



Is 'cashless' the road ahead towards
Digital India?

MicroSave
Market-led solutions for financial services

NPCI
भारतीय राष्ट्रीय भुगतान निगम
NATIONAL PAYMENTS CORPORATION OF INDIA

Introduction

“Post demonetisation, there has been an increased focus on digital payments. The RBI and the government have been asking banks to market digital payment services to facilitate faster migration to a “less-cash” society... It is a fact that in terms of the value of cash withdrawals, the number of ATM transactions has shown a decline in 2016-17 compared with 2015-16. But in terms of number of transactions, it has been growing... The Jan Dhan customers, whose accounts were inactive, have started using their RuPay cards on the ATMs... One possible scenario can be that ATMs may get multifunctional instead of pure cash-dispensing machines. As of today, cash is still king.” A. P. Hota, MD & CEO, NPCI, [Economic Times, July 2, 2017](#)

The real, high cost of cash

As per a [VISA study](#) in 2015, India is one of the most cash intensive economies in the world with a cash-to-GDP ratio of 12 per cent. With [97 per cent transactions](#) in the country carried out in cash, it is evident that Indian consumers prefer cash over digital options. Another 2015 [study](#) by MasterCard highlights that the central bank and commercial banks of India annually spend around \$3.5 billion in currency operation costs. It includes printing of new currency, maintenance of currency chest, ATM costs and interests to the currency chest, ATM and bank branches. This cost does not include the cost of storage, transportation, detection of counterfeit notes and security, among others.

It is further estimated that the net cost of cash is [1.7 per cent](#) of India's real GDP in 2014-15. Findings of the Ratan Watal Committee in 2016 [estimated](#) that forgone tax revenues from the shadow economy, which constitutes 19% of India's GDP, account for 3.2% of India's GDP. [Various studies](#) conducted by *MicroSave* also highlight that consumers across India are inclined to save in cash and make cash payments for most transactions. In a nutshell, cash continues to be the king in India and cost of cash to the country remains significant.

However, the notion that technology-based solutions can drive the agenda of a less-cash economy and financial inclusion is gaining acceptance. Post-demonetisation, there is evidence to suggest that there had been a significant increase in the number of digital transactions, such as those done through [UPI](#) and [BHIM](#). Although this trend, buoyed by demonetisation,

seems temporary ([as the digital transaction data shows](#)), it has led to an increase in meaningful awareness and perhaps with it, knowledge of new age digital payment solutions, such as BHIM, UPI, along with USSD and digital wallets.

We feel that one of the key aspects to extend banking services to the last mile relies on the awareness of various banking products and accessibility of their channels. As per the latest World Bank Data, [47% of rural households in India](#) are still unbanked. This provides a key prospect to increase awareness on digital financial services and drive the rural economy towards less-cash.

Keeping the present context in consideration, the National Payments Corporation of India (NPCI), in collaboration with *MicroSave*, is working in an initiative to create less-cash ecosystem in panchayats across the country. This is being undertaken in collaboration with leading Public Sector Banks (PSBs) and their promoted RRBs (regional rural banks). The initiative is a part of the ambitious “[Digital Finance for Rural India: Creating Awareness and Access](#)” project of NPCI. The NPCI project, in turn, falls under the *Digi Dhan Abhiyan* that aims to digitally enable panchayats across the country and encourage active and sustainable village-level participation.

As a part of this initiative, the NPCI decided to digitise Karangamal, one of the remotest and most under-developed panchayats in Western Odisha in March 2017.

Situational Analysis

*Rakesh is a resident of Karangamal panchayat. He frequently visits Khariar, a town located 50 km from his village Kulingamal in the panchayat, to purchase stock for his stationery shop in the village. It is the last week of the month and Rakesh needs to reach Khariar at the earliest. He asks Mahabir, a local driver – “How much do you charge for Khariar?” Mahabir replies – “It would cost you Rs. 400.” Rakesh is not carrying any cash with him, as the only ATM, of SBI, in Karangamal doesn't have cash owing to demonetisation. Rakesh requests – “Can I pay you at Khariar as I do not have cash right now?” Mahabir politely suggests – “Instead of withdrawing from ATM, you can pay me through *99# facility.” It was a pleasant surprise for Rakesh, as he never expected Mahabir, a driver, to be aware of USSD services.*

Karangamal, a panchayat with five villages (Karangamal, Kulekela, Dotto, Lesunpal, and Kulingamal), belongs to one of the most under-developed and least connected geographies of Odisha's Nuapada district. One can see a number of residents like Rakesh and Mahabir, who are now switching to new digital modes of transactions. This change has been brought about primarily as a result of the efforts of the National Payments Corporation of India (NPCI) and *MicroSave*.

The initiative, which has been christened '**Digitally Enabled Karangamal Panchayat**' is aimed at complete digitisation of the panchayat. The objective is to introduce the residents to a range of Digital Financial Services (DFS) solutions for accessing banking services. As part of this project, NPCI intends to promote a wide range of digital channels, such as Aadhaar-enabled Payment System (AEPS), Immediate Payment Service (IMPS), Unified Payment Interface (UPI), RuPay Cards, Bharat Bill Payment System (BBPS), BHIM and *99#. The panchayat is currently serviced by the Boden and Sinapali branches of SBI and Karangamal branch of Utkal Grameen Bank (an RRB sponsored by SBI).

However, the path for Karangamal to become a completely digital panchayat is paved with several challenges, as detailed below:

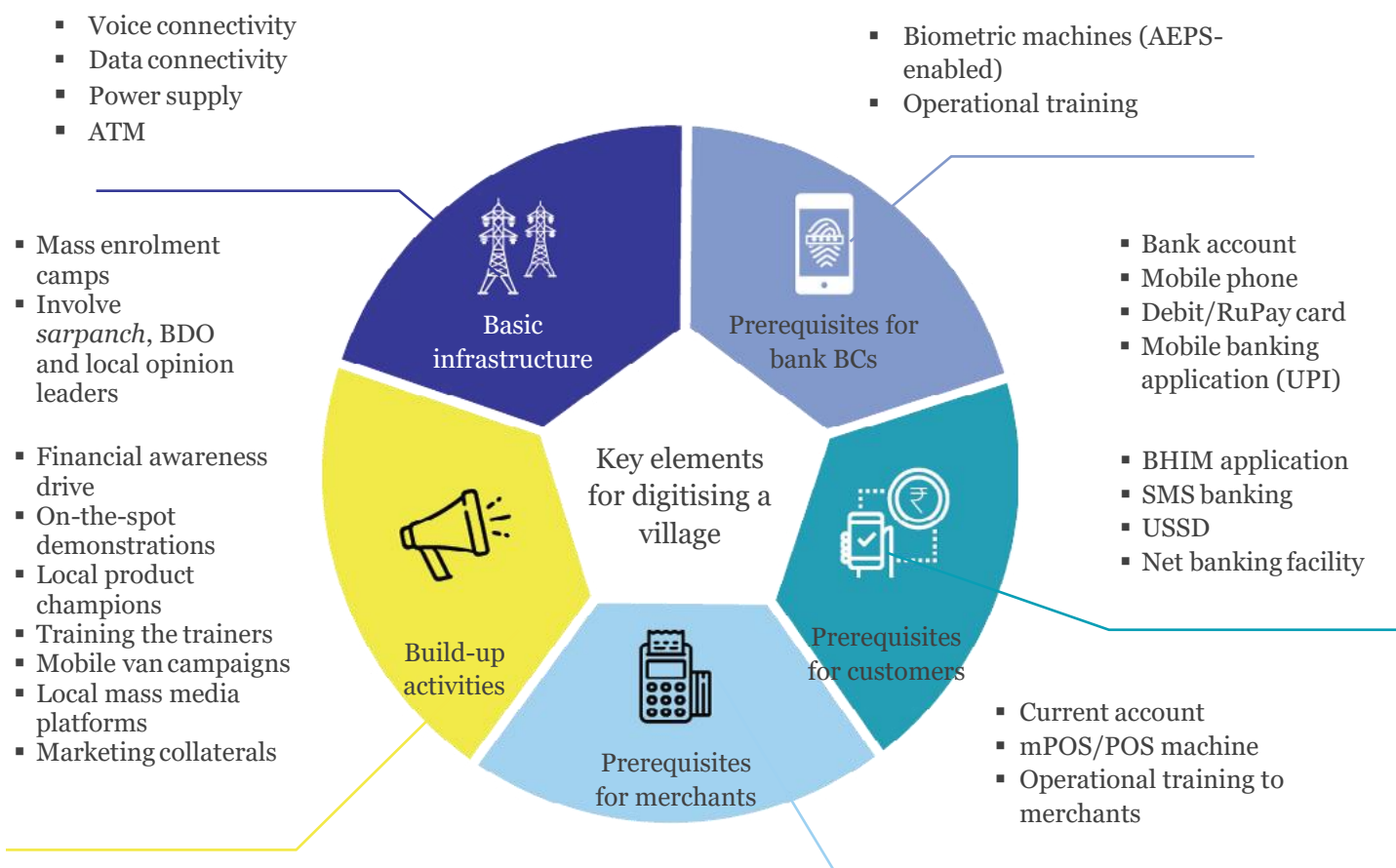


Digitisation in Karangamal: Major Challenges

- Low level of financial and mobile literacy among villagers
- Poor network/data connectivity in the villages
- High MDR charges for merchants
- High cost of POS machines for merchants and banks
- Inadequate resource availability at local bank branches
- Non-registration of banks on BHIM, IMPS and *99#
- Rural economy is predominantly cash-driven
- Lack of digital awareness in the panchayat

Key Elements of Digitisation

MicroSave developed a conceptual framework to identify the key elements required for digitising any village. This framework was applied to Karangamal, based on local context.



The framework is designed keeping in mind the essential requirements while setting up a digital ecosystem in any village.

- Generally, any channel accessed by the customer to make transactions is termed as Alternate Delivery Channel (ADC). These include ATMs, mobile phones, POS machines, etc. All ADCs require the exchange of financial or non-financial information between the bank and the customer, which typically occurs over communication channels connecting the ADC and the back-office system at the bank. Such communication is possible only with the help of a seamless telecommunications infrastructure (includes voice and data connectivity). Communication channels also include internet connectivity provided by mobile networks or leased lines. Therefore it is evident that communication channels form the backbone of any cashless experiment in villages (or cities).

- As enablers of digital transactions, the business correspondents (BCs) and merchants require support in the form of front-end devices, such as POS, mobile phones, and biometric machines. Their buy-in and comfort level to accept and make digital transactions is extremely important in digitisation experiments. It is essential to have the buy-in of the bank managers, staffs and the local government officials at the panchayat. They are the change agents who drive and motivate the village residents towards adopting technology. Therefore, the roles and responsibilities of each key actor cannot be ignored, and everyone forms an important link towards digitising the panchayat.

- Customers, who are the key players of the digital channels, should be educated on channels and motivated to use them. Customers should be made comfortable to choose from a range of different kinds of ADCs available. In this aspect, merchants and BCs play a major role in educating and motivating customers. This is a key pre-requisite for digitisation experiments. Customers need to be made aware of the various digital payment modes available to them. Increased awareness would, in turn, generate interest and lead to the successful adoption of digital transactions.
- Finally, the build-up activities form a key part of awareness-building initiatives for the customers, merchants and the households. These activities are mainly targeted at improving the visibility of the initiative through local stakeholder interactions and active campaigning of various digital payment modes.

As a part of campaigning, below-the-line activities (BTL) can be conducted, such as mobile van promotions, door-to-door promotions of various payment modes and above-the-line activities (ATL) activities. The banks can play an active role in supporting these activities through customised collaterals displayed at their bank branches. Local NGOs, SHG groups, opinion leaders and other civic societies can support in disseminating information to the local masses. These steps help in improving the reach as well as visibility of the products to a considerable extent and reduce the barriers to adoption and usage of technology.

These findings comprise the elements of the framework. Once the elements were identified, NPCI and *MicroSave* executed the activities in a systematic approach with support from all the stakeholders in each phase.

Approach and Phase-Wise Activities

Since all the five villages in Karangamal panchayat are very remote, it was imperative to begin from scratch to be able to make the panchayat digitally enabled. A three-phase plan was designed to implement the project:



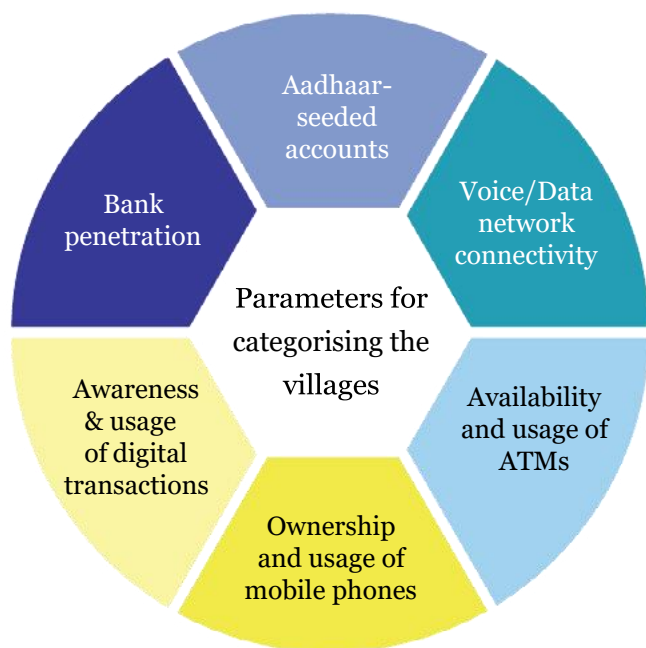
During phase 1, efforts were made to understand the availability of basic digital infrastructure in the villages. Specific interactions were made with customers, merchants, bank officials and local civic organisation to familiarise with their understanding on digital payments. NPCI and *MicroSave* also worked with local bank branches to understand the current status of Aadhaar linkage and mobile seeding into the bank account holders. This is necessary to ensure that banks can fulfil the minimum requirements for people to conduct digital transactions in the next phase.

Phase 2 was a financial literacy campaign that focused on providing training and demonstrations to the people through workshops. This aimed at taking the villagers a step further towards being digitally enabled.

Local banks had a major role to play in facilitating the workshops and ensuring high footfall. Since awareness forms an integral part of a financial literacy project, a number of activities were conducted in phases 1 and 2. The activities were designed to spread the word about the initiative and motivate people to sign up for digital transactions. As part of eco-system development, bank officials ensured that customers are transaction ready by mapping their Aadhaar and mobile numbers to their bank account. They also provided the merchants with platforms to conduct transactions. Phase 3 is currently underway and is slated for completion as soon as the evaluation dates are decided. In this phase, banks will provide real-time data to monitor the progress of digital transactions in the panchayat.

Phase 1: Baseline

- We conducted a baseline study in all the five villages in which we collected data, based on the parameters mentioned in the graphic below. This data helped us to categorise the five villages of the Karangamal panchayat. As a part of the baseline survey, *MicroSave* interacted with several stakeholders. These included teachers, farmers, and daily-wage labourers, besides government and private employees. *MicroSave* also tried to analyse information about the major sources of inflow and outflow, average ticket size of a transaction, as well as the medium and frequency of each transaction. The team also interacted with the business correspondents in the village working for SBI and Utkal Grameen Bank.



- *MicroSave* interviewed other stakeholders, such as the Block Development Officer of Boden, principals and teachers of local schools in Karangamal, Kulingamal and Dotto. Additionally, interviews were conducted with local NGOs, named Lokadrusti and Ayushkam. These additional interviews helped in identifying the venue for the next phase of the project.
- **Promotional Activities:** *MicroSave* teamed up with a local community radio station – 90.4 FM where an FAQ session was recorded on the less-cash ecosystem. The session explained the 5Ws (what, why, where, when and who) of the project.

Phase 2: Financial Literacy Campaign

A. Planning the Workshop

Designing a financial literacy workshop requires meticulous planning and coordination among stakeholders. In this regard, NPCI, *MicroSave*, Regional and Local Bank Branches, local governance of panchayat, local NGOs, such as *Lokadrusti* and *Ayushkam*, played a key role in planning the week-long workshop.

A team from NPCI and *MicroSave* were present in the panchayat to discuss and assess the appropriate time and duration to conduct the workshop. The local banks' teams assisted in finalising the design and flow of the workshop, which included product demonstration on BHIM, *99#, RuPay and AEPS. The *Sarpanch*, bank managers, and the principal of schools assisted in identifying a suitable location for the literacy campaign that can accommodate the participants. The locations finalised were the panchayat office, school premises and specific marketplaces located in the panchayat that ensured maximum impact and visibility of the workshop among the residents. Since most of the participants were from the farming community, it was decided that the workshop would be conducted just before noon, when the villagers would be comparatively free.

Two-sessions were planned – one in the morning and the other in the evening. Evening sessions were planned for farmers/ others who go out in the morning and come back in the evening. A van promotion activity sponsored by *MicroSave* was utilised for the promotion of the financial literacy workshop. A complete BTL promotion was conducted for the announcement of the workshop in the panchayat.

Besides the promotion, marketing collaterals displayed at the bank branches, key village marketplaces and junctions ensured that panchayat residents were aware of the campaign and the pre-requisites required for the campaign. The announcement and the collaterals were planned in the local language to create awareness and interest among the local populace.

B. Ecosystem Development

Apart from setting up the basic infrastructure for digital transactions, RuPay cards were issued to the customers in these villages using the support extended by banks.

Six out of 16 shops in the panchayat were enhanced with POS terminals. These terminals were provided by SBI. Merchants were appraised about the charges applicable on using the terminals, such as POS, MDR, electricity charges, etc. NPCI made certain that merchants and BC agents were registered on the POS machine and micro-ATM. Merchants readily accepted the intervention and agreed to accept payments using RuPay and other debit cards.

The local branches of SBI Boden and UGB Karangamal provided proactive support in arranging projectors and the logistics for the workshop. Power-backup was also arranged for the workshop so that participants and trainers do not face any challenge during the event.

A cinematographer was hired to document the key elements of the village infrastructure and the learnings from the workshop. This was planned with the intent of showcasing the cashless journey of the panchayat to the world.

C. Workshop and Training

Trainers for the workshop were pooled from among the staff of local bank branches, school staff and members of the panchayat. The trainers demonstrated different NPCI products in the workshop. Each workshop had a special guest from the panchayat. The guests were apprised about the agenda of the workshop, so that they would assist in motivating the locals in adopting digital transactions.

The workshops were conducted in all five villages with the help of audio-visual tutorials and live demonstrations. This helped the villagers understand the process of registration and usage of different products, such as *99#, AEPS, RuPay and BHIM.

Each workshop began with an introduction of the chief guest followed by audio-visual tutorials on each payment mode. After this live demonstration sessions, each lasting around two hours, were conducted by NPCI and *MicroSave* with support from branch nodal officers and other trainers. These sessions instilled confidence among the participants for self-access of the products. Villagers were excited to hear about and execute new processes, using their mobile phone to access their bank accounts. The financial literacy workshop ensured that all the participants are *99# and BHIM registered. The bank arranged special kiosks for on-the-spot linking of mobile or Aadhaar number to bank accounts.

The workshop was followed by a quiz on digital payments. This was conducted to gauge the participants' understanding of the session. The quiz session also ensured that participants were keen to hear others express their understanding about the products. The workshop concluded with a speech by the chief guest on the



“The nearest bank branch is located 10 km away in Sinapali and the other one is 18 km away in Boden. With AEPS, it is very convenient to provide financial services.”

- Rajendra, BC, SBI Karangamal

“Earlier, I used to go to the bank branches and would lose an entire day’s pay. Now, I use CSP for different financial services.”

- Lakhmi, a daily-wage female labourer

importance of digital payments and the products explained in the workshop.

Separate demonstrations were conducted for school teachers, local NGOs, college students and bank staff to help them understand all the products. Due to the social environment, there were very few women attendees in the general workshop. Therefore a separate campaign for women was organised to make them aware of digital means of transaction. International Women's Day happened to coincide with the workshop dates, and on this occasion, a financial literacy campaign for women was also organised to create awareness about the RuPay card and other financial instruments available in the panchayat. It was found that women were equally aware of using RuPay cards at POS and ATMs. They also paid complete attention and learnt about new channels of transactions, such as *99# and AEPS.

Villagers, teachers, farmers, retired government officials, students and homemakers were also given sufficient training on the field to familiarise them with *99#, BHIM, RuPay and AEPS.

The NPCI and bank staff helped customers transact on the POS machines. The customers brought along with them

their Aadhaar and RuPay cards, so that they could perform live transactions on AEPS and RuPay at the BC agent and merchant locations respectively. SBI and UGB bank managers acted as interim trainers, who supported the villagers to get registered on *99# and BHIM.

D. Khariar Mahotsav

Khariar *Mahotsav* is a well-known fair attended by the locals of Karangamal and nearby panchayats. This *Mahotsav* served as a good platform to promote the idea of cashless transactions and showcase different NPCI products. The NPCI trained staff members of SBI, Khariar, on the benefits of *99#, BHIM, RuPay, AEPS and IMPS, and provided the bank with vernacular collateral for the *Mahotsav*.

State Bank of India, Khariar branch, offered great support in volunteering and explaining various NPCI products to the customers through a dedicated counter.

The following table contains the **baseline data** on the number of bank accounts linked with Aadhaar, mobile number and RuPay debit cards. During end-line, the next phase of impact evaluation similar data will be captured with support from local bank branches. It will enable us to compare the success of Phase 2.

Parameters (Feb 2017)	UGB, Karangamal	SBI, Boden	SBI, Sinapali
# of Savings Accounts	7,520	17,417	32,378
# of PMJDY Accounts	12,163	16,000	27,034
% Aadhaar number seeding	54%	39%	36%
# Aadhaar seeded accounts	10,816	12,979	21,114
% Mobile number seeding	21%	45%	80%
# Mobile number seeded accounts	4,206	15,000	N.A.
% RuPay debit card active	89%	N.A.	N.A.
% of the total account holders from Karangamal panchayat (approx.)	60%	30%	N.A.

Lessons learnt

During the entire process of digitisation of Karangamal panchayat, many lessons were learnt at different phases of the project. Some of the key challenges faced or seen during the project were:



Insufficient and untrained resources at local bank branches



High MDR borne by local merchants who use POS



Poor network connectivity in using different products



Non-registration of UGB on *99# and BHIM; thus unavailable to their UGB account holders



Low level of awareness and literacy among villagers as a major barrier

1) Insufficient and untrained resources at local bank branches

Before the campaign was organised, the staff of the local bank branches were not aware of the payments product by NPCI. A few members of the staff acknowledged that there was no training provided to them on *99# and BHIM. They possessed a limited knowledge on RuPay and IMPS, though it was a part of their day-to-day work.

Moreover, the bank managers also lamented that the headcount at a rural branch was not sufficient to manage the daily footfall of customers visiting the branch. Thus, they were willing to accept any means of transactions that would ease the work pressure on their staff. It was also difficult for the branch managers to provide their resources for promoting any digital

product as it would affect the day-to-day operations of the bank. Therefore, the banks need to provide special attention to their rural branches. They have to ensure that digitisation helps reduce the footfall of customers in rural branches, especially for services such as money transfer, balance enquiry, and mini-statements.

2) High MDR borne by local merchants who use POS

The local merchants expressed their dilemma related to the MDR (merchant discount rate) associated with the POS machines. They felt it would be difficult for them to break even owing to the low amount of transactions conducted on POS. Besides, there might be an insufficient number of transactions as well. This fact raised the fear that they would never be able to break-even considering their monthly charges levied by the banks for using

POS machines. Banks may need to find a solution to promote the usage of POS among the customers and ensure sufficient support to the merchants to help them resolve this issue.

3) Poor network connectivity in using different products

Only two major telecom providers serve remote rural panchayats, such as Karangamal. Due to unavailability of all providers and intermittent network connectivity, it becomes difficult to access digital products, such as *99# and BHIM that require a continuous network connectivity. It becomes a matter of concern that rural residents may not take up digital products if their first-time experience with a digital transaction remains unsuccessful.

The participants expressed their inability to access *99# due to frequent network time-out issues. What bothered them the most is the fact that their mobile account balance would get deducted by 50 paise every time they got a session time-out. Therefore, the telecom regulators need to find an alternative solution to limit this issue to increase the uptake of the *99# service.

4) Non-registration of UGB on *99# and BHIM; thus unavailable to their UGB account holders

Utkal Gramin Bank was not registered on *99# and BHIM. Therefore, apart from RuPay card transactions and AEPS, the UGB account holders were not able to access these two digital products. UGB needs to satisfy certain minimum criteria laid out by NPCI and RBI in order to access both these products. Therefore, the regulators and the bank need to discuss a solution such that their account holders are not left out of the digital journey.

5) Low level of awareness and literacy among villagers was a major barrier

The village population in less-developed panchayats, such as Karangamal are low in literacy. Their number literacy levels are also low, which makes it difficult to explain new-age digital products to them. Frequent awareness campaigns and financial literacy workshops need to be organised to ensure that villagers reach a minimum literacy level that would ensure uptake of digital payment products.

While these were a few challenges foreseen in the project, if resolved, there is likely to be a definite surge in digital transactions conducted in the panchayat.



Phase 3: Impact



- **Mobilised 600 and more villagers** under one roof to impart digital education and successfully executed live demonstration of *99#, BHIM, AEPS and RuPay transactions.
- **Trained local bank staff** on various digital payments solutions and grievance mechanisms. This will ensure that the bank staff are able to educate their customers on various digital products and encourage them to use solutions, such as card-based payments and BHIM.
- ***99#** was the **most demonstrated product** among the villagers, due to the dominance of basic feature phone. A small number of test transactions were carried out by the villagers themselves, once they understood the process of conducting a digital transaction. The retired government employees also participated in the workshop and were able to conduct transactions, such as balance check by themselves.
- The **smartphone users**, especially the **youth**, showed immense interest in downloading the BHIM App and registering during the workshop. Everyone could check their balance and make small amount transfers to their friends and relatives.
- Created **Product Champions** among school/college teachers, SHG members and local NGO workers, the business correspondent agent on *99# and BHIM app, etc. These select stakeholders are the permanent opinion leaders at the local level and can guide the villagers, students, NGO members, SHG members and others in future, even when the literacy campaign is over. Similarly, willing and capable individuals can be trained and categorised as product champions.
 - **First-hand experience** and introduction of the villagers into the world of digital transactions. This will help build their confidence, trust and awareness on digital channels.
 - Created a **positive push** for banks to facilitate digital transactions for future.
 - **Motivated customers** to clarify their doubts and concerns with digital transactions.

Before the conclusion of the literacy campaign, there has been an **increase of 11% and 9%** in the number of Aadhaar-seeded accounts and accounts linked to their mobile numbers respectively. This shows the motivation of the villagers and the push from the banks in ensuring that villagers do not miss the digital train.



*“With regular training on *99# and BHIM, more villagers will use digital channels and high footfall will be reduced at our bank branches.”*

– **SBI Branch Manager, Boden**

“Digitisation of banking products is required. With mobile phones and digital technology, financial services are reaching the doorsteps of each village household.”

– **UGB Branch Manager, Karangamal**

Road Ahead for Karangamal panchayat



- The journey of the villagers in the panchayat right from understanding what a digital transaction is to actually executing a transaction is documented into a short video called *Digitised Karangamal*.
- The next phase – mid-line and end-line evaluation will focus on diagnostic output level assessment. This assessment will be carried out through semi-structured interviews with the villagers on:
 - Retrospective data based on the literacy campaign
 - Existing challenges
 - Source of information of digital channels
 - Product usage updates
- These interviews will assess the knowledge, attitude, behaviour and practices towards the products and services explained during the financial literacy workshop.
- The transactional data from banks will also be analysed to understand the usage pattern of different digital products among customers.

In view of the above, there are few questions that still need to be addressed:

- a. What is required to keep the real momentum of digital transactions in the panchayat?
- b. Will villagers continue to transact digitally after major financial literacy events?
- c. What should the banks do to sustain the momentum achieved through such initiatives?
- d. How do you think providers will benefit by the beneficiaries going digital?

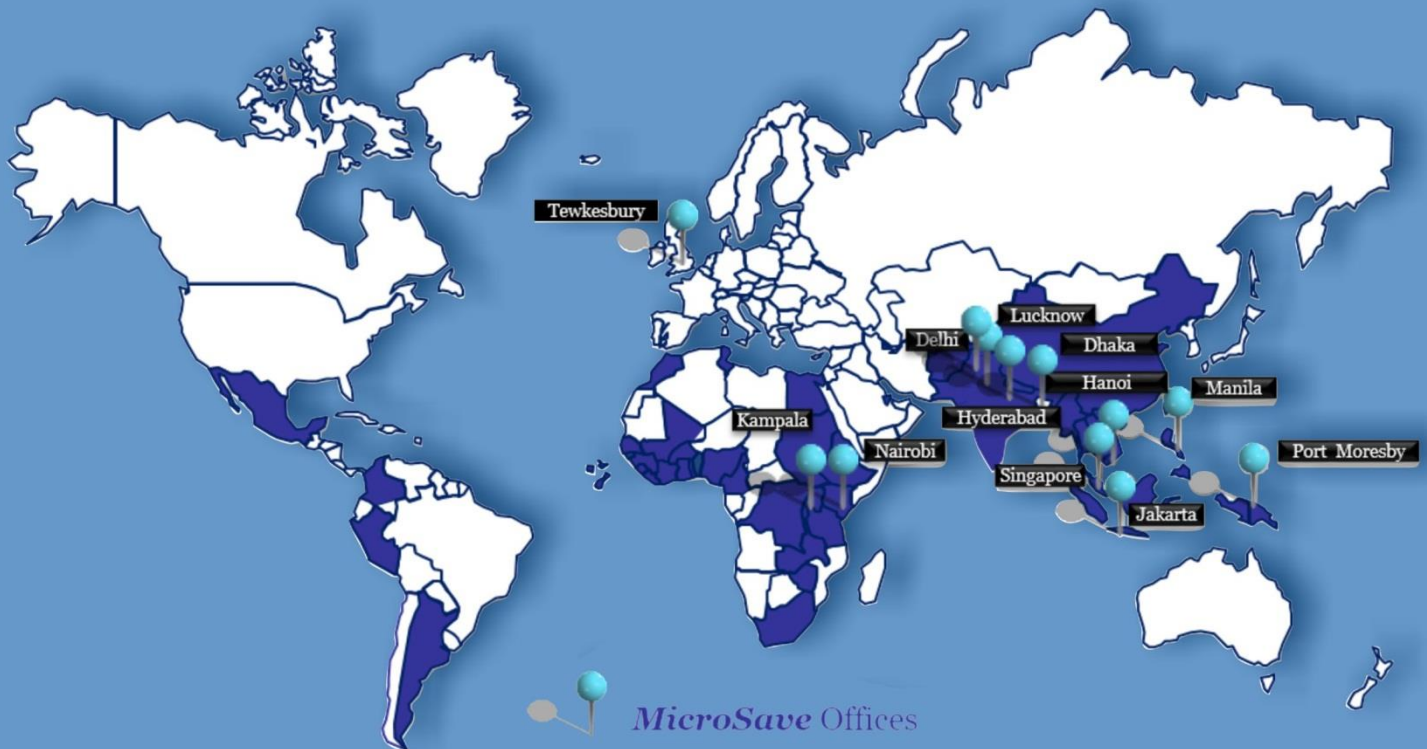
Providers and regulators are making efforts to understand and address the implementation-related challenges associated with processes and infrastructure. Possible answers to the questions mentioned above lie in these efforts. The onus is also on the beneficiaries, who have to trust the motivation gained through workshops and motivate others to transact digitally, thereby continuing with the existing momentum of financial literacy.

Glossary

Reserve Bank of India (RBI)	RBI is the central regulatory bank of India monitoring all the public, private and rural regional banks in the country. They create the monetary policy framework to meet the challenge of maintaining a stable economy and pricing stability while ensuring a growing economy.
National Payments Corporation of India (NPCI)	NPCI is an umbrella organisation for all retail payments system in India. From a single service of switching of inter-bank ATM transactions, NPCI has developed a range of services that include Cheque Clearing, Immediate Payments Service (24 x 7 x 365), Automated Clearing House, Electronic Benefit Transfer and a domestic card payment network named RuPay to provide an alternative to international card schemes.
MicroSave	<i>MicroSave</i> is an international financial inclusion consulting firm. They provide consulting to strengthen the capacity of institutions to deliver market-led, scalable financial services to all people through guiding policy & facilitating partnerships to develop enabling eco-systems; comprehensive, customised strategic advice; and actionable, on-site operational assistance.
Aadhaar	Aadhaar is a 12-digit unique identification number issued by the Indian government to every individual resident of India. The Unique Identification Authority of India (UIDAI), which functions under the Planning Commission of India, is responsible for managing Aadhaar numbers and Aadhaar identification cards.
Aadhaar Enabled Payment Systems (AEPS)	AEPS is a bank led model which allows online interoperable financial inclusion transaction at POS (MicroATM) through the Business correspondent of any bank using the Aadhaar authentication.
Immediate Payment Service (IMPS)	IMPS is a multichannel and multidimensional platform that offers an instant, 24*7 interbank electronic fund transfer service capable of processing person to person, person to account and person to merchant remittances via mobile, internet and ATM.
RuPay	RuPay is card payment scheme launched by NPCI. It offers a domestic, open-loop, multilateral system which allows all Indian banks and financial institutions in India to participate in electronic payments.
*99#	It is a USSD-based technology platform developed by NPCI that offers services such as interbank account to account fund transfer, balance enquiry, mini statement besides host of other services.
Unified Payment Interface (UPI)	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 & merchant payments under one platform.
BHIM	Bharat Interface for Money (BHIM) is an app that lets you make simple, easy and quick payment transactions using Unified Payments Interface (UPI). You can make instant bank-to-bank payments and Pay and collect money using just Mobile number or Virtual Payment Address (VPA).
PMJDY	Pradhan Mantri Jan Dhan Yojana (PMJDY) is a National Mission on Financial Inclusion by the Government of India encompassing an integrated approach to bring about comprehensive financial inclusion of all the households in the country. The plan envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit, insurance and pension facility.
Point of Sale (POS)	Point of Sale machines are terminal(s) which facilitate acceptance of payment from customers through the use of debit/credit/pre-paid cards. Customers swipe their cards on the POS terminals to pay for the sale proceeds of goods and services sold by merchants.
MDR	Merchant discounted rate is a rate charged to a merchant by a bank for providing debit and credit card services. The rate is determined based on factors such as volume, average ticket price, risk and industry. The merchant must set up this service with a bank, and agree to the rate prior to accepting debit and credit cards as payment.

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