

# WHITE PAPER

## Catalyst for financial inclusion

*Bank the unbanked with digital channels*



– C. Sangeetha, Kapil Sai Koushik

### Abstract

The unbanked population is a sizeable market at the base of the pyramid. Banks can reach out to the underprivileged sections of society by partnering with governments and making financial services available at a nominal cost. Our experts propose adoption of digital channels to realize financial inclusion in developing countries.

## Contours of financial inclusion

Financial inclusion is a by-product of financial exclusion and is directly related to poverty.

Financial exclusion refers to the lack of

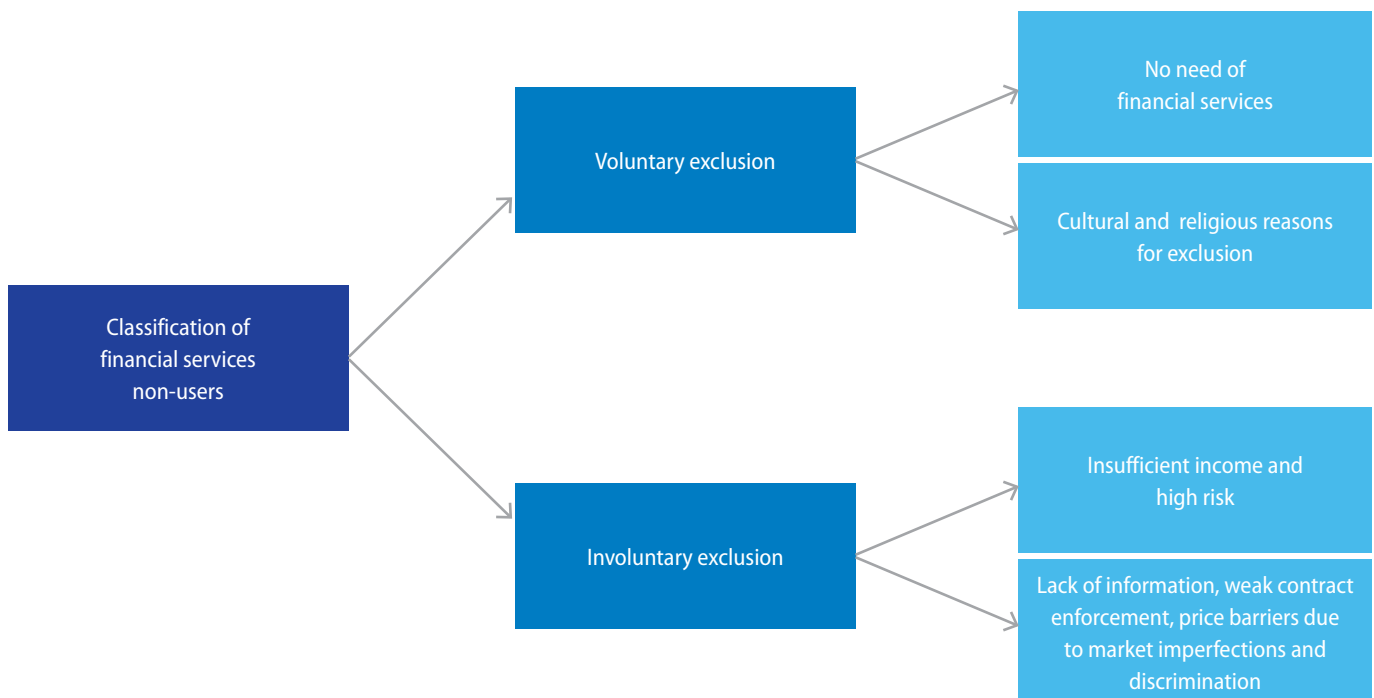
banking and financial services to the poor. It hinders efforts to eradicate poverty in developing countries.

Financial inclusion is the process of

providing access to financial products and services for the disadvantaged sections of society.

## Classification of financial exclusion

According to the World Bank, four forms of financial exclusion are prevalent in society:



Low income groups or disadvantaged sections of society do not have access to basic financial services of banks and financial institutions. It is imperative to make financial services and banking products available to low income groups at a nominal or reasonable cost. Financial inclusion makes banking products and services available to weaker sections of society at an affordable cost.

The low income groups or disadvantaged sections of society include farmers, labourers, senior citizens, and ethnic minorities.

## The financial inclusion imperative

Let us understand financial inclusion in the context of the disadvantaged sections of society in developing countries:

- 11% of people in low income countries saved money at a financial institution
- 89% of people in high income countries have an account at a financial institution compared to 24% in low income countries
- Only 9% of people in low income countries use a cell phone to receive money

Source: <http://www.centerforfinancialinclusion.org/fi2020>

- More than 50% of the world's working-age population do not have viable financial facilities
- Out of 2.5 billion adults, 2.2 billion adults live in Africa, Asia, Latin America, and the Middle East

Source: [http://mckinseysociety.com/downloads/reports/Economic-Development/Half\\_the\\_world\\_is\\_unbanked.pdf](http://mckinseysociety.com/downloads/reports/Economic-Development/Half_the_world_is_unbanked.pdf)



## Challenges of financial inclusion

Today, more than one-third of the world's population is excluded from financial growth. The majority of excluded groups include tribes, minorities, and women below the poverty line who do not have access to financial products due to multiple reasons:

### Lack of awareness

A majority of the population has little or no education, which excludes this section of society from financial products and services offered by the government or private sector. Moreover, the lack of

information hampers access to financial products for low income groups.

### Rigid product structure

Financial inclusion by the government or private sector banks is not designed to empower the individual through economic opportunity. Consequently, there is no strategy for inclusive growth. The products offered by banks are not configured to the requirements of the unbanked population. So the terms and conditions and product features are not understood by low income groups. A

majority of such products do not cater to the requirements of diverse disadvantaged sections of society.

### Unfavourable regulatory environment

The absence of a prudent regulatory framework for financial products and services offered to low income people does not provide incentives to private or public sector banks. For example, documentation deters the underprivileged sections of society from accessing financial products and services.

## Financial inclusion strategy for the unbanked population

The world's population can be classified into people living below and above the poverty line. People who live below the poverty line use informal financial services with little knowledge of their reliability, security, and value.

### Using digital channels to cover the unbanked population

l) Reaching out to the unbanked population through digital channels:

a) Banking with handheld devices or terminals:

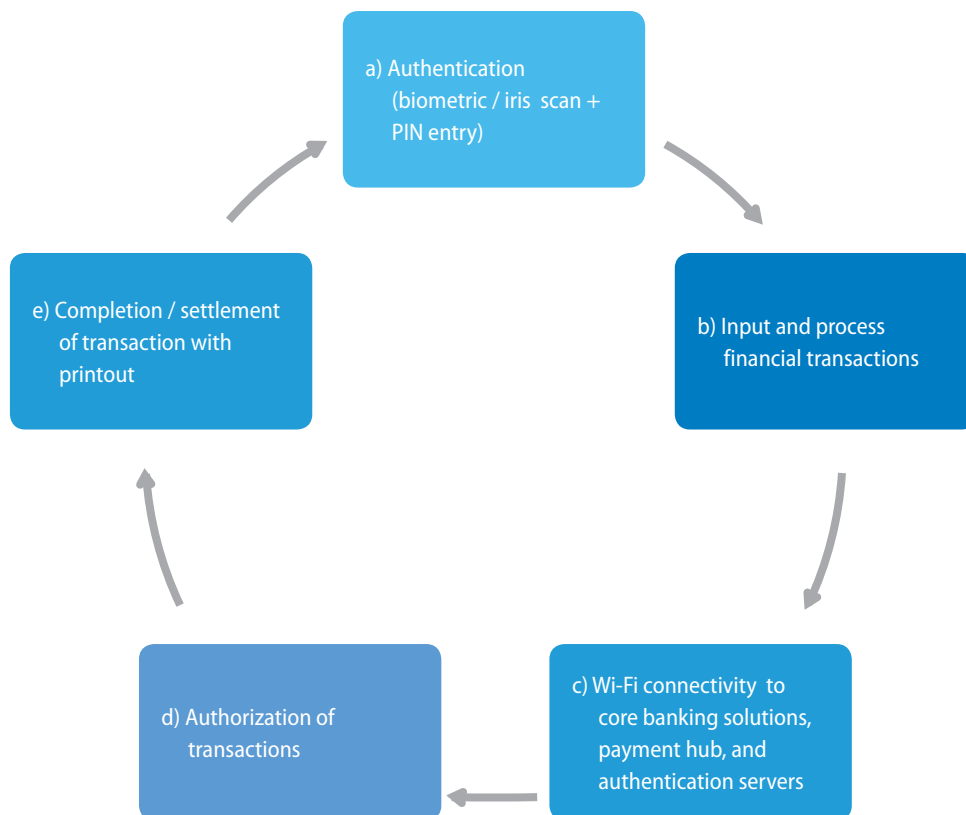
- A majority of the unbanked population uses low-end mobile phones that cannot be used for financial transactions. At best, they can be used to view account balance or receive text messages of transactions. Serving the unbanked population involves the dual challenges of reachability and affordability. Increasing reach while keeping costs low can be achieved through handheld wireless devices

or terminals, the most viable channel for the unbanked.

- Handheld terminals are mobile solution devices connected through a wireless network to a financial inclusion solution. The solution interfaces with a core banking solution, payment hub and authentication infrastructure. It ensures terminals perform safe, secure and real-time financial transactions. Handheld terminals should provide features such as payments, deposits, small loan disbursements, loan repayments, account view, mini statements, and print

capability. The devices also should capture biometric impressions or iris scans, and transmit and receive confirmation of validations for security and authentication of information.

- The success of handheld terminals is determined by the degree of portability, ease of use, flexible software development platforms, and user interfaces. Since handheld devices are portable, banking correspondents in remote locations can carry devices to customers and perform financial transactions in real time.



The process pathway

The government should identify nodal agencies for ownership of identification and issue of identity cards on its behalf. It should assign an identification number on the lines of the national identification number / national insurance number / national identity document / social security number. The ID cards can be EMC chip-enabled to make identification and authentication of customers easier.

The basic details of individuals can be recorded and stored in the government's central repository mapped with their fingerprints or iris scans. Financial inclusion can be achieved through collaboration between the central bank, government agencies, and the nodal agencies responsible for technology implementation.

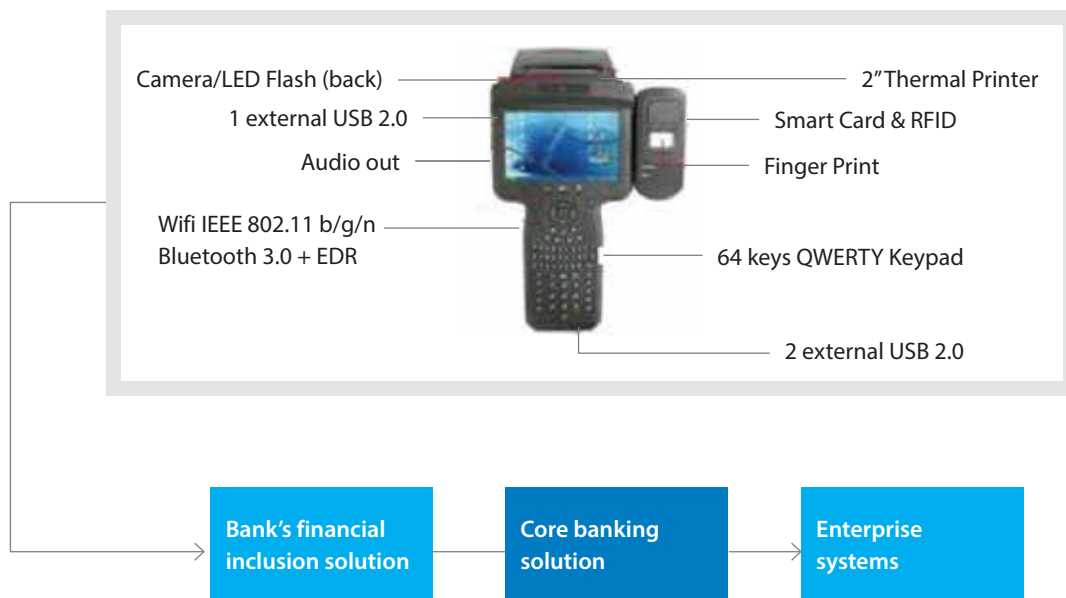
Central banks / retail banks should appoint banking correspondents who

are authorized to perform financial transactions with customers. The correspondents can subsequently serve customers across banks. Banking correspondents are intermediaries between the bank and the public to ensure financial inclusion and increase outreach of the banking sector. In addition, access to banking can be extended to the postal network or agricultural societies. Banking correspondents can perform basic banking functions such as account opening, cash deposits, and non-financial activities such as account enquiries and mini statement printouts on behalf of the bank. However, the onus of regulatory compliance such as anti-money laundering, customer identification, and transaction authorization should lie with banks.

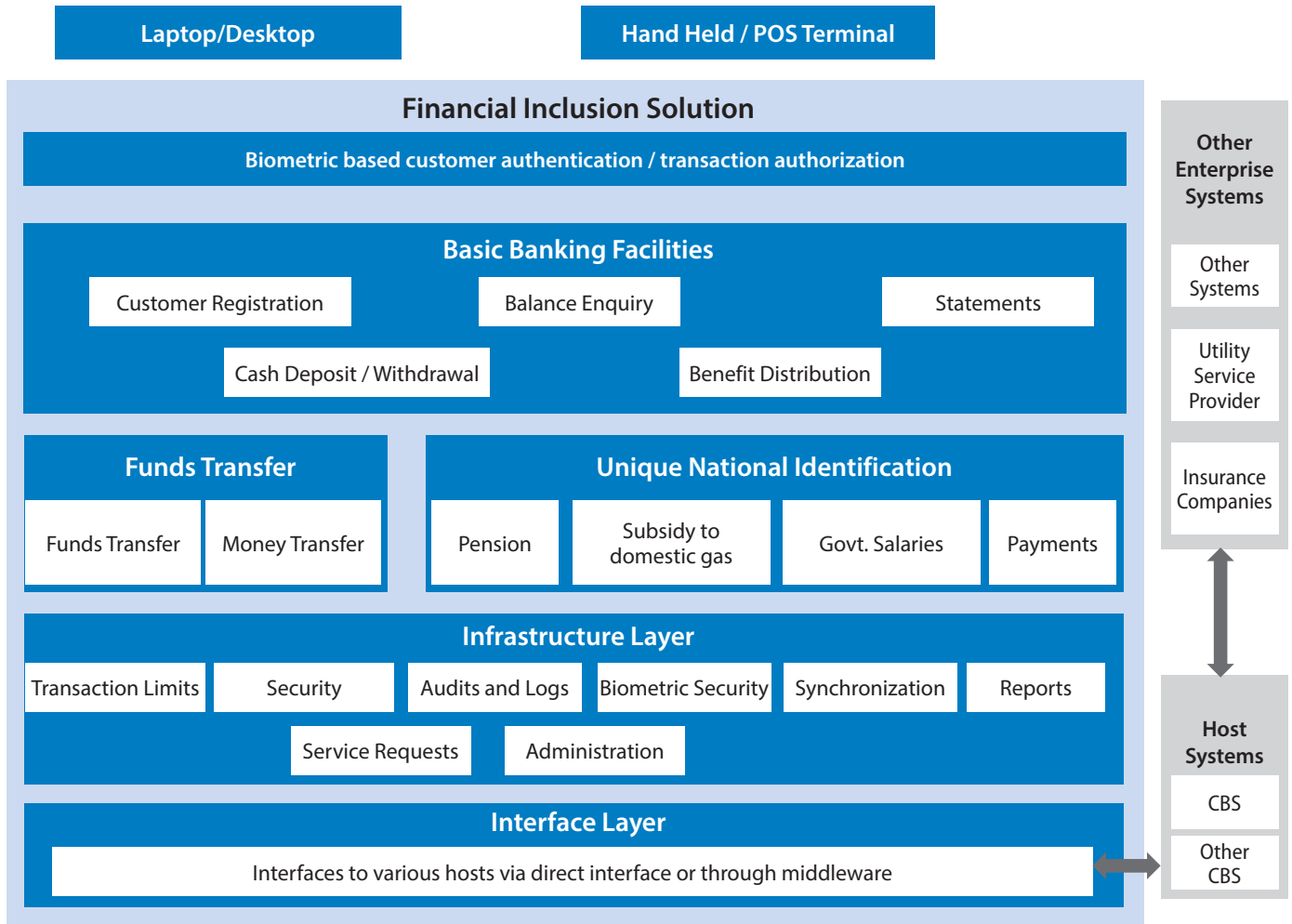
The initial customer identification should be done by banking correspondents since

they carry the identity cards and perform authentication using their identification or smart card as well as through finger prints or iris scans.

The government should be proactive in issuing identity cards, maintaining the common identity database or repository and undertaking biometric validations such as fingerprints or iris scans when transactions are performed. Being a nodal point, the government can avoid individual banks establishing payment hubs and authentication gateways. The government can levy a nominal transaction fee to maintain the infrastructure for participating banks. When customer authorization is completed, banks should connect the customer's financial transaction request to their core banking solution for balance verification based on their policy or process.



Biometric handheld device process after customer authentication



Architecture for financial inclusion

## Solution highlights:

- Customer information from the identification or smart card is transmitted from the handheld device to the core banking solution through the interface middle layer
- When details are captured by the handheld device, they are shared with the government central repository for customer identification and validation
- When there are rejections in validation due to biometric mismatch or fraudulent customer registrations, the handheld device receives the 'rejected' status of the transaction and a failed authentication error code is transmitted to the core banking solution for false identification request / misuse record. The status is conveyed to the customer and the rejected message with error code details is printed out and handed to the customer.
- After the customer's details are validated and accepted, the financial / non-financial transaction request is processed by the backend system and stored as a core banking transaction.
- Banks should flag transactions through handheld devices to set them apart from other channel transactions.
- When the process is completed, an acknowledgement message is displayed on the handheld device and a printout is generated
- Digital advancement ensures that these processes are completed faster. Significantly, customers can access financial services at their doorstep in a safe and secure mode.



## Success stories from Africa

### *M-Pesa, Kenya*

M-Pesa, a mobile payment service in Kenya, is operated through a private telecommunications provider with nationwide coverage independent of traditional banks. M-Pesa provides financial services to more than 75% of Kenyans.

### *Umurenge SACCO, Rwanda*

Umurenge SACCOs are community savings and credit cooperatives in Rwanda. In a span of three years, the cooperatives attracted more than 1.6 million customers, which is equivalent to the number of customers of traditional banking. More than 90% of Rwanda's population lives within a 5 km radius of an Umurenge SACCO.

## A roadmap for financial inclusion

The private banking sector should collaborate with governments to facilitate financial inclusion through innovative and technically advanced products and services.

Financial inclusion can help banks as well as the unbanked population with robust governance policies. It empowers women,

individuals, and families who live below the poverty line. The unbanked population is a sizeable market at the base of the pyramid that should be tapped by banks.

Financial inclusion can become a success when banks make financial services available at a reasonable cost to low income groups. Banks should create

awareness about innovative banking channels among the unbanked population. Growth of financial inclusion solutions along with integration of digital channels can pave the way for financial inclusion in developing countries.

## About the authors



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