

2 The Indian digital ID programme

The 1.2 billion people ID programme

Since 2012 the Indian government has been in the process of introducing, from scratch, a national digital identity scheme for approximately 1.2 billion people. This digital ID identifies individuals uniquely on the basis of their demographic information and biometrics. In this way, this ambitious approach will provide individuals with the means to give clear and automatic proof of their identity to public and private agencies across this highly-populated emerging country.

The Aadhaar ID

Knowing as the Aadhaar card, it is currently the world's largest biometric identification programme. It allocates a twelve-digit identification number for every Indian citizen. The IDs are issued by the Unique Identification Authority of India (UIDAI) which stores the enormous quantity of information which is digitally accessed, and it is interconnected with all the relevant Indian private and public institutions. For example, the Aadhaar card can help poor residents to establish their identity easily with banks. As a result, banks will be able to scale up their branch-less banking and reach a wider population at lower cost. To date, the UIDAI has issued close to 900 million identifications.

Biometric information automatically invoked anywhere

With the biometric pattern recognition scheme, the goal is the automatic and reliable determination of personal identity by analysis, encoding and matching of individual personal characteristics. The answer for reliable identification of the entire population is to register the biometric data, such as irises and fingerprints, of every Indian people, which is centrally stored and linked to a unique twelve-digit number. The number always identifies the person, so it can be invoked anywhere, by biometric authentication against the central database.

One of the most interesting aspects of this scheme is that each new person enrolled is first compared biometrically with all the persons already enrolled to detect any duplicate identities, in order to avoid fraudulent access to multiple benefits. This 'de-duplication' check requires enormous work flow (storage and computing processes) that scales as the size of the comparables' database grows exponentially.

The digital ID and financial inclusion

An efficient, cost-effective payment solution is an urgent necessity for promoting financial inclusion. The Aadhaar and the accompanying authentication mechanism, coupled with the application of rudimentary technology, can provide the desired solution for micropayments. This can enable low-cost access to financial services for everyone.

The Aadhaar ID ('aadhaar' means 'platform' in 22 of the Indian languages) becomes a digital hub for financial inclusion. It can be used to create a bank account for a person who does not have one. In rural areas that have no bank branches, the government is installing millions of so-called 'micro-ATMs' which will be complemented by shopkeepers and grocers who will dispense cash to local villagers using authenticated Aadhaar numbers, along with online interbank counter-transfers to the shopkeeper's account.

There are three key aspects of the Aadhaar scheme for financial inclusion. First, this digital approach means an evolution from the simple prepaid transaction account to a second step which integrates identity and the financial infrastructure. Citizens have the right to acquire a prepaid card linked to their Aadhaar card and to use them to receive monetary social aid. The card can be topped up by participating banks.



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Second, it tackles the Know Your Customer (KYC) banking regulatory requirement. Thanks to the strong authentication offered by the Indian digital ID, the documentation that the poor are usually required to open a bank account can be dramatically reduced. So, the digital ID reduces the costs for banks by mitigating the high customer acquisition costs, high transaction costs and fixed IT costs that would normally confront both the financial system and customers.

Finally, the ID digital authentication and verification processes will allow banks to expand their networks through banking correspondents in order to provide easy financial intermediation. Banking correspondents have been shown to be a key factor as a complement for any IT strategy focused on low income and rural populations.



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