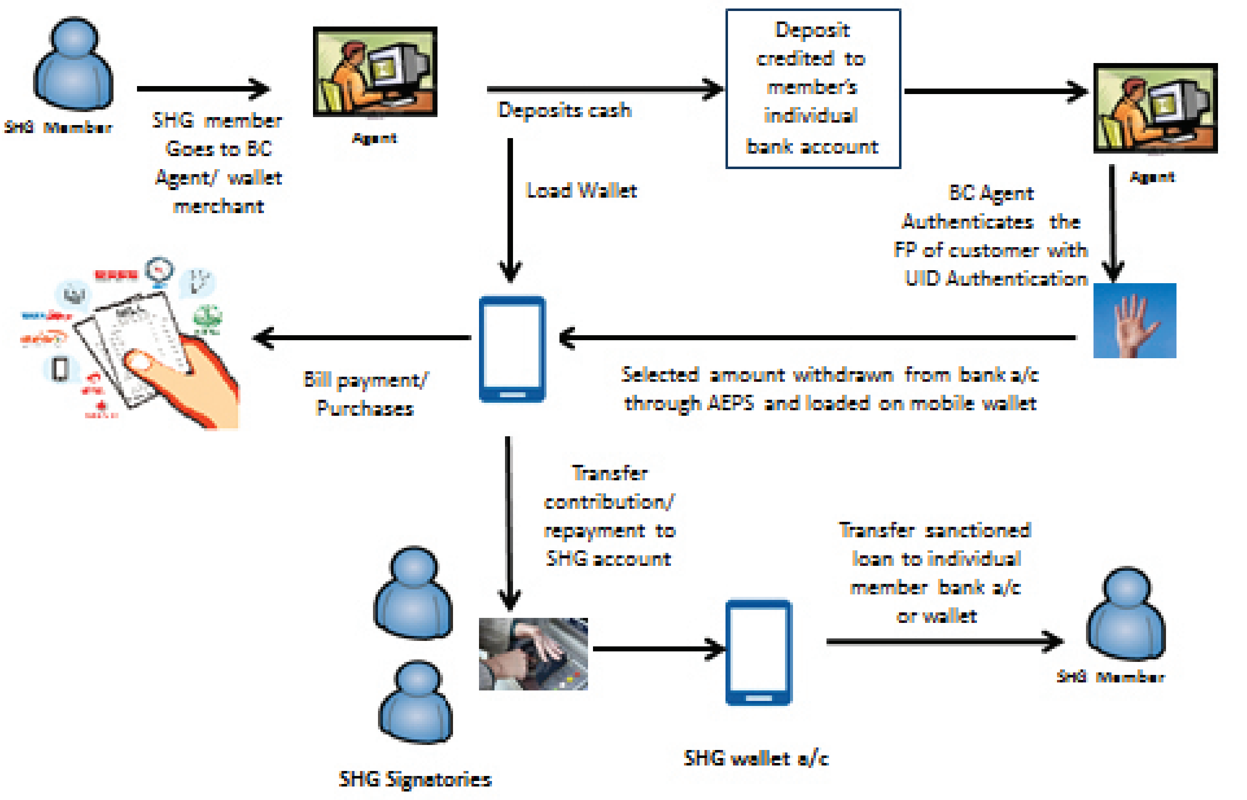
The Aadhaar number of the signatories of SHG bank account can be seeded at the bank branch. One primary mobile number should be set for the SHG account.

8.5 Cashless transactions of SHG through Business Correspondent, Mobile Spplication or through digital wallet

The transactions within SHGs (SHG & its members) and among SHG and its federations should be performed using digital modes. For the purpose, SHGs can use the services of Business correspondents in the area, Mobile Applications or digital wallets. For the purpose the following steps should be followed:



Model 2: Combination of BC channel + assisted mobile wallet (USSD)



To ensure that the entire transactions between member to SHGs and SHG to member is done through digital mode. It is important to make the facility available to transact jointly operate accounts of SHG at the BC outlet. All SRLMs/ promoter should insist on partnering banks to provide this facility.

8.6 Issue of Debit Cards for SHG members

All SHG members who have opened Basic Savings Bank Deposit Account are eligible to get debit cards. All members should apply for Debit Cards at their respective bank branches. The debit cards are delivered at the address of the account holder. The card can also be collected at the bank branch. Usually it takes about 7-15 days for delivery of personalised debit card. PIN for the debit cards are mailed separately by the bank and can be collected at the bank branch by the account holder by showing valid identify proof.

Banks also have non-personalised debit cards readily available at the bank branches. The non-personalised card is available at branch level in the name of "Ready Kit" and the same can be given instantly along with PIN which is ready for use from next day onwards.

SHG members may insist upon Rupay Debit cards as the processing fees for such cards are much lower than other settlement service providers.

8.6.1 Activation of Debit Card

On receipt of the debit card all members must immediately activate the card by visiting the nearest ATM. For activation of the card, the account holder must insert the card in the ATM slot and use the PIN provided by the bank. The ATM will ask for changing the PIN. The card can be activated just by performing a cash withdrawal or even by taking out a statement for the account. The Debit Card is now ready for use by the account holder.

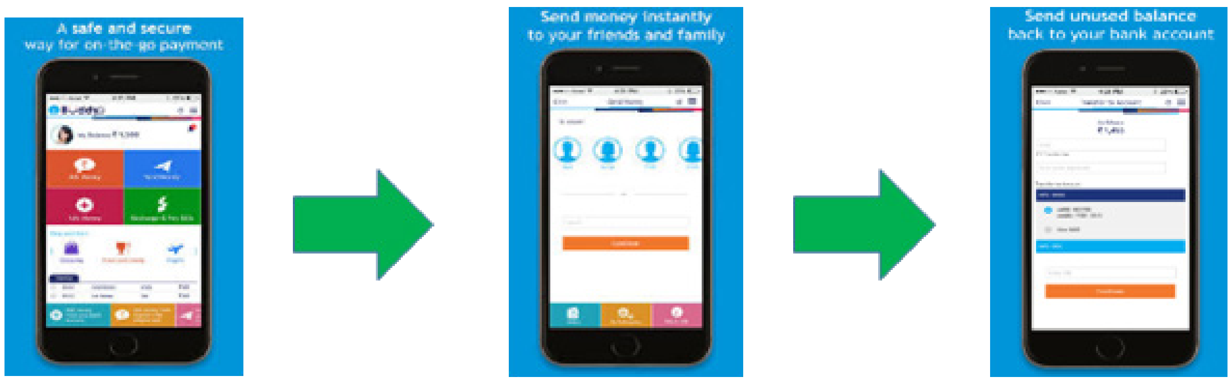
8.7 Cashless payments at retail stores by SHG members

SHG members who have debit card can use the same for making cashless payment at retails outlets. The card can also be used for transfer of funds from one card to another using ATM or at Business Correspondent outlets. For authentication of the transactions performed, account holders are required to use the 4 digit PIN which should be kept confidential. At BC outlets and select retail stores, authentication of transaction can also be performed using biometric provided the account is linked to Aadhaar.

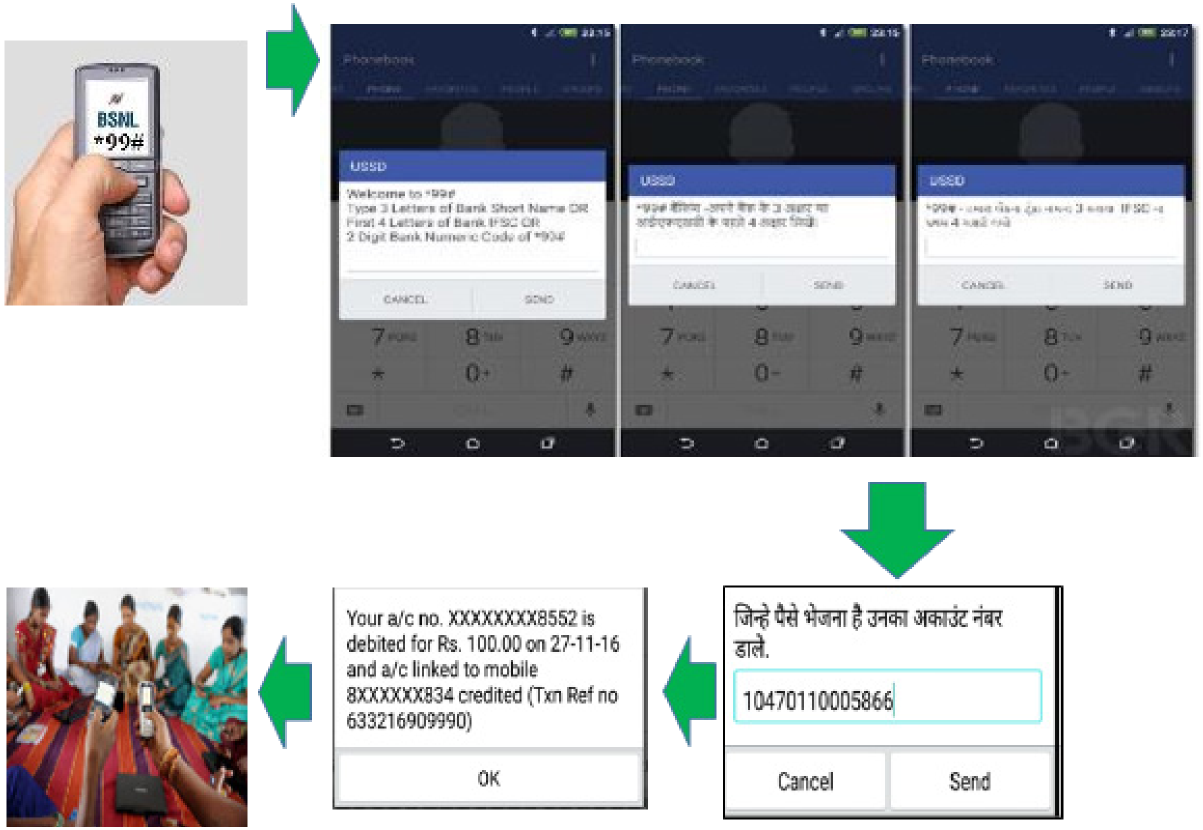
Alternately the SHG member can use Mobile Wallet for money transfer or payment at retail outlet. There are two kinds of wallet available – (a) App based which requires a smart phone and internet connectivity (b) USSD based which can be used on a feature phone without any internet connection.

Members of SHG or their family members who have a smart phone and access to internet facility may download an application for digital wallet and create an individual wallet account. All major banks have their own digital wallets eg: SBI has a wallet called ‘SBI buddy’; ICICI Bank has a wallet called ‘ICICI pocket’. These Apart from banks, third party providers also have their wallets eg: Paytm; Freecharge, Oxigen etc.

The individual wallets can be loaded using Debit Card’s details. Once loaded the wallet can be use to make payment for utility bills or at retail outlets. For making payments, the payee is identified based on Mobile Number of QR code depending on the features available on the respective wallet. Individuals having wallet can also receive payment from another individual having the same facility. The amount accumulated on digital wallet can also be transferred to a bank account.



Individuals who do have a smart phone and access to internet facility can use USSD based mobile banking applications for money transfer and payments. Account holders can use the National Unified USSD Platform [*99#] created by NPCI for the purpose. This is a self-service model. Currently 41 banks have been onboarded on the platform. Individuals can access their bank account using this protocol form feature phone. To access this service the account holder needs to register her/his Mobile Number in the bank account. Once the account is registered the user needs to generate a MPIN. Request for generating MPIN can be submitted at the bank branch or alternately the same can be generated at an ATM. Once the MPIN is generated, the platform can be used for transfer of money to another account. This feature is available in 12 Indian languages.



There is another USSD based service which is has both assisted and self-service versions provided by the telecom operator Vodafone called ‘M-PESA’. M-PESA establishes merchant points at different locations. Users who do not have smart phones can visit a M-PESA merchant location and load her/his M-PESA wallet against cash paid to the merchant (or debit card). Once the M-PESA wallet is loaded, the same can be used to transfer money to a bank account or make payments at retail outlets.

9. Do's and Don'ts

Do's and Don'ts of Mobile Wallets

Do's

- Set a password for your phone
- Set a password/pin for accessing Wallet App
- Use good antivirus software and keep it updated and scan your mobile
- Download app only from authorised application or sites that you can trust
- Turn off your Device's NFC connection when not in use.
- Limit your wallet limit to Rs. 10,000.00 - Rs. 20,000.00

Don'ts

- Do not keep the phone unattended for a long time
- Do not provide your credentials on sites without https protocol
- Do not rely on free anti-virus software or trial versions
- Do not Download app from unauthorised or unknown sources
- Avoid using NFC as you may end up paying for others
- Do not pay for or on behalf of others.

मोबाइल वॉलेट से संबंधित सावधानियाँ।

करें

क्या न करें

Do's and Don'ts of Mobile Banking

Do's

- Ensure that your mobile number is shared with the bank at the time of applying and you have selected Mobile Banking in the application form. If you are already a customer of the bank but have not registered your mobile number then you can do so at any branch of your bank or at any ATM, using your debit card
- Change your PIN regularly
- In case your mobile phone is lost or stolen, call customer contact centre of your bank immediately and register the complaint of your lost mobile phone
- Always protect access to your mobile phone with a password so that it cannot be accessed by others
- Set automatic screen-lock on your phone when it not in use
- Protect your mobile phone from online viruses, malwares and threats using anti-virus software
- Download the app from registered stores only, for example Google Play Store
- In case of any change in your mobile number, update it with your bank immediately
- Review your account statements frequently to check for any unauthorized transactions

Don'ts

- Never share your PIN or confidential information with anyone
- Don't transfer funds without due validation of the recipient
- Don't store sensitive information such as card details, PIN etc on your phone
- Keep Bluetooth off when not required
- Don't install apps on links that you get on SNS from third parties
- Bank never calls you for your card details or PIN. So, never fall prey to such calls

मोबाइल बैंकिंग से संबंधित सावधानियाँ।

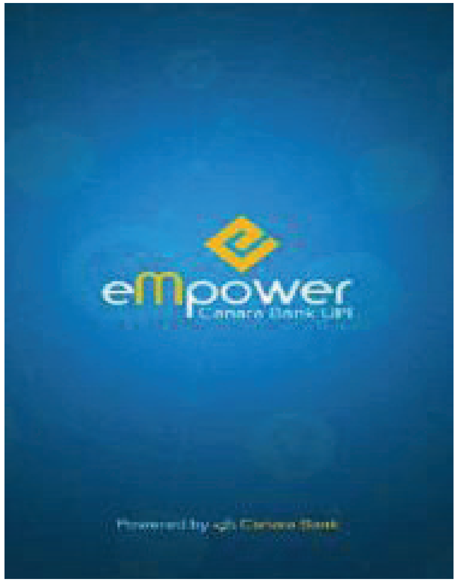
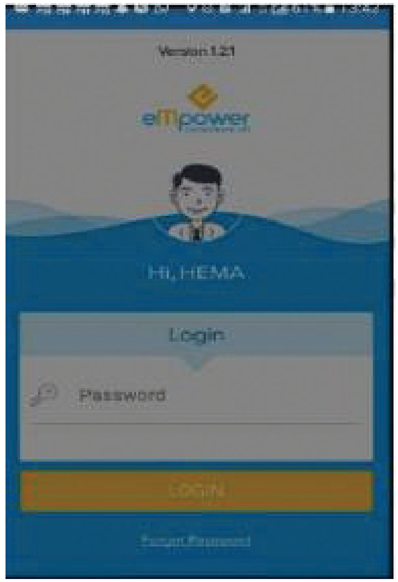
करें

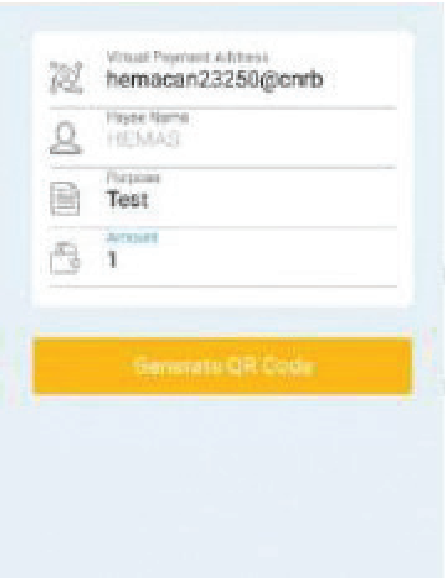
क्या न करें

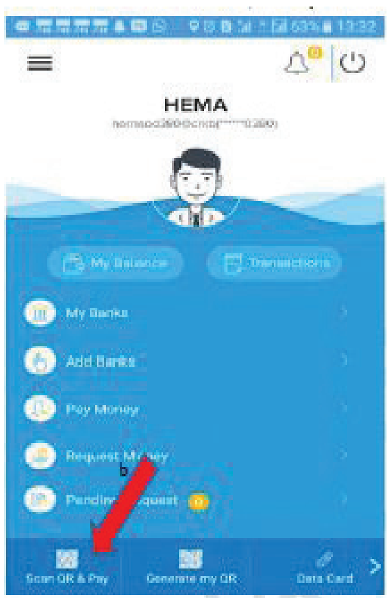
10. Appendix

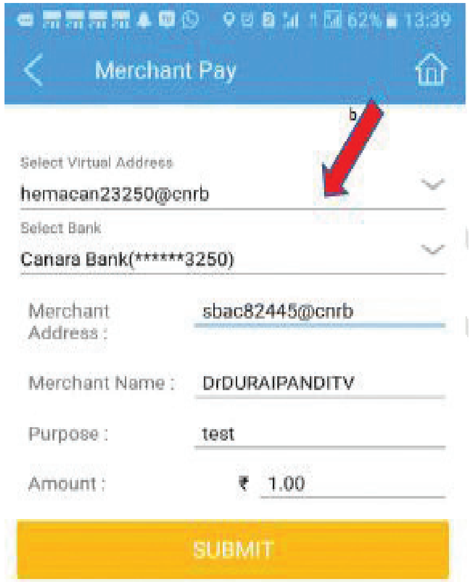
10.1 QR Code Generation and Usage

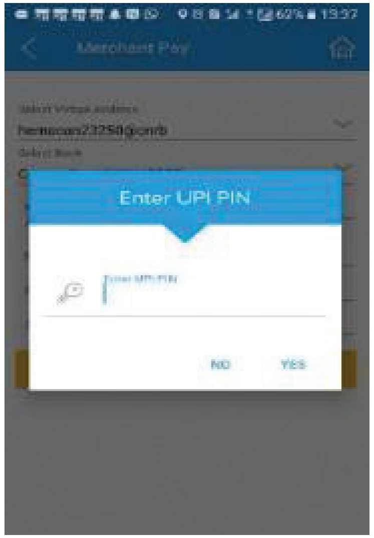
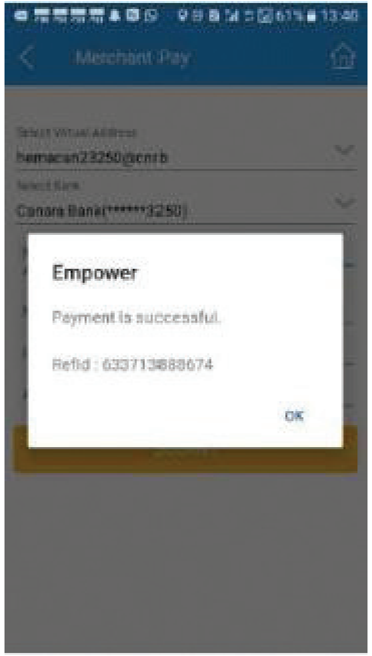
*Here to show usage of QR code we take Canara Bank's Empower App as an example.

Open Empower App	
Login to Empower Application	

Generate QR Code Enter your Virtual Payment Address Enter the Purpose Enter the Amount Required	
Generate QR Code and Save it to Gallery	

Share the QR code generated to the other person from whom the amount is to be received. Receiver need not generate QR code for each and every transaction Instead, one QR code generated may be saved in gallery which can be scanned by the sender. Alternatively, in case of a vendor, QR code once generated may be taken a print and pasted at vantage point of his establishment, so that any sender can scan that image and make settlement.	
Login to Empower Application Select Scan QR and Pay	

Scan the QR image received from the Receiver	
Immediately, the System will fetch the Details of the Beneficiary. I. (Virtual ID, Name, Purpose and Amount).	

Enter the Mobile Banking MPIN.	
The transaction will be completed instantly at both ends and sender will receive following message	

स्वच्छ भारत
एक कदम स्वच्छता की ओर

2016

सत्यमेव जयते

Training Module on Enabling Digital Payments in Rural India

राग्राविपंरासं
NIRDPR

National Institute of Rural Development and Panchayati Raj,
Ministry of Rural Development,
Government of India.
Rajendranagar, Hyderabad-500030.

NIRDPR
National Institute of Rural Development and Panchayati Raj
Ministry of Rural Development, Government of India.
Rajendranagar, Hyderabad - 500 030. Tel : Telefax: 040-24008473
Website: http://www.nird.org