

Aadhaar Project

"India has a population of 1.2 billion people and approximately 400 million people are unable to prove their identity (in 2011)... The inability to prove one's identity precludes the poor, the marginalized, and the underprivileged populations of India from gaining access to benefits and subsidies, applying for welfare benefits, accessing education, opening a bank account, or attaining employment. The goal of Indian government officials in implementing a broad identification system is to successfully address the concerns of national security, corruption, and anti-poverty efforts. There have been many documented cases of fake identities, fraud, and duplication of welfare services across the country... In order to improve the economic situation of all of its residents, the Unique Identification Authority of India (UIDAI) implemented an ambitious and innovative program known as Aadhaar. Aadhaar, which translates to "support and foundation" in most Indian languages, would allow residents to prove their identity through a unique identity number provided by the officially recognized agency. The issuing of an Aadhaar number would be provided to all residents of India, whether or not they are permanent citizens." (Chin et al., 2015).

Quick facts

Barriers addressed



Digital & Physical Infrastructure
Poor digital & foundational ID infrastructure



Policy & Regulation
Lack of proportional & tiered KYC requirements



Entry and Capability Barriers
Real or perceived lack of money



Consumer Protection
Increased exposure to frauds & scams
Fear of making mistakes
Fear of privacy violations

Segment focus

1 2 3 4

Geography

[India >](#)

Sources

[Chin et al., 2015; Aadhaar Dashboard, accessed 2022;](#)
[Perlstein, 2017.](#)

Customer Journey Relevance



Key stakeholders involved

Unique Identification Authority of India (UIDAI), The Planning Commission of India, Ministry of Electronics and Information Technology, Enrollment agencies, Authentication user agencies

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Key activities

Enrollment is free and occurs through duly designated third-party enrollment agencies. To become an official enrollment agency, an organization is required to go through proper training and testing on procedures and use of the enrollment kit. Each kit is packed into a briefcase and includes the following: a laptop, the enrollment software, fingerprint reader, iris scanner, webcam, laser printer, and monitor. Participation in Aadhaar is voluntary for all residents. Crucially, it enables eKYC – a function which greatly enhances the efficiency of the KYC process and fosters financial inclusion. To enroll, residents can go to any authorized enrollment agency, complete an Aadhaar application form, and present current identification documents. If an enrollee does not have identification documents, they can still enroll with the help of an “introducer” – a person whose identity has already been verified. The “introducer” vouches for the enrollee, sidestepping the requirements for identification documents. The enrollee will then have their biometric data recorded and is entered into the database. The assigned Aadhaar number for an individual is connected to all biometric data collected during the enrollment process. A trained enrollment center employee photographs the enrollee, records the iris scans of the—

—eyes, collects demographic information, and takes imprints of all 10 fingers. Each enrollee’s data is then uploaded to the Central Identification Data Repository (CIDR) for deduplication. The term “deduplication” refers to the process where the CIDR checks to determine whether or not the biometric data submitted already exists in the database. If no equivalent record exists, then a unique, randomly generated 12-digit number will be mailed to the enrollee.

Outcomes/results

- According to the UIDAI’s Aadhaar Dashboard, 1,331,920,291 Aadhaar numbers have been generated as of April of 2022. Additionally, 622,578,411 Aadhaar have been updated, and 70,711,414,709 authentication transactions have been completed.
- There 1,307,544 certified supervisors and operators, 888 active enrollment agencies, and 237 Authentication User Agencies.

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Key enabling environment factors for the intervention

“Aadhaar’s ecosystem and public-private partnership structure is considered to be its greatest strength. Aadhaar’s implementation momentum does not reside entirely within the bounds of government or even within a narrow set of government and private organizations. Rather, the project has a broad array of organizations with a vested interest in its ongoing evolution and success.” (Chin et al., 2015).

Key design elements and principles that led to successful outcomes

- Enrollment is free, ensuring that users at the bottom of the pyramid can enroll in the program.
- The program is designed to be inclusive. Transgender individuals can register for this program, as well as noncitizens of India. Additionally, “multiple biometric data are recorded in order to enable the inclusion of all residents in India. Fingerprints, for example, can be worn away by physical labor. Since many of the poor residents of India have occupations that require heavy physical labor, a fingerprints-only identification scheme would continue to disenfranchise many of them.” (Chin et al., 2015).

- The program is designed to enable individuals who don’t meet the KYC requirements to enroll as long as they have the help of an “introducer” – someone whose identity has already been verified.
- The program has incorporated “anti-duplication” systems to ensure that each person is associated with one number, which minimizes the risk of fraud, scams, or identity theft.

Potential for scale/replicability

The Aadhaar Project is the largest-scale program for establishing biometric identity ever to be launched around the world (as of 2022). Other countries around the world have also been experimenting with incorporating biometrics into their ID programs, such as Nepal, Tanzania, and Nigeria. One of the reasons why India’s program has been able to operate on such a large scale is the formation of public-private partnerships throughout the country. Countries wishing to scale up their ID programs to the level of the Aadhaar project should seek to leverage partnerships with different stakeholders to improve operational efficiency and outreach.

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Challenges encountered during the program

The Aadhaar Project has suffered from political divisions in the past. For example, in the 2014 national elections, some candidates questioned the safety of the Aadhaar technology and how the program's funding was used. This raised tensions among citizens who started to distrust the program. The Supreme Court of India has also challenged the constitutionality of Aadhaar.

Recommendations from the research

Based on the concerns over security and privacy of Aadhaar, future programming should incorporate consumer protection trainings or presentations to resolve doubts that individuals may have concerning their identity and data protection. Additionally, the major strength of Aadhaar is its ability to make public-private partnerships. The program should continue leveraging these partnerships in the future to ensure that those at the bottom of the pyramid can become included via formal identification.

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