Semester 1

Mindset / Aptitude of an Entrepreneur

Investors - Expectations and Wants

Sales

Case-study Based Project

1 2 3 4 5 6 7

Criticality of Scale - MOAT and Differentiation

Entrepreneurial Journey: Ideation to Reality

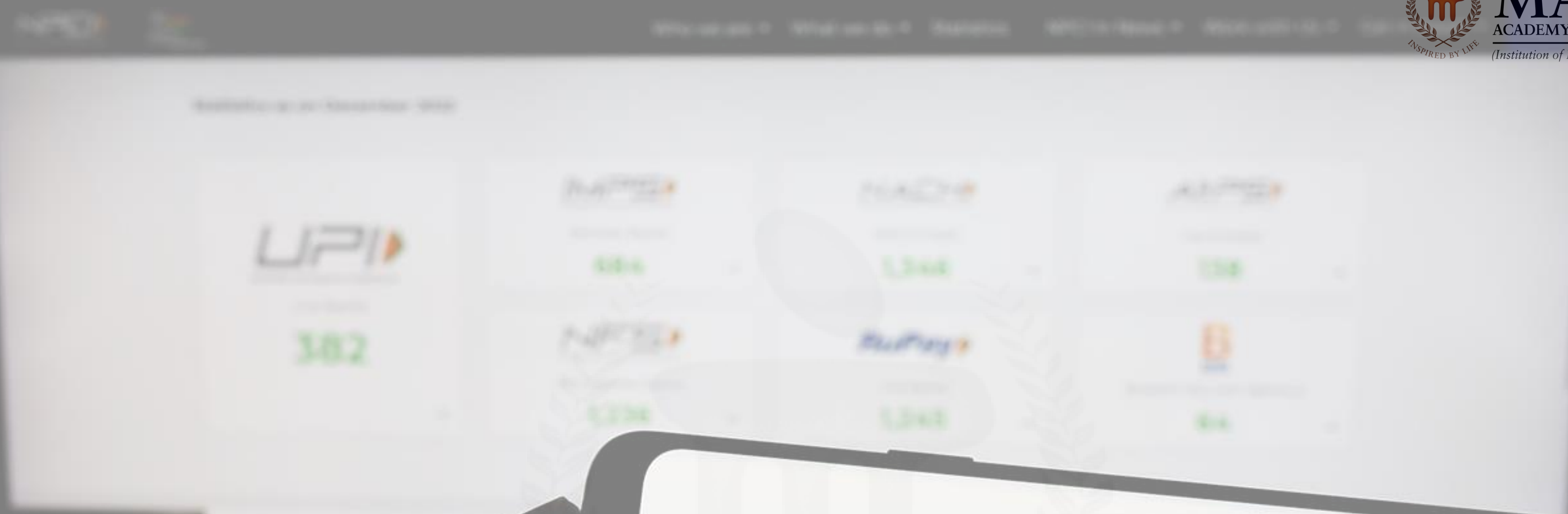Creating a Business Plan and Pitch Desk

Intangible Assets - Overview
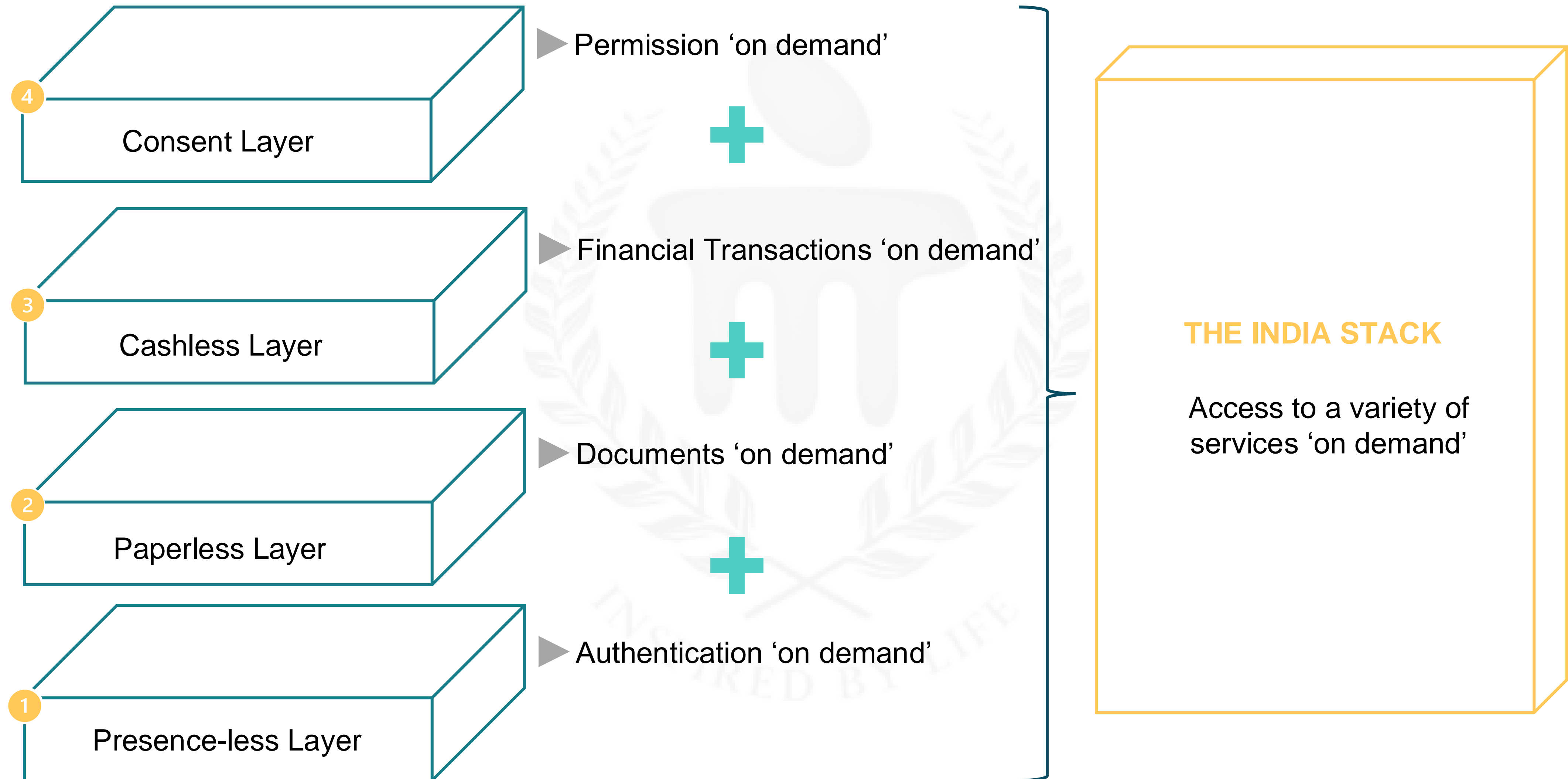
Part I: Medical Devices

Part II: India Stack

Part II: India Stack

India Stack: Population Scale

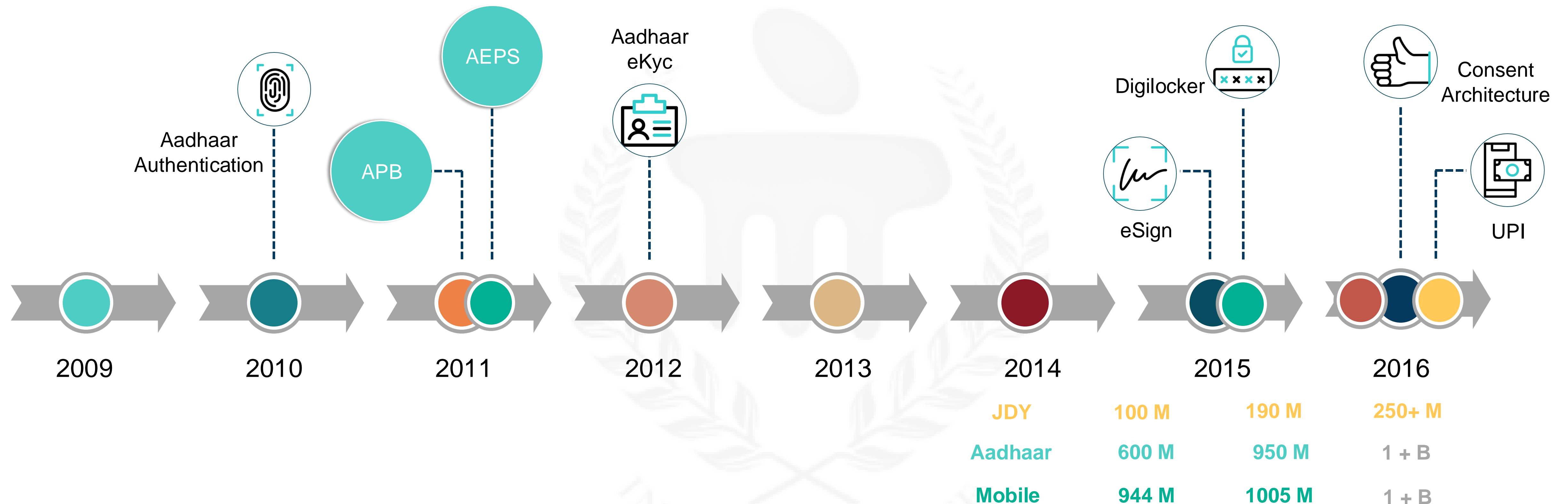## Can you Use Digital Technology to Move The Needle? Inclusion, Formalisation And Economic Growth

4 Consent Layer — ▶ Permission 'on demand'

➕

3 Cashless Layer — ▶ Financial Transactions 'on demand'

➕

2 Paperless Layer — ▶ Documents 'on demand'

➕

1 Presence-less Layer — ▶ Authentication 'on demand'

THE INDIA STACK

Access to a variety of services 'on demand'

Evolution of Digital Verification in India

The Digital Ecosystem in India is scaling rapidly due to the rapid growth of technology, supported by government initiatives.

	2009	2010	2011	2012	2013	2014	2015	2016
JDY						100 M	190 M	250+ M
Aadhaar						600 M	950 M	1 + B
Mobile						944 M	1005 M	1 + B

- Aadhaar card is the National Identity card issued by the Government to every Indian
- APB (Aadhaar Payments Bridge): Facilitates seamless transfer of all welfare scheme payments to beneficiary residents' Bank Account
- AEPS (Aadhaar enabled payment system): Leverages Aadhaar online authentication and enables bank accounts to be operated anytime

2016: The Breakthrough Year for Digital India

Year of JAM: Jan Dhan Yojana, Aadhar and Mobile

- ➤ India reached 1 billion Aadhar cards,
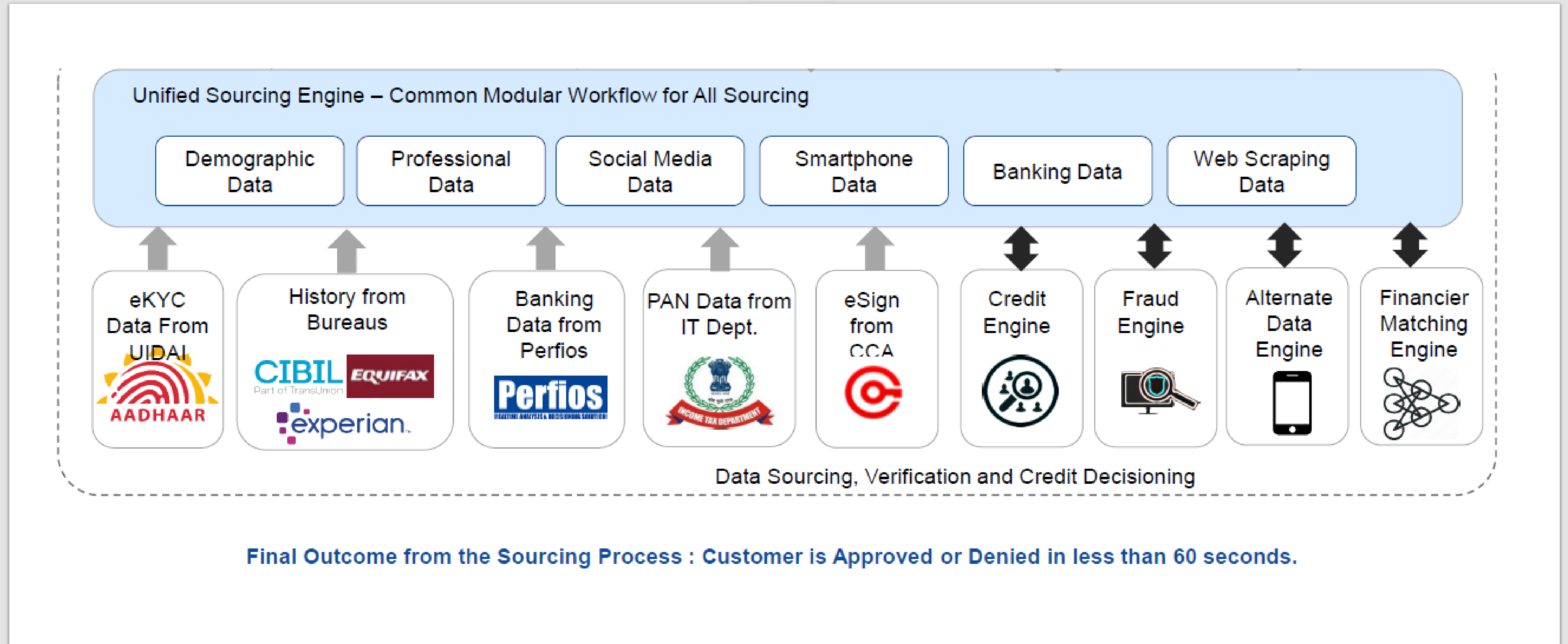- ➤ Launch of UPI, JIO, BHIM
- ➤ Demontisation

2016 was the inflection point when people moved from Voice to Data and smart phone penetration took off

Demonetisation gave the first boast to digital payments

Pandemic further gave a push post 2020 for higher adoption

Internal Tech Stack/API's to Integrate to Build An Underwriting Model

Unified Sourcing Engine – Common Modular Workflow for All Sourcing

Demographic Data	Professional Data	Social Media Data	Smartphone Data	Banking Data	Web Scraping Data

eKYC Data From UIDAI	History from Bureaus	Banking Data from Perfios	PAN Data from IT Dept.	eSign from CCA	Credit Engine	Fraud Engine	Alternate Data Engine	Financier Matching Engine

Data Sourcing, Verification and Credit Decisioning

Final Outcome from the Sourcing Process : Customer is Approved or Denied in less than 60 seconds.

Internal Credit Scoring Model

Credit Risk – Model Parameters

A. Bureau Based

- Delinquent trade-lines (Ever 30 on any trade in L6 months)
- Number of Enquiries
- Number of Unsecured Trades (Personal Loans, Consumer Durables)
- Total EMI (derived basis estimates on tenor, ROI)

Source: Credit Bureau

B. Social Profile (LinkedIn, Facebook)

- Months since the most recent job
- Organisation and Category
- Total experience
- Education Institution
- Job Stability
- Number of Friends and Customer Location

Source: Customer Provided Access to Social Profile

C. Income/Employment

- Customer Income
- Derived income from bureau and SMS reading
- Name of the Employer and Employer Categorisation
- Regularity of Salary Credits

Source: SMS/e-mail classification, Customer Documents

D. Merchant Transaction Data

- Customer Transaction Value (live to date)
- Customer Delivery Address (Compared Vs the KYC address)
- Product Value and Product Category
- Type of Product and Seasoning of Purchase

Source: Merchants

Internal Credit Scoring Model

Credit Risk – Model Parameters

E

Digital footprint
(SMS, e-mails, contacts, call logs, GPS location)

- Category Spends (Travel, Food, e-commerce)
- Customer Balances
- Transaction Velocity
- Loan Payments and Over-dues
- Credit card Spends
- Salary Credits and Name of the Employer
- Call Logs Dedupes
- Customer Contact Cohorts

Source: SMS/e-mail classification, Contact and Call Logs

F

Banking Related

- Customer Balances
- Category of Spends
- Transaction Velocity
- Variation in Balances
- Vintage of the Account

Source: Perflos, SMS/e-mail classification

G

Location Based Parameters

- Customer Location Comparison to KYC Address/ Temporary/ Permanent address
- Negative Areas
- Pincode cohorts
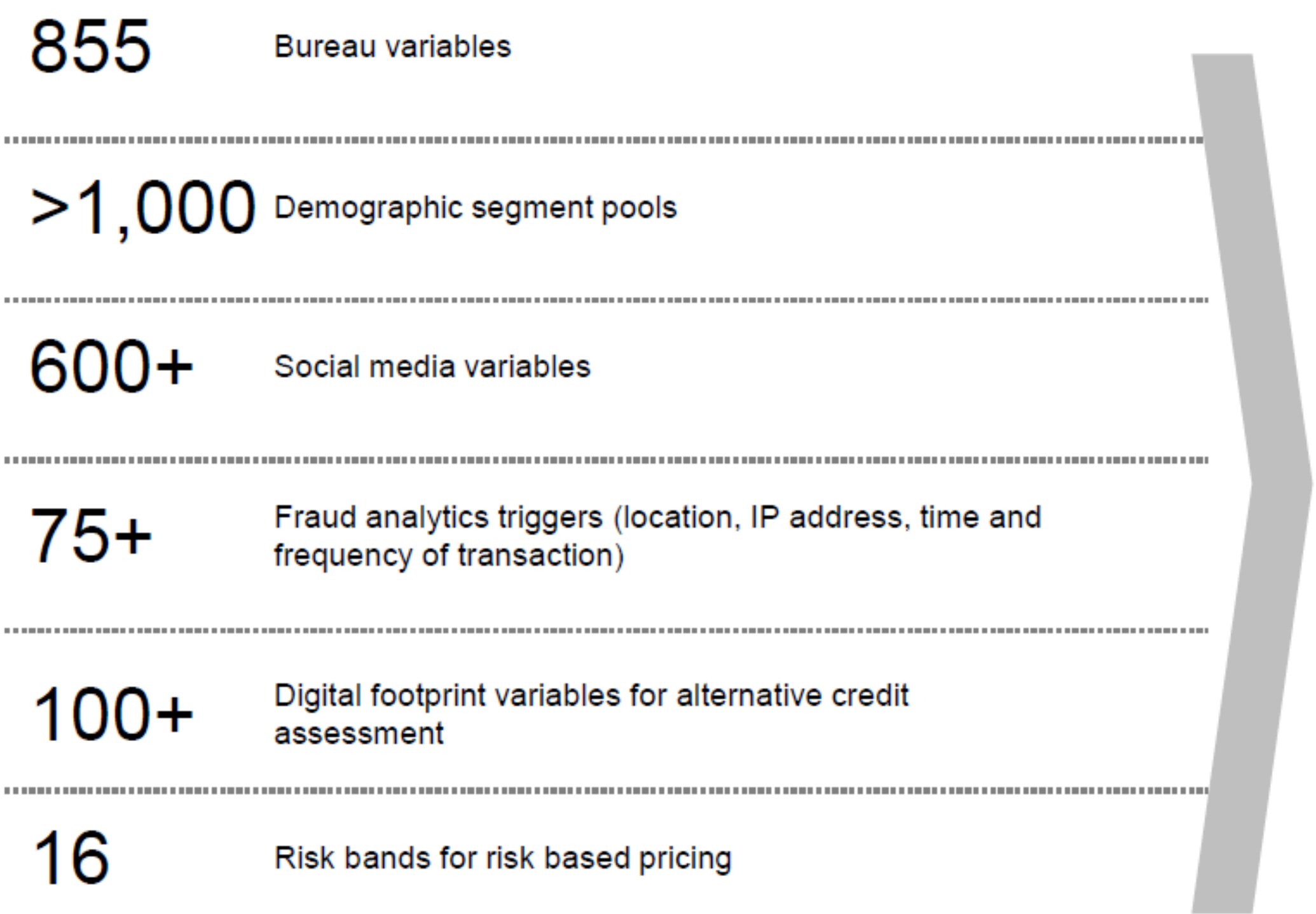
Source: Customer shared location coordinates

E H

Other Fraud Parameters

- Customer IP Address
- Distance between KYC Address and Delivery Address
- Number of Times Applied from the Same Mobile Number
- Number of Times Same Delivery Address Used
- Increase Applications from the Same Pincode

Source: Customer IP address demographic parameters

Tech-enabled Proprietary Credit algorithms: Can Capture Far More Data than Traditional Underwriting Models

855 — Bureau variables

>1,000 — Demographic segment pools

600+ — Social media variables

75+ — Fraud analytics triggers (location, IP address, time and frequency of transaction)

100+ — Digital footprint variables for alternative credit assessment

16 — Risk bands for risk based pricing

- **Variables being run through Machine learning algorithms**
- **Continuous assessment** done on the risk model
- **75+ Fraud risk** parameters augment the credit risk model

HAPPY LEARNING!