



IndiaStack

Towards presence-less,
paperless, and cashless service
delivery



eCommerce
(Amazon)

Taxi
(Uber)

Hotel
(Airbnb)

TECH STACK

Payments

Evolution of Payment Systems,
Security Frameworks, ...

Visa/Master, ApplePay

Smart Phones

Telecommunications & Computing
Technologies - Hardware
Innovations

Android, IOS

Open APIs, Platforms

Large Scale Infrastructure, Private
Companies,

Google Maps

Govt. Technology

Fundamental Technology
Innovations, Govt. Funded, Publicly
Available

TCP / IP, Internet, SMTP
(Email), GPS

Layering of Innovation



Layered
Innovation



Mass
Flourishing!



J A M - The Foundation of the India Stack

Pradhan Mantri Jan Dhan Yojana

BANKING FOR ALL



25.68 Crore Accounts opened so far

₹ 72,834.72 Crore deposits

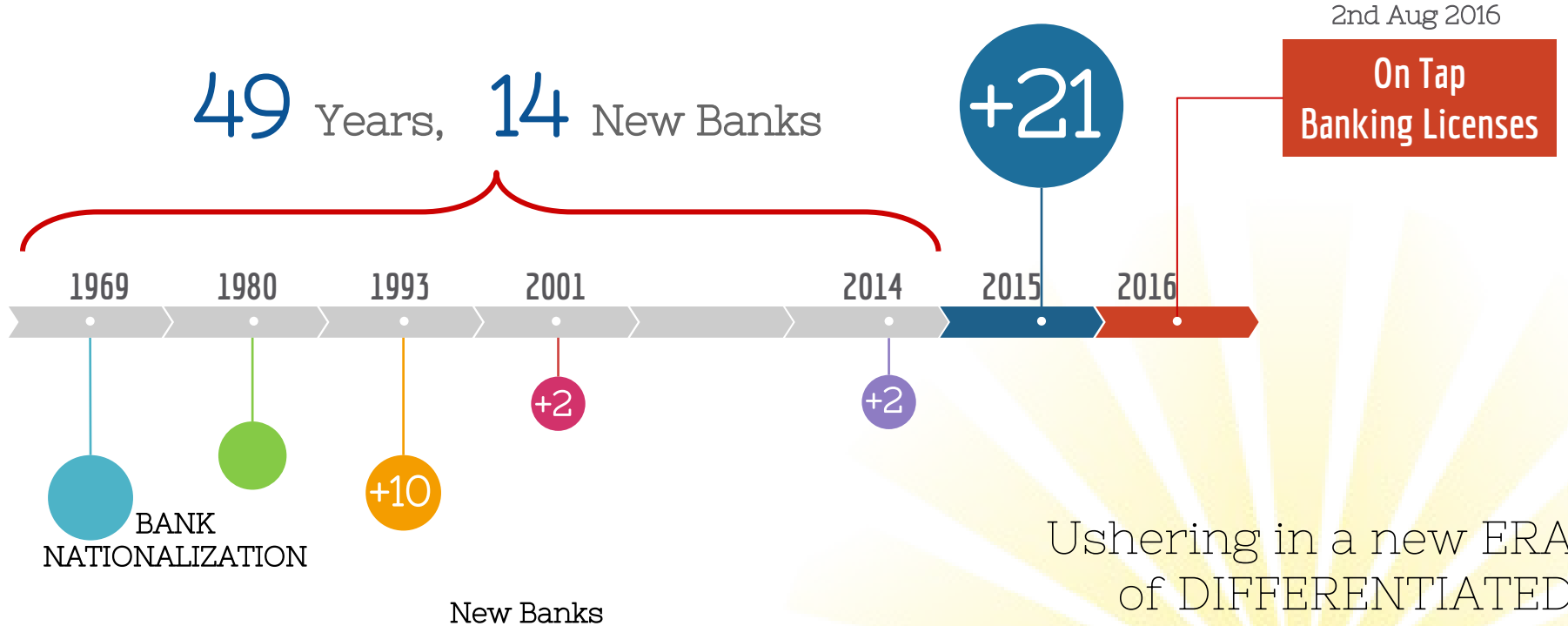
1.26 lac Bank Mitras

9.78 Crore Suraksha Bima Policies

3.07 Crore Jeevan Jyoti Bima Policies

Accelerated by regulatory innovation

49 Years, 14 New Banks



2nd Aug 2016

On Tap
Banking Licenses

BANK
NATIONALIZATION

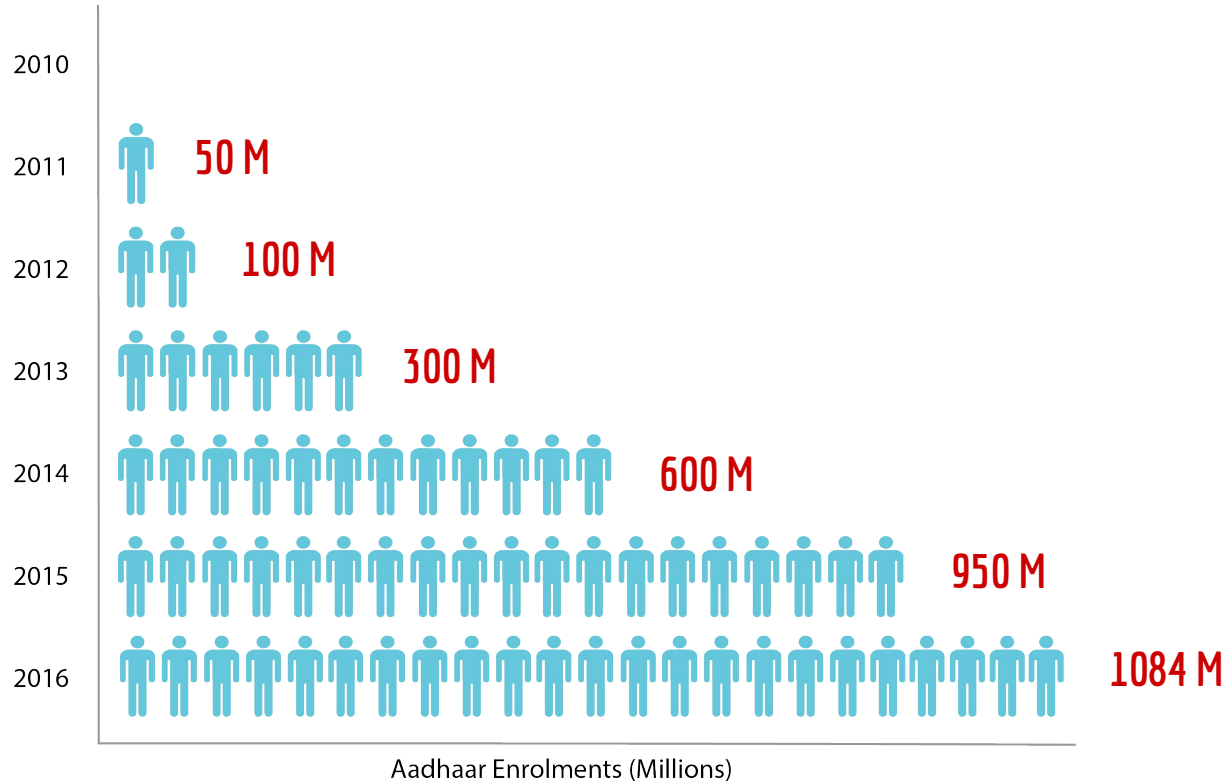
New Banks

Ushering in a new ERA
of DIFFERENTIATED
BANKING

Nandan Nilekani, 2016



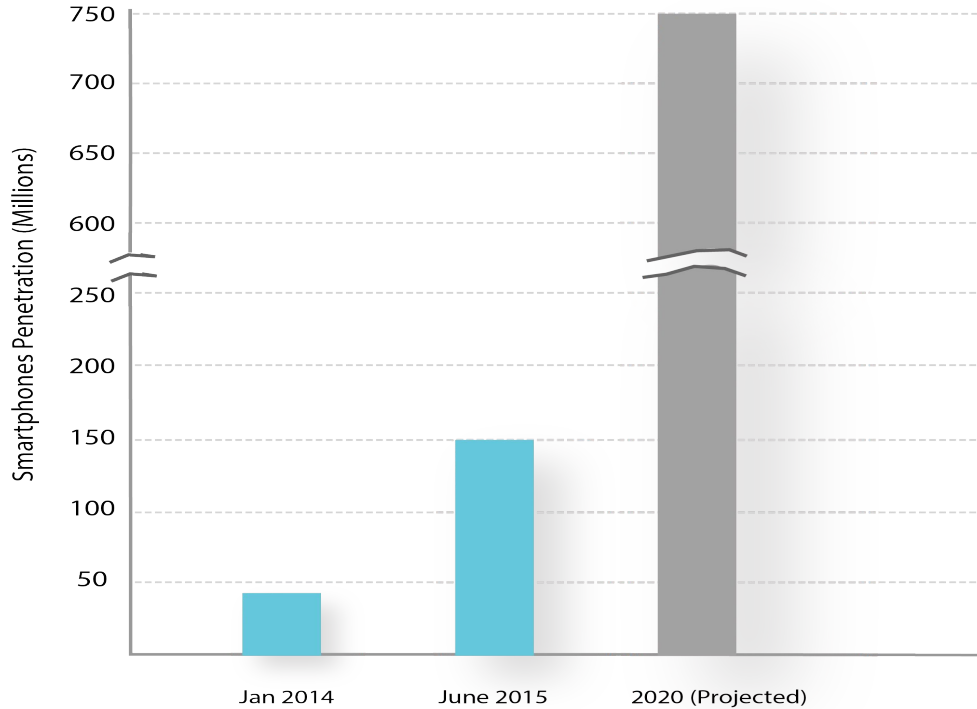
1 Billion in 5½ Years



A Ubiquitous **Digital Identity Infrastructure** for a digital desh.

The Aadhaar system can authenticate **100 M** transactions per day, in real time!

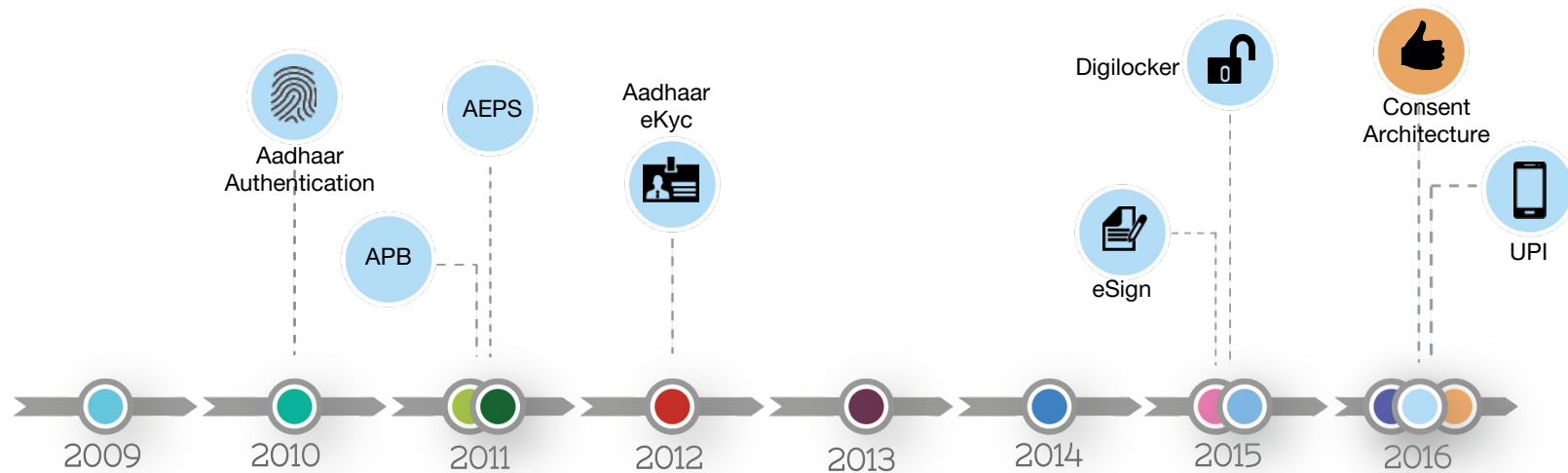
The rise of smartphones



Current sales
about **25M**
smartphones
per quarter



The Evolution of the India Stack - Built on JAM



JdY	100 M	190 M	250+ M
Aadhaar	600 M	950 M	1+ B
Mobile	944 M	1005 M	1+ B

Name
DoB/Age
Gender
Address
Mobile/Email



1234 5678 9012



Unique
Lifetime



Aadhaar Authentication

NO MORE PHYSICAL
PRESENCE

Are you who you claim to be?
Only a yes/no answer
Anytime anywhere

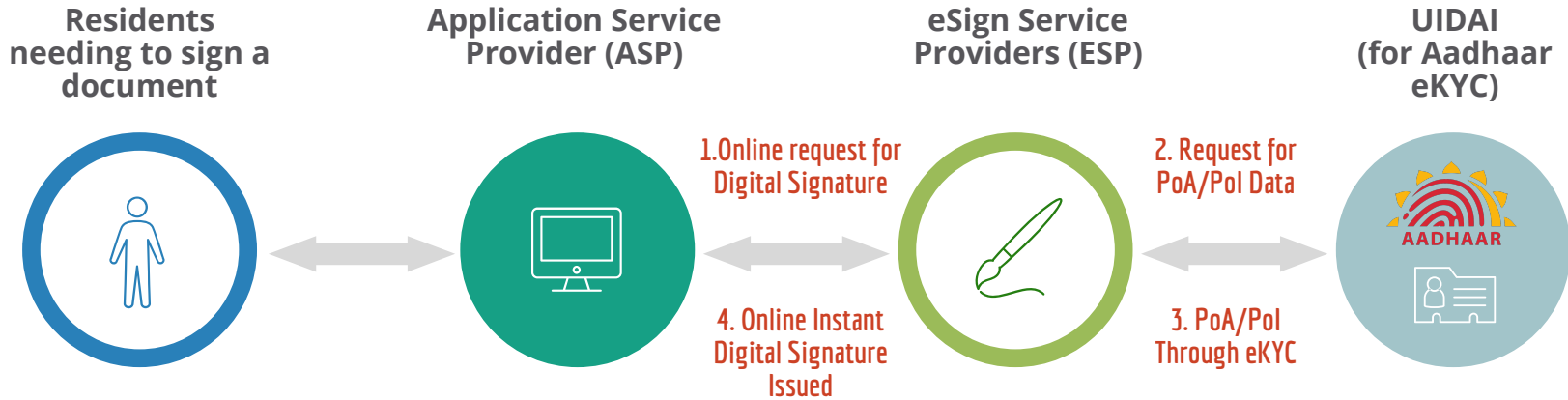
Aadhaar
e-KYC



NO MORE PHOTOCOPIES!

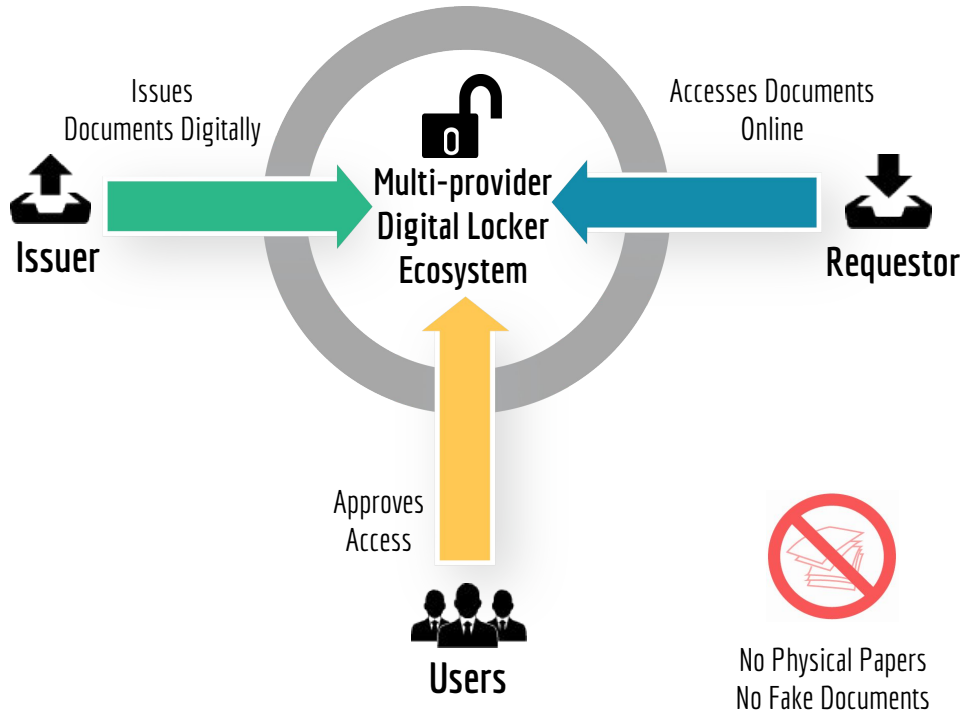
Access ONLY via authentication
No more fake identities
No more paper

eSign – eliminating wet signature



Existing DSC non-scalable due to physical verification, paper process, and use of dongles
eSign allows all Aadhaar holders to digitally sign anytime anywhere
Open API based, allowing applications to easily integrate

Digital Locker – eliminating fake papers



Open API based

Ecosystem driven

Digitally protected

Unified Payment Interface

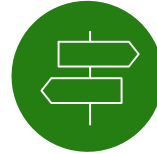


Push & Pull Payments

Payments can be initiated by payer or payee.

Ubiquitous - Bank accounts

Every one with a bank account can send money to any bank account in India!



Virtual Payment Address

No need to disclose account information. Allows account portability, enhances privacy.

Easy Immediate Payments

Real-time posting
Funds are not locked!



Validation & Assurance

Real-time validation of the account and balance

Timely Notification

Immediate notifications of the payment made

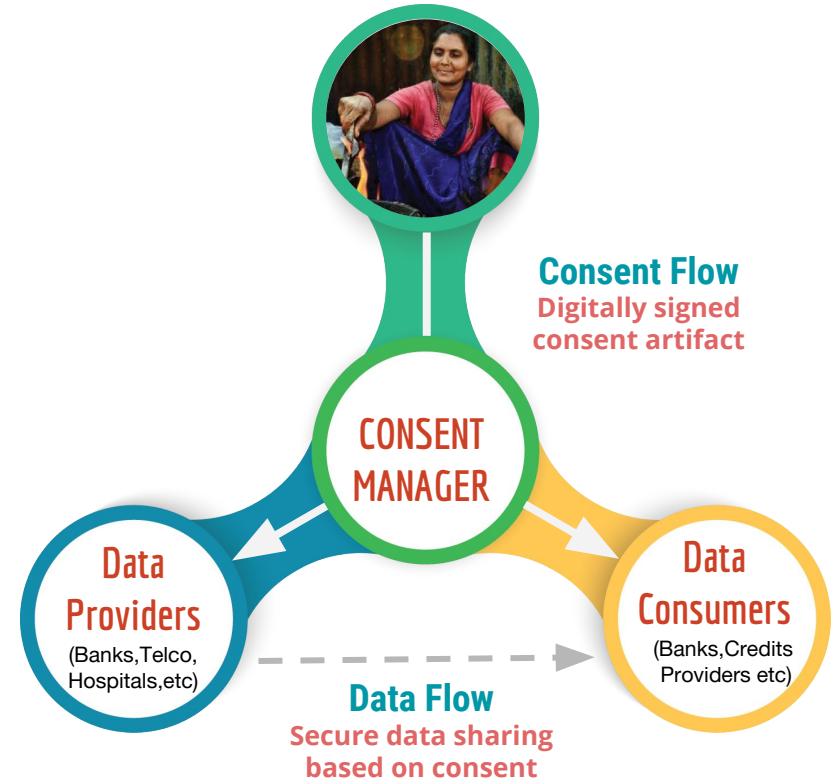


Minimal Issuer/Acquirer Cost

Smartphone replaces card and PoS machine!!

Electronic consent architecture

- Structured consent artifact and log system
- User controlled data sharing, data flow, and data retention
- Separation of data and consent flows
- Consistent with current legal frameworks





OTHERS

COMMERCE
(GSTn)

CREDIT
(RBI)

INVESTMENTS
(SEBI)

SKILLS

INDIA STACK

CONSENT LAYER

Provides a modern privacy data sharing framework

Open Personal Data Store

CASHLESS LAYER

Game changing electronic payment systems and transition to cashless economy

IMPS, AEPS, APB, and UPI

PAPERLESS LAYER

Rapidly growing base of paperless systems with billions of artifacts

Aadhaar e-KYC, E-sign, Digital Locker

PRESENCE-LESS LAYER

Unique digital biometric identity with open access of nearly a Billion users

Aadhaar Authentication

JAM

Jan Dhan, Aadhaar, Mobile



Jan Dhan

256 Mn

Jan Dhan bank accounts



Aadhaar

1.084 Bn

Enrolments In 6 years since launch



Mobile

350 Mn

Smartphones



3 Bn

Authentications of
500M unique ids



1060 Mn

Phone numbers



340 Mn

eKYC in 3 years
75 Mn unique ids



349 Mn

APB Accounts Linked
1.2 B Transactions worth 4.5 B USD in 3 years



>2.5 Mn

e-Sign in 15 months
>0.8 Mn unique ids



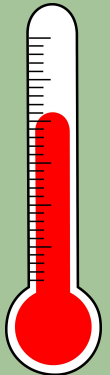
2.9 Mn 4.8 Mn

Digilocker users & Uploaded Docs
15 months

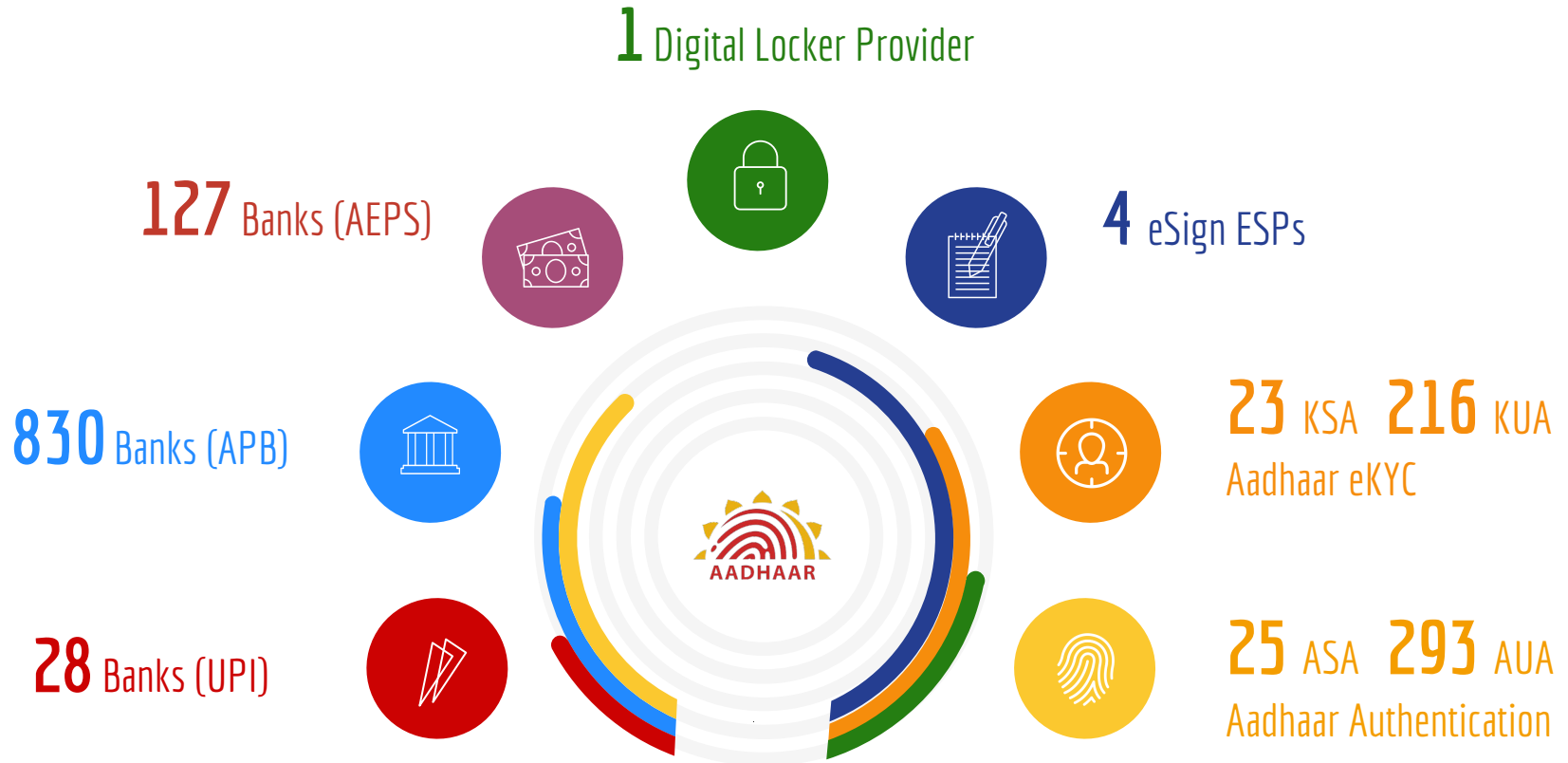


2M+

UPI VPA in
Just under 2 Months



India Stack Ecosystem





Providing credit without friction

In today's model, Rajni can never get a loan!



Sales Cost 

Servicing Cost 

No Credible Data 

Customers with the lowest default rates have the highest interest rates

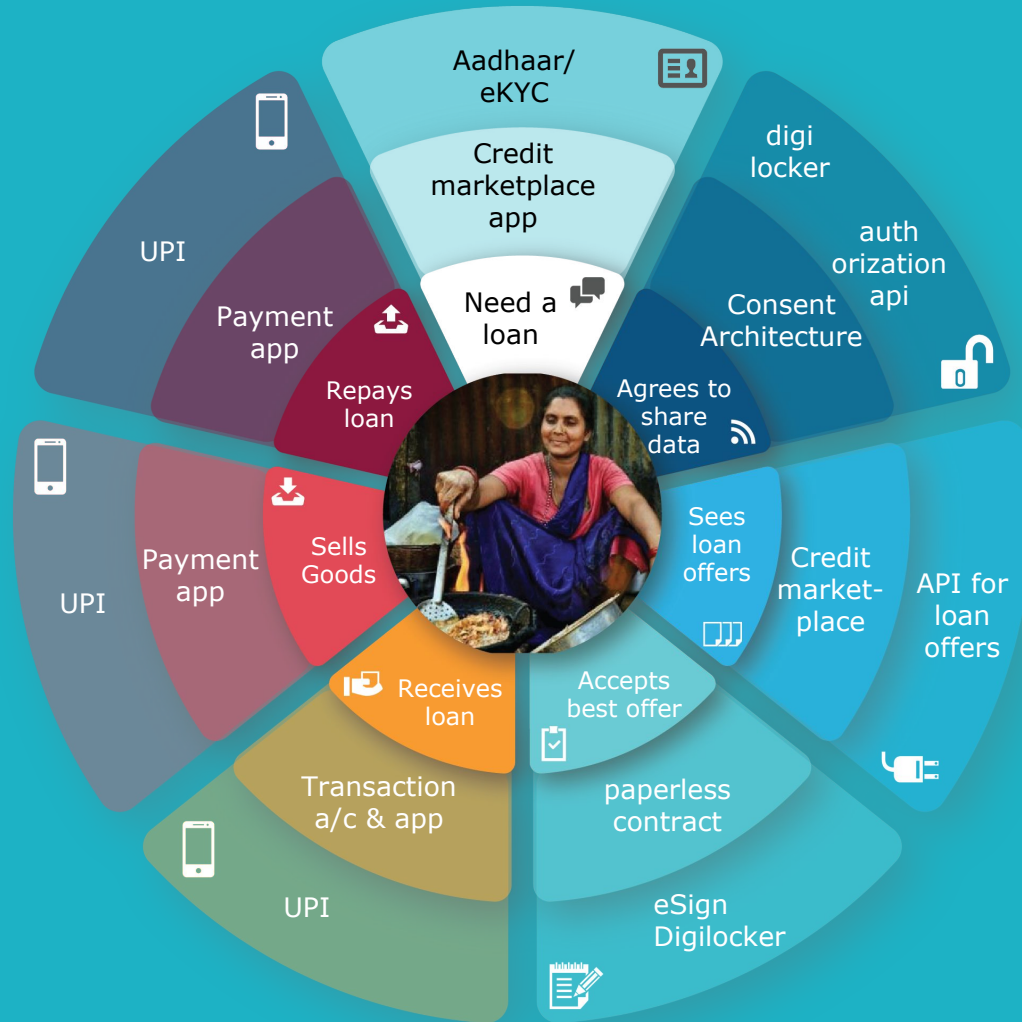
DENIED



7 Key Steps For Rajni to get a small intra-day loan



Each step requires a solution



Each solution is enabled by the India Stack



A robust
foundation to
enable innovative
solutions to
India's hard
problems

Innovative Solutions to India's Hard Problems

- Commercially Viable
- Far reaching consumer impact
- Reinforces experimentation

100s of Experiments

- Low barriers to entry
- Level playing field
- Aligned to national issues
- Rapid success/failure cycle



Market Making Policy via Challenge Grants

India Stack as Digital Infrastructure

Regulatory Policy



Thank You