

# A Matter of Identity

The UIDAI has been established with the aim of providing every Indian citizen with a unique identification number system. Here's a look at what is in the offing

The issue of identity has been plaguing India for the past few years. The country, despite previous efforts, has not been very successful in creating a unique identity system, which will easily and conveniently verify the identity of its citizens.

The Election Commission, Government of India, launched its photo identity cards initiative in 1993, as a first attempt to establish the identity of residents. This year in February, however, the identity project was given a fresh boost with the setting up of the Unique Identification Authority of India (UIDAI), attached to the Planning Commission. The UIDAI has been established with the aim of providing every Indian citizen with a unique identification number system, which is robust enough to eliminate duplicate and fake identities and can be verified and authenticated in a quick and cost-effective manner. The project is being spearheaded by Nandan Nilekani, one of the founders of Infosys and a leading member of the IT community in India.

## Challenges thrown up by the absence of an identity system

In the absence of such a nationally accepted, verified identity number system that residents and agencies can use with ease and confidence, India has been unable to undertake the following:

- Extend the benefits and subsidies to the poor, who usually lack documentation and find it difficult to meet the costs of multiple verification processes
- Provide services to individuals, since public as well as private sector agencies across the country typically require proof of identity before they can do so
- Eliminate the full cycle of verification, individuals have to go through when they approach different service providers for a benefit
- Avoid duplication of effort which leads to "identity silos," and increases the costs of identification and inconveniences for citizens

## The role of IT in the project

The UID project is expected to throw up significant opportunities for the Indian IT industry – including hardware, software and networking vendors. Since IT remains the backbone of the initiative, many vendors will need to work together, harnessing different technologies and platforms, to provide the most efficient and workable solution to the UIDAI.

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servers, which will have to be robust, flexible and scalable, keeping in mind the escalating demand. A multi-model Biometric sub-system, for enrolling as well as authenticating residents, will achieve a high level of assurance. The 1:N de-duplication envisioned will be by far the most computing-intensive operation of the UID system. Service providers involved will have to come up with innovative techniques of hashing, indexing, distributed processing, and in-memory databases using multiple-biometric-modes, in order to achieve acceptable performance levels.

An enrolment client application, to capture and validate demographic and biometric data will be another requirement. The network, meanwhile, will remain a critical aspect of the system, since all UID enrolment and authentication services will be available online. UID services will be available either over secure WAN networks, the vanilla Internet or mobile SMS channels. They could also potentially work over existing networks such as credit card POS (Point-of-Service) devices.

Another important technology-driven component of the project will be security design, which will entail server security (firewall, intrusion prevention and detection systems); and network, client security (encryption, PKI).

IT vendors will also have to provide an administration solution, embracing features such as account setup, role-based access control, audit training, fraud detection and reporting and analytics, to facilitate UIDAI in its operations.

### **Lending the underprivileged a helping hand**

The biggest benefits of the instant identity verification ID however, will be enjoyed by the poor and underprivileged residents of India who gain in the following ways:

- The UID will enable them to enter the formal banking system, and avail the services provided by the government and the private sector
- Migrants will have mobility of identity
- The system will bring down the transaction costs for the poor as they will need to prove their identity only once
- A clear identity number would also transform the delivery of social welfare programmes by making them more inclusive of communities now cut-off from such benefits due to their lack of identification
- The system will enable the government to shift from indirect to direct benefits, and help verify whether the intended beneficiaries actually receive funds/subsidies

The UIDAI will start issuing UIDs in 12-18 months, and the Authority plans to cover 600 million

people within four years from the start of the project. This can be accelerated if more Registrars partner with the Authority for both enrolment and authentication.

India will be the first country to implement a biometric-based unique ID system for its residents on such a large scale. The UID will give the government a clear view of India's population, enabling it to target and deliver services effectively, achieve greater returns on social investments, and track money and resource flows across the country.

## **Key features of the UIDAI model**

- The UIDAI will be the regulatory authority managing a Central ID Data Repository (CIDR), which will issue UID numbers, update resident information, and authenticate the identity of residents as required
- The Authority will partner with agencies such as central and state departments and private sector agencies who will be 'Registrars' for the UIDAI
- Registrars will process UID applications, and connect to the CIDR to de-duplicate resident information and receive UID numbers
- The UID number will only provide identity, based on a citizen's demographic and biometric information
- The UID number will only guarantee identity, not rights, benefits or entitlements
- The UID will prove identity, not citizenship
- The model will focus on enrolling India's poor and underprivileged communities. The Registrars will help bring large numbers of the poor and underprivileged into the UID system
- The UID method of authentication will improve service delivery for the poor
- The UIDAI will issue a number, not a card. This number may be printed on the document/card that is issued by the Registrar
- The number will not contain intelligence. It will be a random number
- The Authority will only collect basic information on the resident