

India - A Startups Nation

The Theatre of Step-Function Transformation

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India at a glance

Population	1.415 bn	Jan 2023
Population Growth Rate	0.80%	Jan 2023
Life Expectancy: Male	68.71 yrs	Dec 2020
Total Fertility Rate	2.0	Dec 2021
Life Expectancy: Female	71.49 yrs	Dec 2020
Literacy	78%	NFHS-5 (2019-2021)
GDP (at current prices)	US\$ 3,469 bn	ES 2022-2023
Real GDP growth	7%	ES 2022-2023
GDP (in PPP) - 3rd Largest Economy	US\$12,200 bn	2023 Estimates
Per capita Income	US\$ 2,467	2022-23 (SAE)
Exports (goods and services)	US\$ 763 bn	2022-23 (SAE)
Imports (goods and services)	US\$ 916 bn	2022-23 (SAE)
Foreign Exchange Reserves	US\$ 578.8 bn	March 2023
Government External Borrowings	US\$ 129 bn	(Ministry of Finance) March 2023
External Debt (Govt & Non-Govt)	US\$ 613.3 bn	(Ministry of Finance) March 2023
Interest to Gross Revenue	22%	2023 RE (Budget)
Gross Debt / GDP ratio	82%	2022 (Estimate)

Source: CSO, RBI, DEA, Registrar General and Census Commissioner
Note: 1 USD taken as INR 80 for conversion purposes.

2023 vs 1991

Key Economic Indicators

30 Years' Snapshot
Post-Liberalization

	2023	1991	CAGR
Population (Bn)	1.415	0.89	1.49%
Life expectancy (Years)	70.19	58.8	0.55%
Literacy rate	78%	52%	1.28%
GDP Growth Rate	7%	5.3%	0.87%
GDP (at current prices) - Rs. cr	272 lakhs	5.32 lakhs	13.08%
GDP (at current prices) - US\$ Bn	3,469	275	8.24%
Per capita income - US\$	2,467	310	6.70%
Exports (G+S) - US\$ Bn	763	18	12.42%
Imports (G+S) - US\$ Bn	916	24	12.05%
Share in world trade (exports + imports)	3%	1%	3.49%
Foreign Currency Reserves - US\$ Bn	578.8	5.8	15.47%
Exchange Rate (US\$)	82.68	17.9	4.90%
Gross savings (% of GDP)	30.2%	21.9%	
Gross domestic investment (% of GDP)	31.4%	22.5%	

Source: CSO, RBI, Budget documents, World Bank, Economic Survey 2023

TV Mohandas Pai © 3one4 Capital



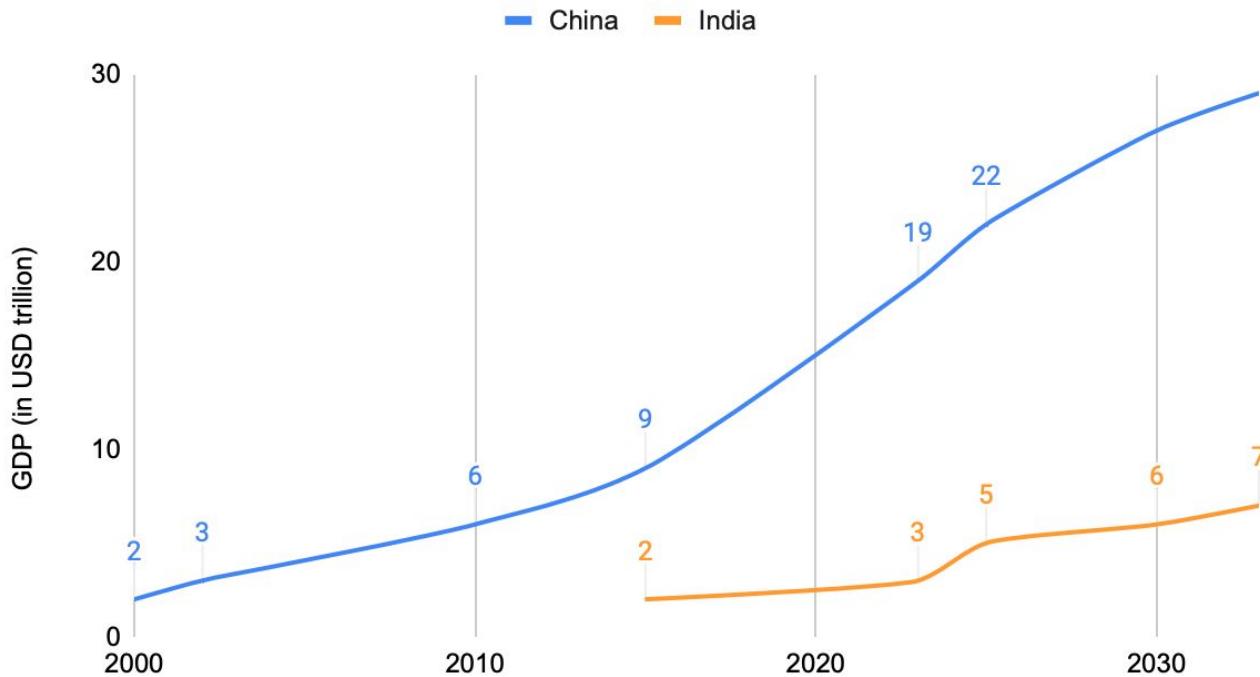
India & China at a glance

China has grown faster

	Estimates as of	India	China
Population	2023 (E)	1.415 bn	1,454 bn
Population Growth Rate	2023 (E)	0.80%	0.1%
Life Expectancy: Male	2021 (E)	68.71 yrs	75 yrs
Life Expectancy: Female	2021 (E)	71.49 yrs	80.88 yrs
Literacy	2022 (E)	78%	96.8%
GDP (current)	ES 2022-2023	US\$ 3,469 bn	US \$ 17,734 bn
GDP growth (Real)	2022 (E)	7%	5.2%
GDP (in PPP)	2023 (E)	US \$ 12,200 bn	US \$ 30,074 bn
Per capita Income (current)	2022-23 (SAE)	US \$ 2,467	US \$ 12,970
Exports (Goods & Services)	2022-23 (SAE)	US \$ 763 bn	US \$ 3,828 bn
Imports (Goods & Services)	2022-23 (SAE)	US \$ 916 bn	US \$ 2,720 bn
Foreign Currency Reserves	Jan 2023	US \$ 578.8 bn	US \$ 3,188 bn
External Debt	Dec 2022	US \$ 613.3 bn	US \$ 2,482 bn
Debt / GDP ratio	2022 (E)	82%	273%

India & China at a glance

India GDP Projection— India is where China was in 2002

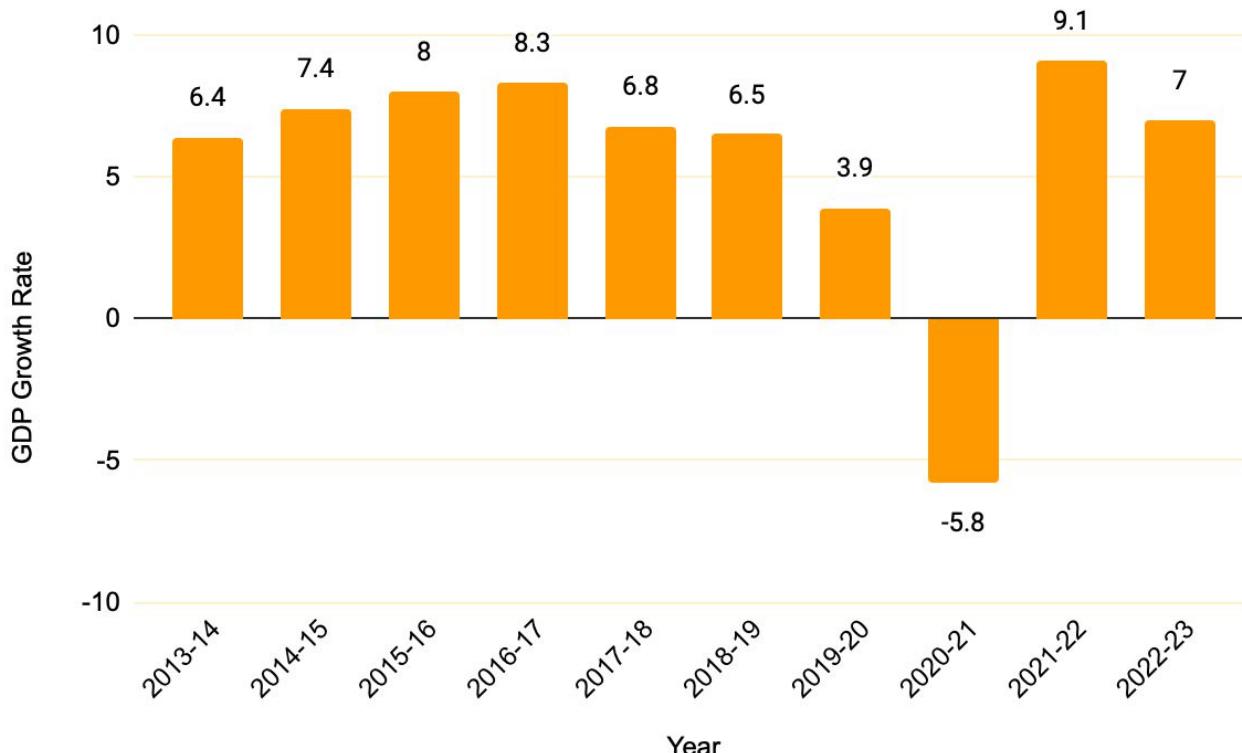


India could achieve a projected GDP of \$ 8T and per capita income of \$5,625 by 2030 on account of India's demographic dividend and a sharp rise in working population. – CBRE

- If India wants to build a \$10T economy by 2030, it needs to grow at **16.7% CAGR** (with US\$ at 75)
- To reach the same by 2033, it needs to grow at **11.4% CAGR**

GDP Growth (%)

Regaining Growth Momentum



Real GDP & Nominal GDP expected to grow approximately @ **6.5% & 10.5%** respectively in 2023-24 (ES & Budget)

The world is changing

Regions	GDP 2023(E) \$ Trillion	GDP 2025(F) \$ Trillion	GDP 2033(F) \$ Trillion	CAGR 2022-2033
US	26.19	28.05	33.53	2.50%
EU22	17.01	18.8	19.74	1.50%
Japan	4.37	4.81	4.83	1.00%
Others	11.98	13.13	16.10	3.00%
Total OECD	59.55	64.79	76.2	2.50%
China	19.24	22.40	28.48	4.00%
India	3.82	4.55	7.51	7.00%
Others	23.57	26.30	34.89	4.00%
Total: RoW	46.63	53.25	70.88	4.28%
Total Global	106.18	118.04	147.08	3.31%

Source: IMF, analyst estimates. Currency appreciations considered

The world is changing

India is a positive outlier in a world with suppressed growth rates

	Growth Projections (per cent)		Change from WEO Update (July 2022) (per cent)	
	2022	2023	2022	2023
World	3.2	2.7	0	-0.2
Advanced Economies	2.4	1.1	-0.1	-0.3
United States	1.6	1	-0.7	0
Euro Area	3.1	0.5	0.5	-0.7
UK	3.6	0.3	0.4	-0.2
Japan	1.7	1.6	0	-0.1
Emerging Market Economies	3.7	3.7	0.1	-0.2
China	3.2	4.4	-0.1	-0.2
India*	6.8	6.1	-0.6	0

Strong Industrial & Infrastructure Base

								
	Steel Production in Mn tonnes	Cement Capacity in Mn tonnes	Two Wheeler Production in Mn Units	Four Wheeler Production in Mn Units	Construction Bn Sq. ft.	ITeS Revenue in Bn\$	Electricity Production Bn Units	Wireless Phone Subscribers in Mn
INDIA	125 (2nd largest)	545 (2 nd largest)	17.7 (Largest)	4.25 (4th largest)	1.4 (2 nd largest)	260	1,459 (3rd largest)	1,200 (2nd largest)
JAPAN	89.2	54	0.63	7.54	-	-	1,005	195
USA	85.8	166.5	-	9.2	-	1,800	4,116	342.5

Source: Ministry Reports of the Government of India, BEE, TRAI, SIAM, OICA,
World Steel Association

TV Mohandas Pai © Zone4 Capital

Strong Industrial & Infrastructural Base



INDIA	Coal Production (Mn MT)	Iron Ore Production (Mn tonnes)	Aviation Passenger Traffic (Mn)	Railway Network ('000 Kms)	Roadway Network (Mn Kms)	Ports Cargo Traffic (Mn MT)	Electricity Production (Bn Units)	Textile Production (Bn Sq. Mt.)
	780 (2nd largest)	254 (4th largest)	341 (3rd largest)	67.9 (4th largest)	6.37 (2nd largest)	720.3	1459 (3rd largest)	71.05 (2nd largest)

- Exports stood at USD 418 billion in 2021-22
- Ranked 44th in Logistics Performance Index (LPI) (last updated in 2018)
- Air passenger traffic is growing at 16.5%, to become 3rd largest by 2024
- Produces 95 minerals - 4 fuel-related, 10 metallic, 23 non-metallic, 3 atomic, and 55 others

Strong Agricultural Base



INDIA	Food Grains Production (Mn tonnes)	Milk Production (Mn tonnes)	Cotton Production (Mn bales)	Horticulture Production (Mn tonnes)	Sugar Production (Mn tonnes)	Spices Exports (in USD Bn)	Cropland (Mn hectares)	Livestock Population (Mn)
	328 (2nd largest)	210 (Largest)	34.2 (Largest)	342.3 (2nd largest)	36.5 (2nd largest)	4.2 (Largest)	180.8 (Largest)	537 (Largest)

- Major producer of agrochemicals, tea, cashew, jute, oilseeds, etc.
- Largest exporter of cereal products, cotton, bovine meat, sugar, etc.
- All 15 major climates in the world; 46 of the 60 soil types in the world
- Largest manufacturers of farm equipment
- Proximity to food importing nations

Strong Financial Base

2055

Number of listed companies on the National Stock Exchange

5311

Number of companies listed on the Bombay Stock Exchange

110 Mn+

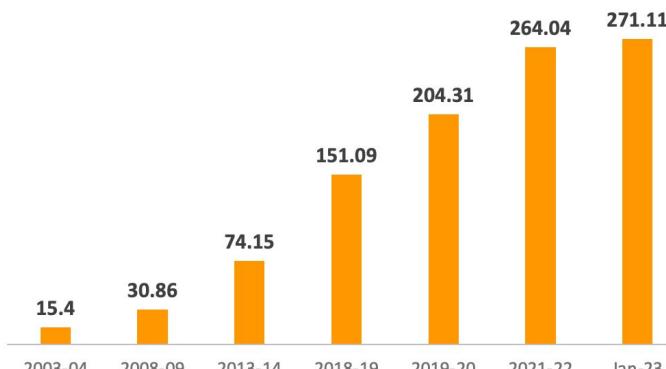
Active demat accounts for trading on the stock market

8 unicorns

Listed on the public stock exchange since 2021

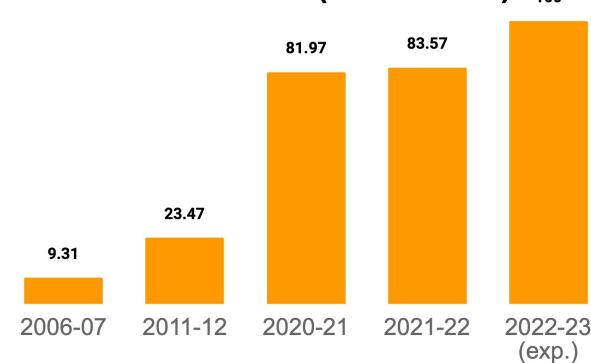
India Equity Market Capitalisation

(in INR Lakh Crore)

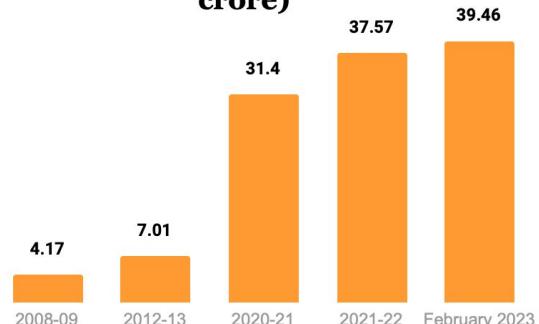


INR 271.11 Lakh Crore ≈ USD 3.39 Tn

FDI into India (in USD Bn)

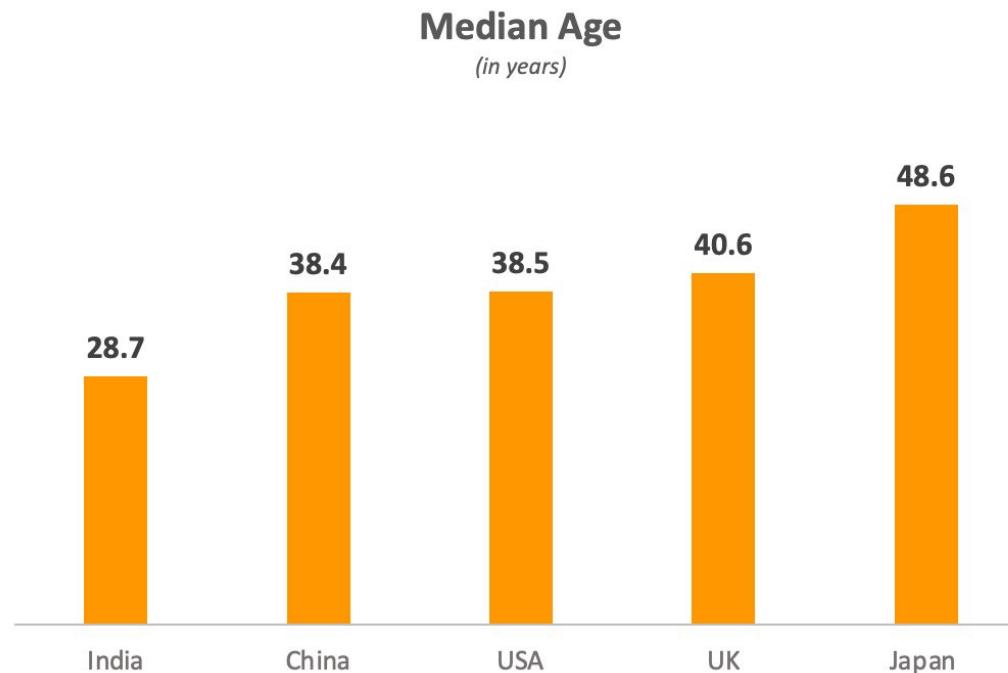


India Mutual Fund AUM (in INR lakh crore)



INR 39.46 Lakh Crore ≈ USD 493 Bn

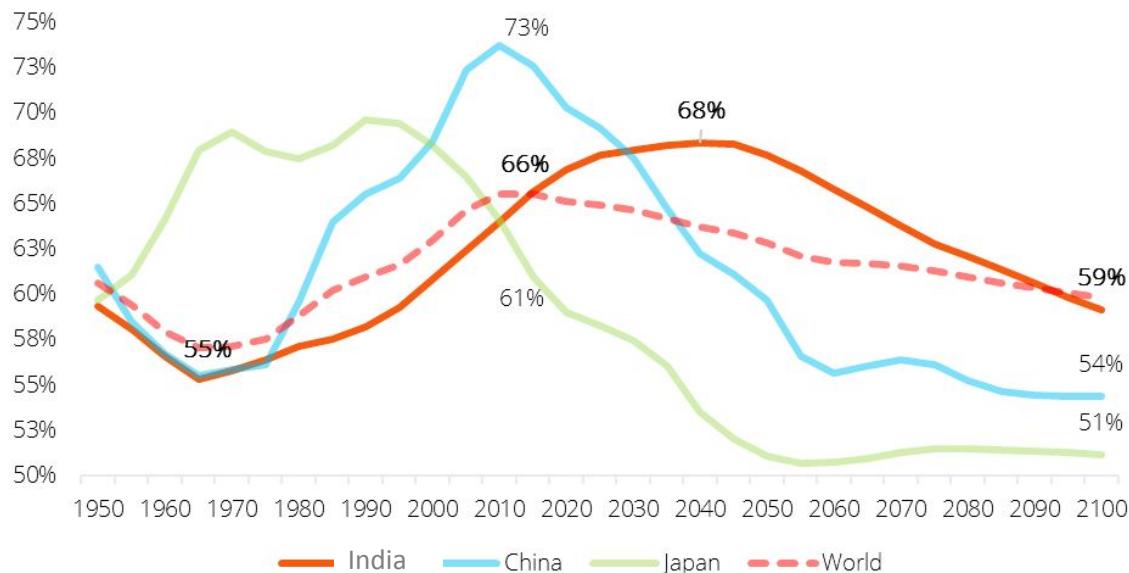
We have a Young Population



We are NOT an aging country!

We will continue to have a Young Population

% Working Population (Ages 15-64)



India's working population is expected to total two-thirds of the total population in 2025

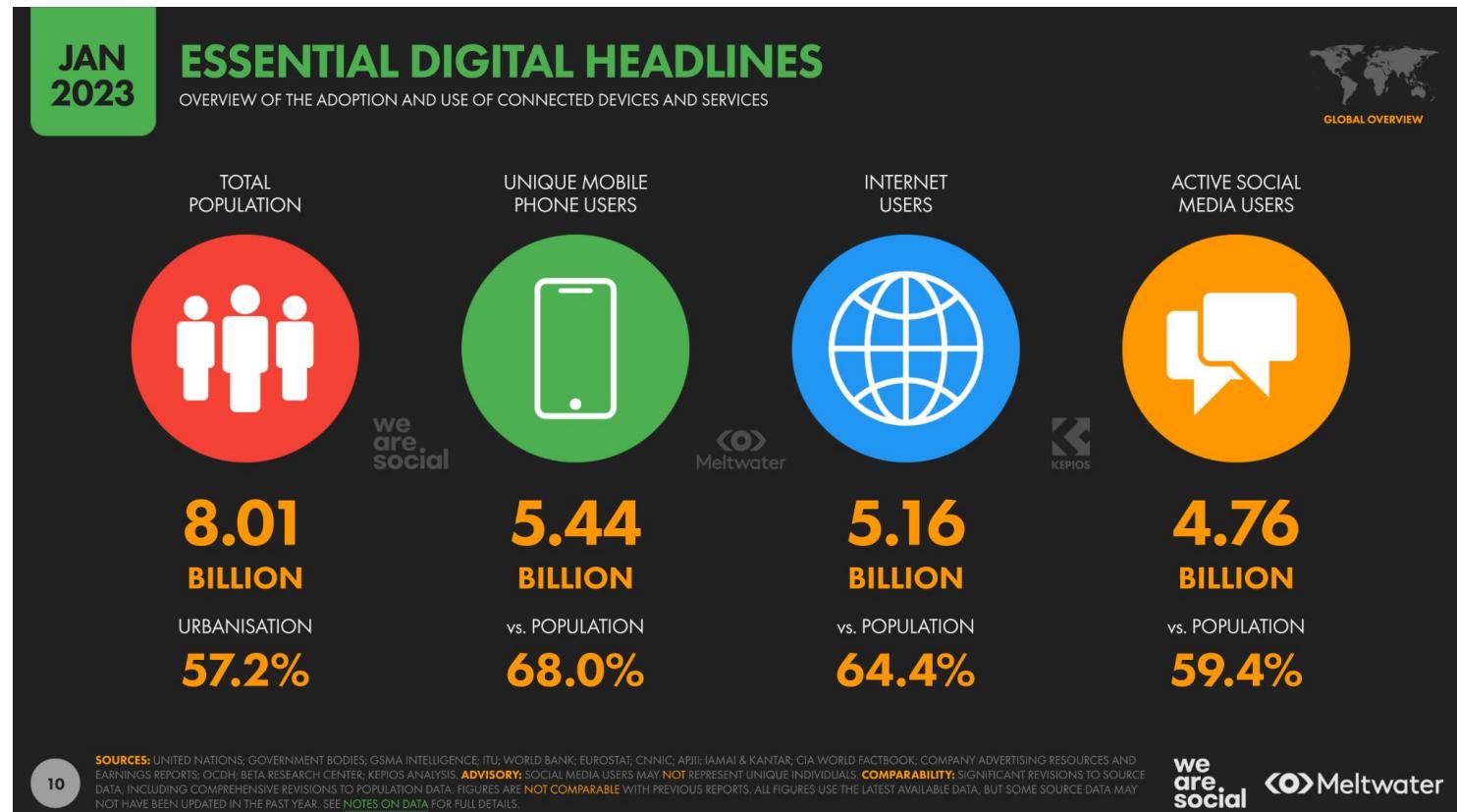
Higher aspirations & increased demand for skilled labor leads to higher education levels

We have a growing middle class (~300Mn) which is increasing its consumption

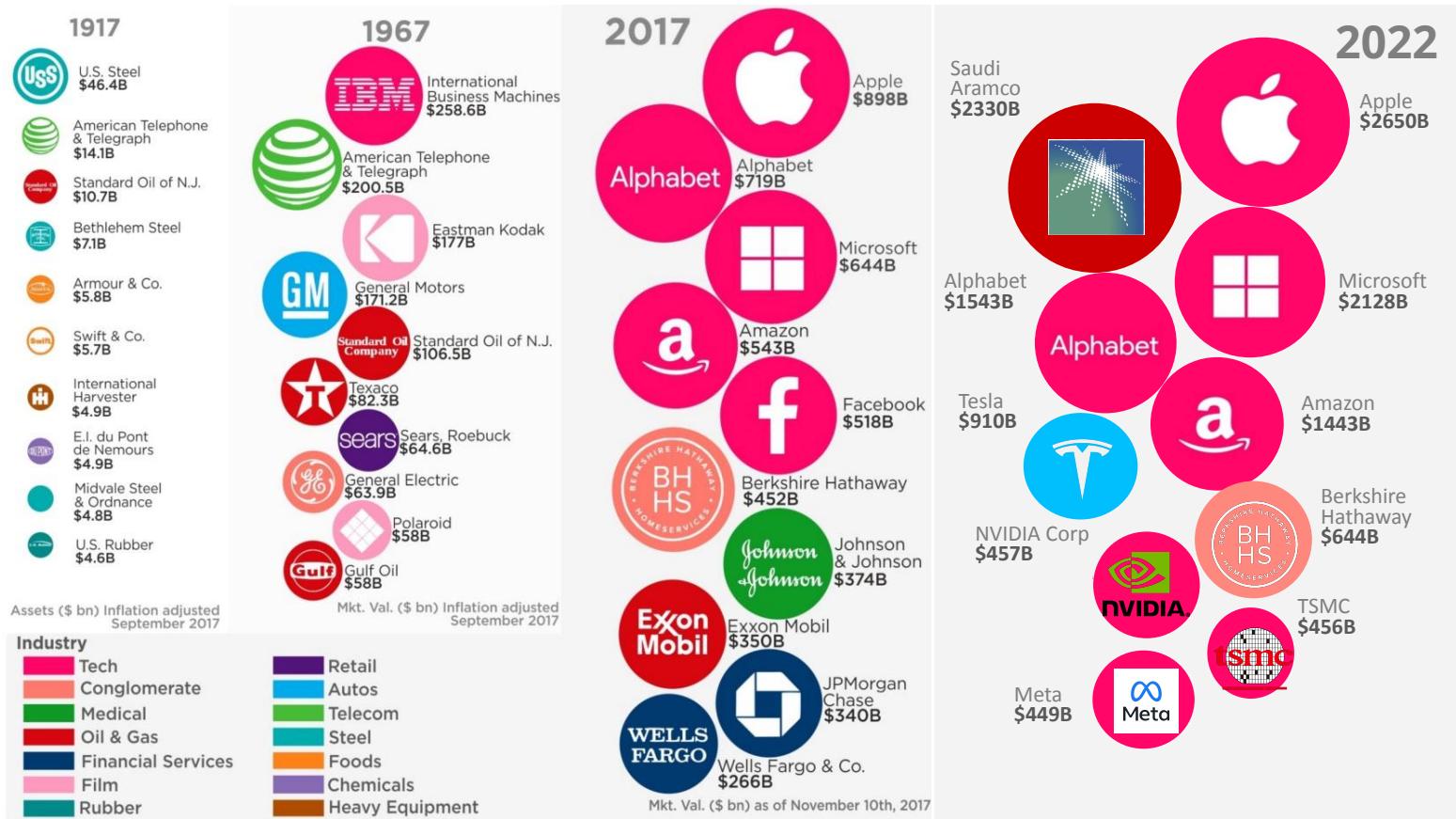
Formal jobs are growing

Financial Year	Net new EPF subscribers		Net new ESI subscribers	
	Ages 18-25	Women	Ages 18-25	Women
2018-19	1,12,50,214		1,49,65,972	
	50.10%	21.00%	48.20%	16.60%
2019-20	94,72,468		1,51,45,261	
	53.40%	22.80%	48.60%	17.90%
2020-21	94,54,119		1,15,05,302	
	51.40%	22.80%	48.40%	16.30%
2021-22	1,38,20,141		1,49,12,698	
	52.40%	25.40%	48.20%	18.50%
2022-23 (Apr'22-Nov'22)	1,12,15,403		1,00,97,326 (Oct'22)	
	51.00%	26.50%	47.90%	19.10%

Digitalisation has transformed the world...



The early-movers now dominate the market



Tech Eats The Leaderboards

The Most Profitable Companies in the World

2021 profits of the world's most profitable publicly listed companies (in billion U.S. dollars)



Source: Forbes Global 2000



statista

The Age of the Tech Giants

Companies with the world's largest market capitalizations in 2005 and 2021 (in billion U.S. dollars)*



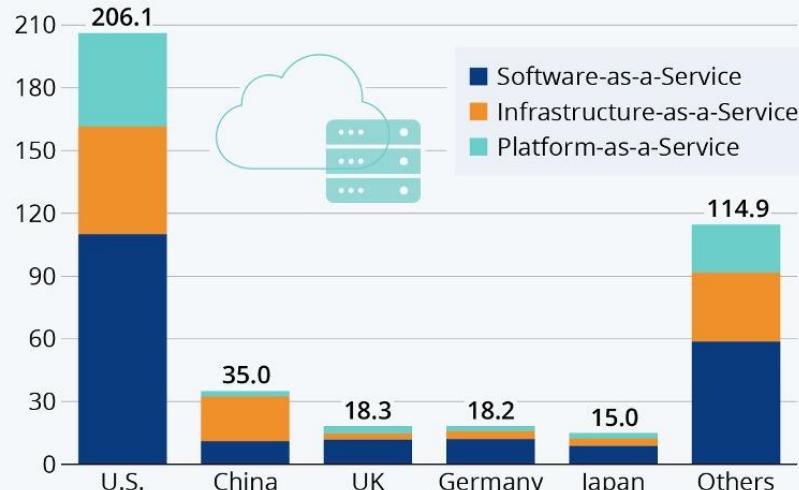
* As of March 31, 2005 and November 4, 2021.

Sources: Financial Times, Yahoo! Finance

The US Runs The World's Cloud

The U.S. Rules the Cloud

Estimated revenue of public cloud computing services in 2022 (in billion U.S. dollars)



Forecast as of May 2022

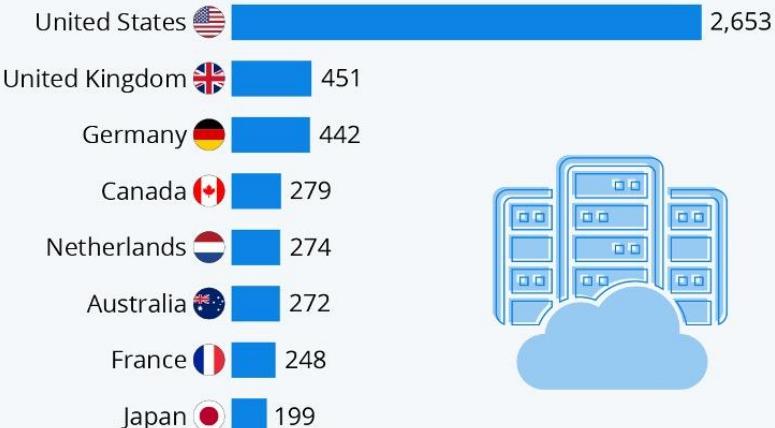
Source: Statista Technology Market Outlook



statista

Which Countries Have The Most Data Centers?

Number of data centers per country as of February 09, 2021



Source: Cloudscene

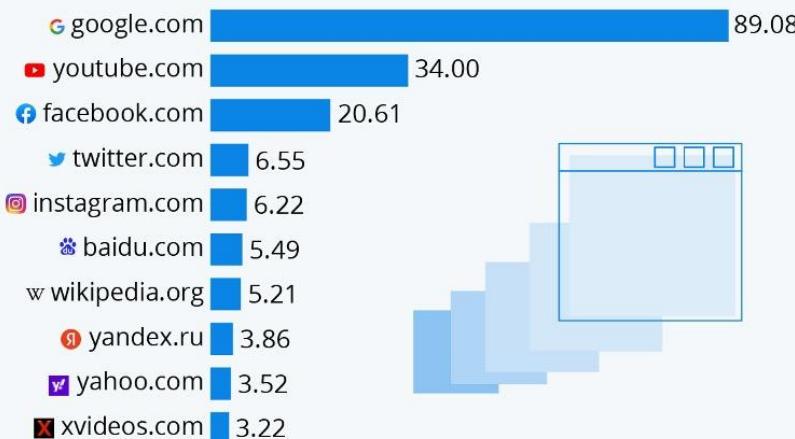


statista

The EU is an aging Digital Colony

The World's Most Visited Websites

Websites with the highest number of visits worldwide in November 2021 (in billions)



Source: SimilarWeb



statista

October 22, 2019

Europe Has Declared War on American Tech Companies

McKinsey Global Institute

**Securing Europe's competitiveness:
Addressing its technology gap**

September 22, 2022 | Report

Corporate Europe is falling behind as tech weakness permeates sectors

02 APR 2019

Europe's big tech contradiction

Why are all the tech giants American or Chinese? Should Europe have its own Facebook?

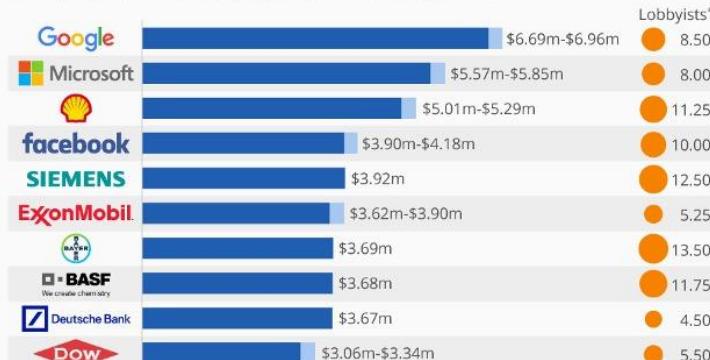
Why aren't any of the top digital companies European?

Big Tech Outspends To Maintain Monopolies

Big Tech and industry lobby groups accused in EU transparency complaints

The Companies Spending the Most on EU Lobbying

Self-reported annual lobbying expenditure in the European Union*



* most recent available estimate as of April 29, 2019; converted to U.S. dollars
** Full-time equivalent

Sources: EU Transparency Register, LobbyFacts.eu

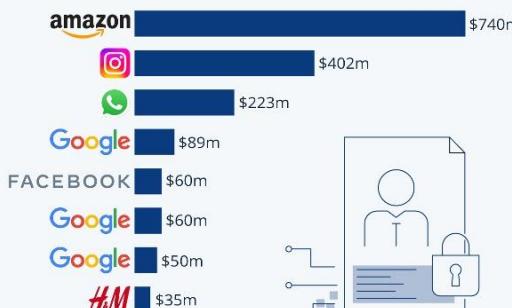


Big Tech's \$95 Million Spending Spree Leaves Antitrust Bill on Brink of Defeat

- Google, Apple and others spent nearly \$95 million on lobbying
- Congress's window to act is tight ahead of November elections

Big Tech, Big Fines

Highest fines for breaching one or more articles of the General Data Protection Regulation*



* Currency converted on Sep 6, 2022
Source: CMS GDPR Enforcement Tracker



Report reveals Big Tech's last minute lobbying to weaken EU rules

Tech companies spent almost \$70 million lobbying Washington in 2021 as Congress sought to rein in their power



THE INDUSTRY

The Senate Fought Mark Zuckerberg, and Mark Zuckerberg Won

The Facebook CEO charmed, evaded, and sometimes misled his way through the committee-hearing gauntlet.

Monopolies are *not* encumbered by geographical borders in a Data+AI-first world



Meta hit with antitrust breach order in Turkey for combining user data across FB, WhatsApp, Instagram

The New Colonialism, Digitally

<input type="checkbox"/> Symbol	Market Cap (USD)	Monopoly, everyday digital products in
<input type="checkbox"/> AAPL	1.6 Trillion	
<input type="checkbox"/> MSFT	1.5 Trillion	
<input type="checkbox"/> AMZN	1.5 Trillion	
<input type="checkbox"/> GOOG	1 Trillion	
<input type="checkbox"/> FB	685 Billion	
<input type="checkbox"/> SNAP	35 Billion	
<input type="checkbox"/> TWTR	27 Billion	
<input type="checkbox"/> MTCH	24 Billion	

Why Facebook Stock Soared 56.6% in 2019

The Social Network posted strong performance last year, and its stock recently hit a new all-time high.

BREAKING NEWS | 10,626 views | Jan 13, 2020, 09:22am

Google Parent Alphabet Passes \$1 Trillion In Market Value

Apple's Market Cap Could Close in on \$2 Trillion in 2020 -- Here's How

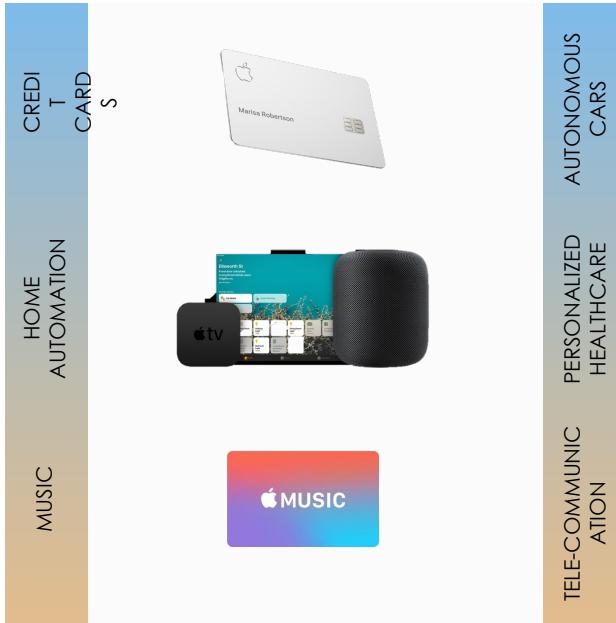
A combination of factors could drive the iPhone maker's stock considerably higher in the coming year.

Business

Amazon becomes the country's second \$1 trillion company

The New Normal – Global Tech Conglomerates

Tech companies dominate globally and will continue to accrete disproportionate control over new value creation



Coordinated Capture of the Digital Day

American duopolies rule most digital sectors globally. Emerging duopolies in new areas like Cloud.

Mobile Operating System



71.62%



27.73%

Internet Search



92.42%



3.45%

Social Media



79.18%



8.99%

Cloud



34%



21%

Digital Advertising
Revenue



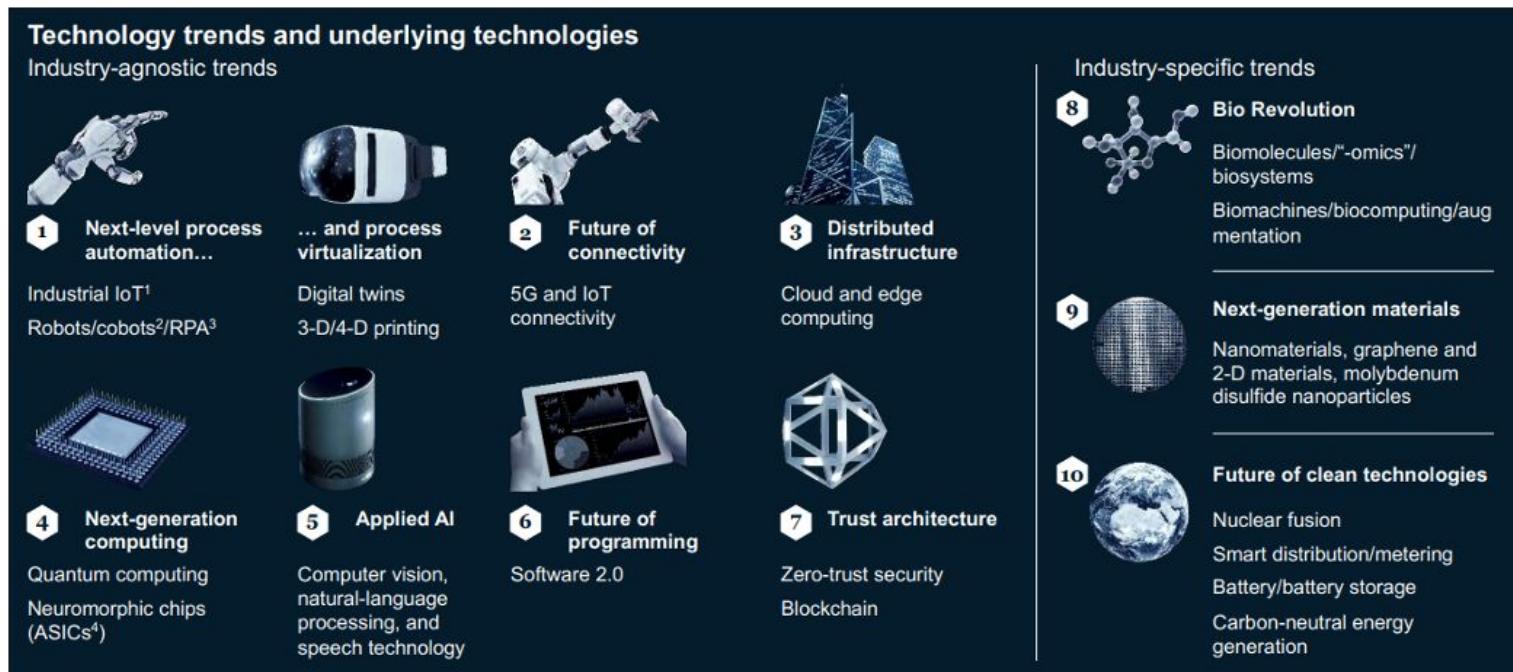
37.2%



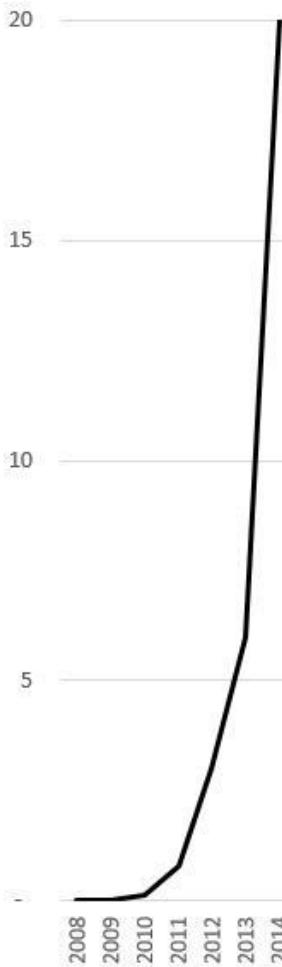
22.1%

The Future Arenas of Competition Are Transversal Technologies

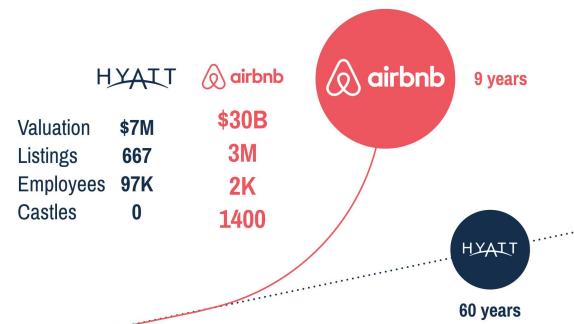
From Applied AI and Edge Computing to Nanomaterials and Tissue Engineering, the race is on to own the technologies of tomorrow.



Airbnb Nights Stayed Per Year (Millions)



Building *Exponential Organisations*



Exponential organisations are getting 10x performance above their traditional peers, just because of how they organise themselves.

The value is generated by *scalability, efficiency, longevity, and relevance*.

FOXCONN has *completely automated* some of their **factories** using AI-enabled “Foxbots”

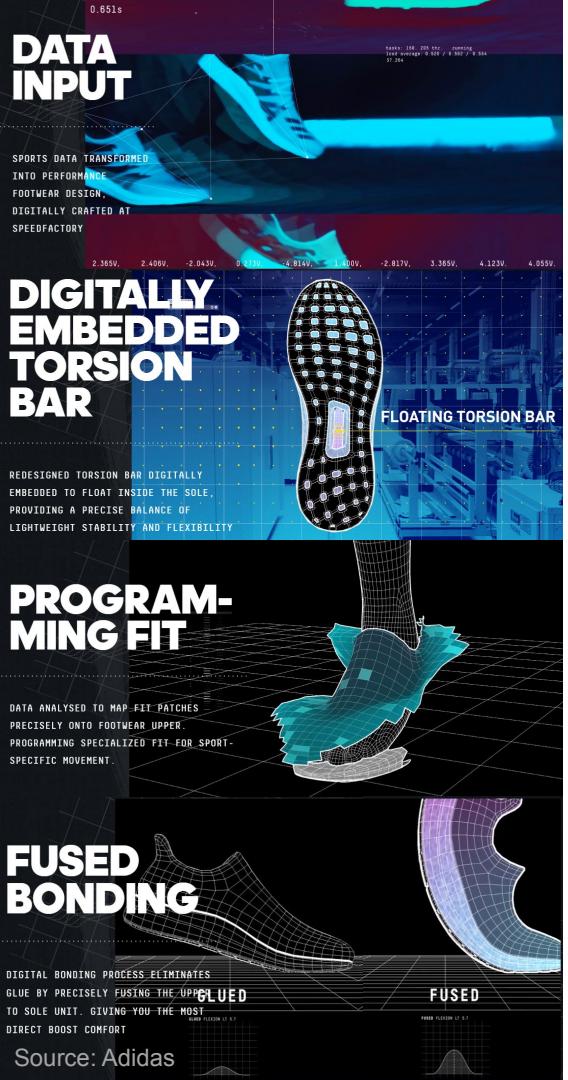


Foxconn identified challenges with Manual Labor

- Down-time
- Attrition
- Cost variability – changes in wages
- Quality variability

Foxconn's fully automated factories benefit from:

- “Lights-off” factories: 24/7 operations
- Cost predictability
- AI-enabled demand-supply sync, energy use, robot monitoring and automated maintenance



Combining athlete
data-driven design with a
technology-enabled

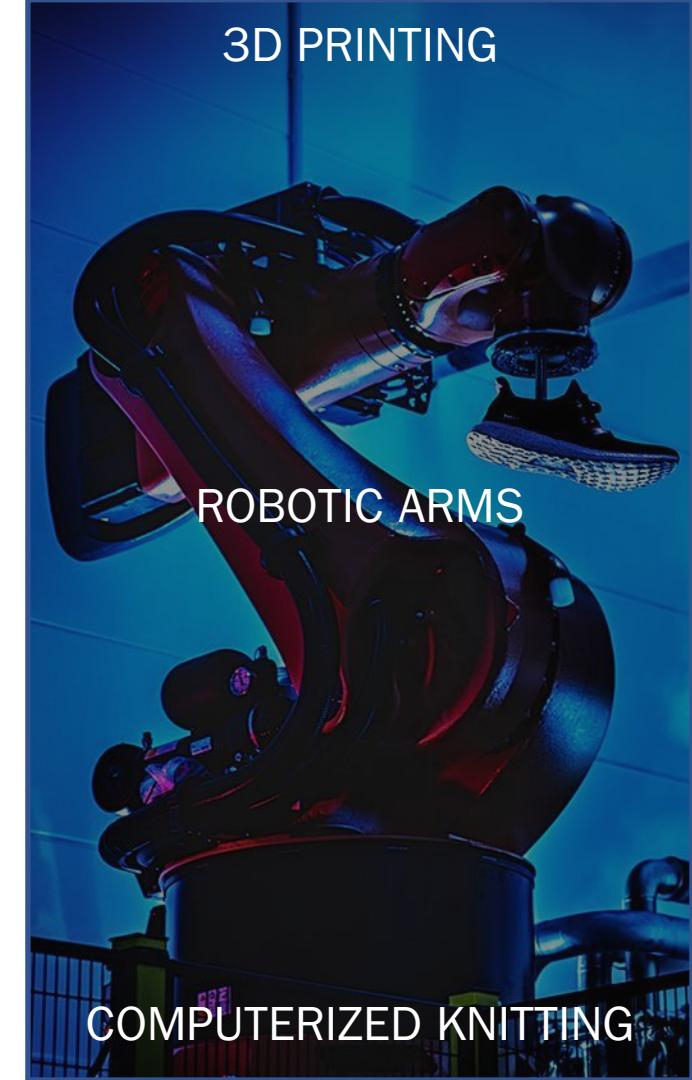
'Speedfactory',



reduced its production to
market time from
**2 months to under 2
weeks.** The shoes got better
too, much better.

Source: Adidas

3D PRINTING





is galloping ahead in bringing ***human-equivalent movement capabilities*** in its range of robots



Atlas

The World's Most Dynamic Humanoid, uses balance and whole-body skills to achieve two-handed mobile manipulation

Handle

Handle combines agility and the ability to pick boxes to tackle box handling tasks in the warehouse.



Spot

A nimble robot that handles objects, climbs stairs, and will operate in offices, homes and outdoors.



'Designer babies' modified using CRISPR technology are here (whether we like it or not)

Biotechnology / CRISPR

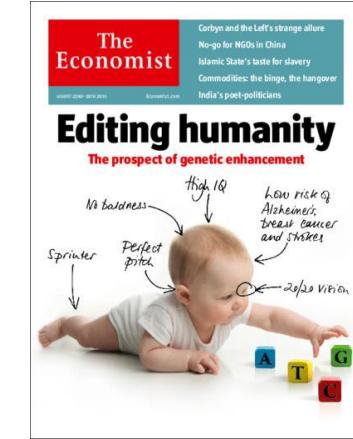
EXCLUSIVE: Chinese scientists are creating CRISPR babies

A daring effort is under way to create the first children whose DNA has been tailored using gene editing.



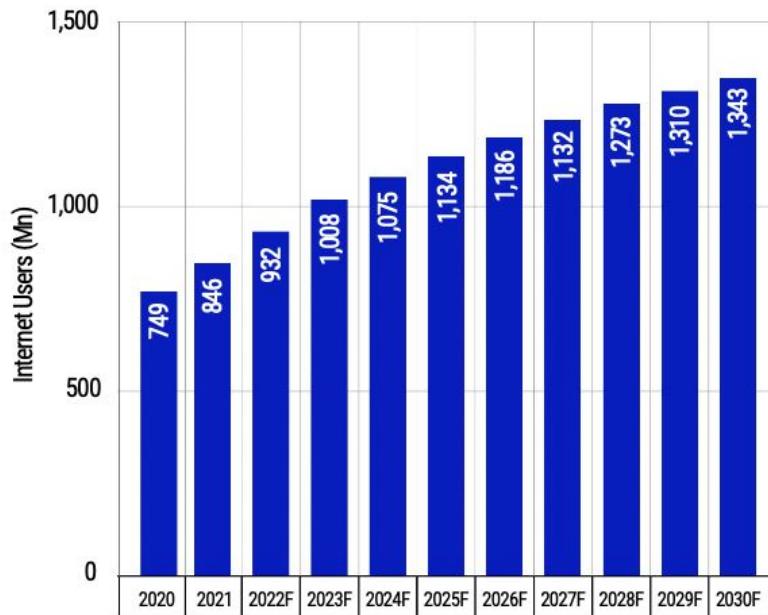
CRISPR Might Have Made China's "Designer Babies" Smarter

New Research into the gene CCR5 that was allegedly edited out of twin girls in China to protect them from HIV might have made them smarter, raising fears of future "designer babies"



'We as a species need to come to terms' with CRISPR technology as China awaits birth of third genetically modified baby

Digitalisation is transforming India too...



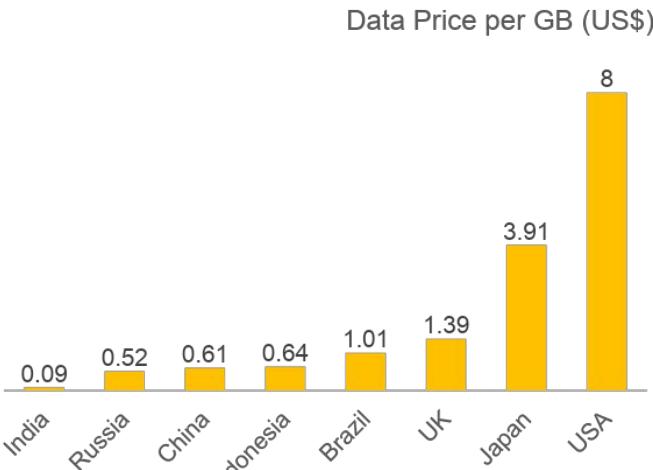
Source: Statista, NPCI, Bain & Company, App Annie
F stands for forecasted.

1.3 Bn+ Internet Users By 2030	61% Internet Penetration In India	44% Increase In Internet Users From 2022 To 2030
\$0.68 Per GB Internet Cost In India	4.7 Hours Average Hours Spent On Mobile Per Day Per User	305 Mn+ Users Doing Online Transactions In India
\$138 Bn+ Total Volume Of UPI Transactions As On November 2022	\$2.8 Tn Total Value Of Upi Transactions As On November 2022	373 Mn+ Estimated Rural Internet Users In 2022

India Internet on a high growth trajectory

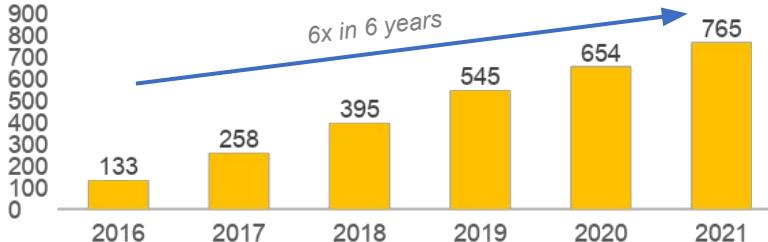
Cost of data – one of the lowest in the world, rapid increase in wireless broadband subscribers and subsequently increased data usage

Cost of Data in India is one of the lowest in the world

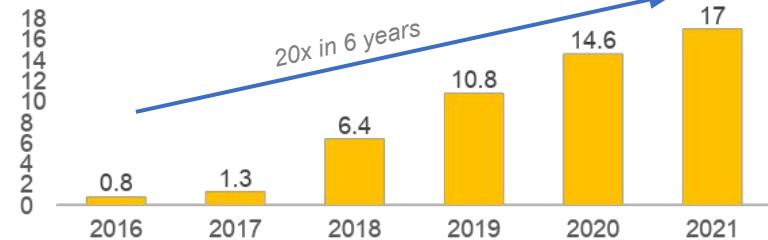


Every second person in India has Internet

Wireless broadband subscribers (3G+4G) in India (Mn)



Data usage per month per user (GB)



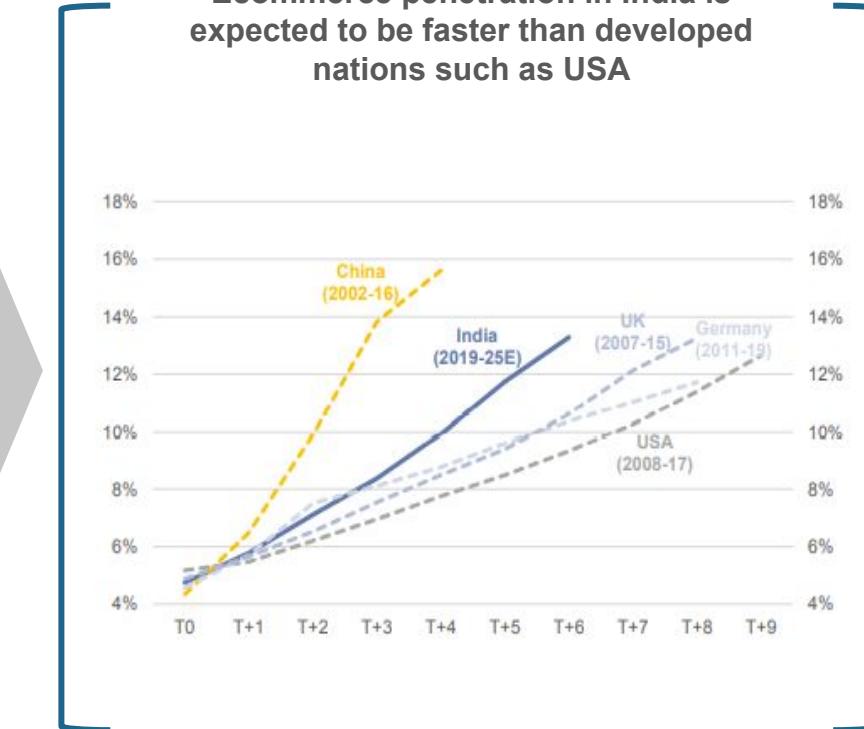
How does India fare against emerging and developed nations?

'India Internet' on a high growth trajectory

India shows high appetite for digital consumption across verticals

	China	India	Indonesia	USA
Internet Users	1.02 Bn	658 Mn	204 Mn	307 Mn
Daily time spent on media				
Internet	5h 15m	7h 19m	8h 36m	7h 05m
Social Media	1h 57m	2h 36m	3h 17m	2h 14m
Audio Streaming	1h 21m	1h 54m	1h 40m	1h 56m
Games	1h 15m	1h 21m	1h 19m	1h 27m
Smart home households	68 Mn	20 Mn	7 Mn	52 Mn
Digital payment users	988 Mn	644 Mn	158 Mn	264 Mn

Ecommerce penetration in India is expected to be faster than developed nations such as USA



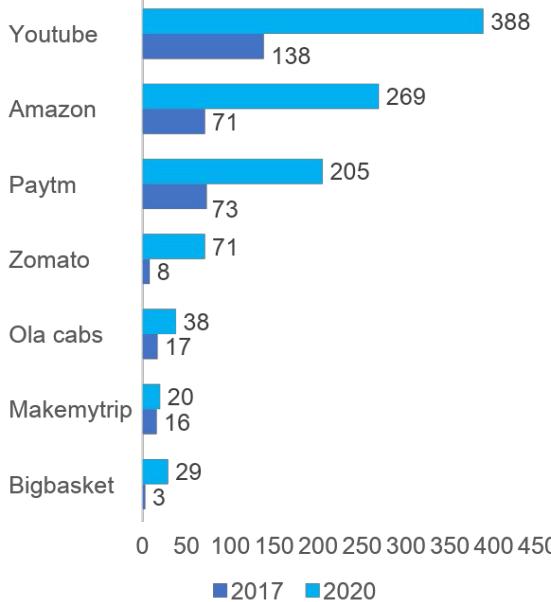
India now accounts for 11.6% of global app downloads

Consumer led digital leap

Increased app usage contributing to significant opportunities for internet companies

Increased app usage...

Unique visitors across verticals (Mn)



... India Internet's \$180Bn Opportunity





“ The Startup Ecosystem will help
create a **USD 10 Trillion**
economy in India ”

Indian Startup Ecosystem



3rd
largest startup
ecosystem in the World

96,000+
startups

USD 500 Bn
Value Created

New flywheel ramping up

IT Services

Infosys

HCL



TATA



Cognizant



FY 2023 (pr)

USD 260 Bn revenue



USD 200 Bn exports



5.5 Mn People Employed

1989

IT Services took off

2015

Startups take off

2025

What lies in store

Startups

2025

Projections



200,000 Startups



Employ 3.25 Mn



USD 150-200Bn to be invested in 2021-25



#2 after US



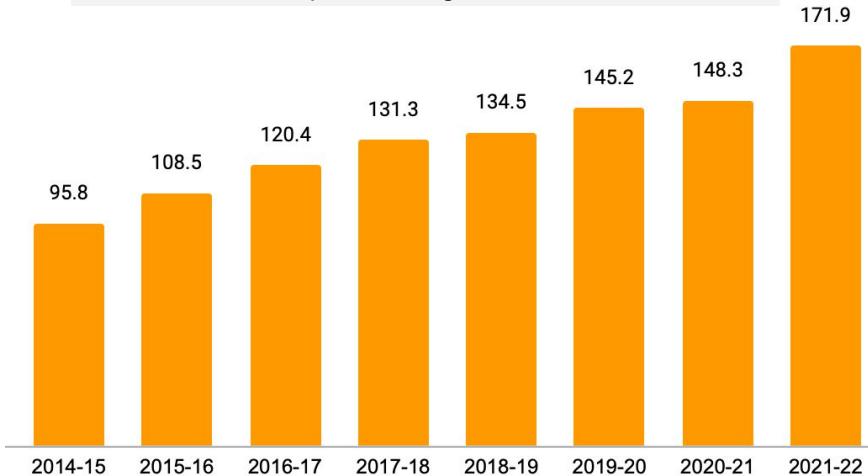
250 Unicorns

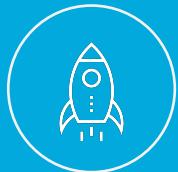
India is a software export giant

India has the largest engineering population in the world and exported more software (USD 148.3 Bn) than Saudi Arabia exported oil (USD 145.3 Bn) in 2021.

India's Exports of Software Services (in USD Bn)

India's software exports have grown **1.8x** since 2014-15.





Startups have raised
USD 136 Bn from 2014-22

520+ Accelerators &
Incubators

750+ Institutional Investors

2,480+ Active Investors

950+ Acquisitions

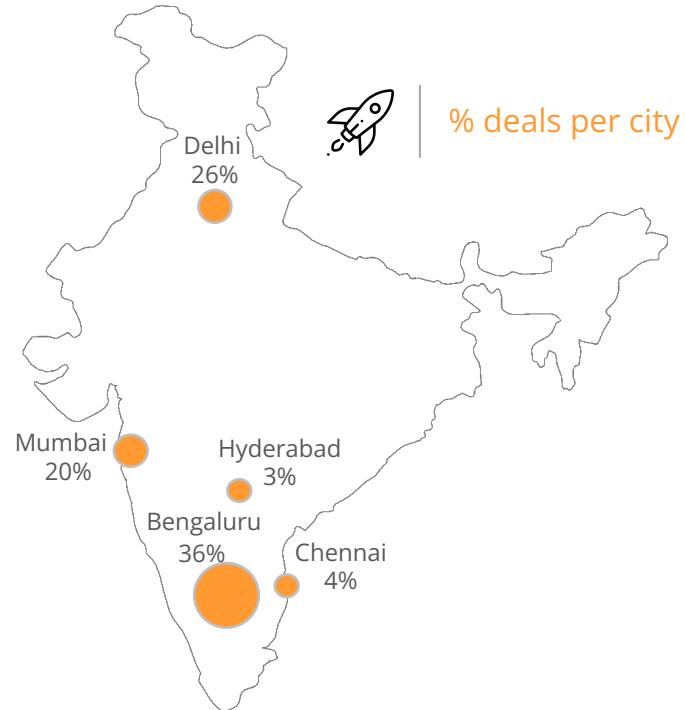
Startups at a glance

67%

of all active
startups

are concentrated in
Bengaluru, Mumbai
and Delhi-NCR

Bengaluru saw 48%
of the total deal value
between 2021 and 2022



2022 saw startups raise **USD 25 Bn** across **1,519 deals** and **240+ M&As**

India's 108+ unicorns have created \$350 Bn in value

There will be 250+ unicorns in India by 2025

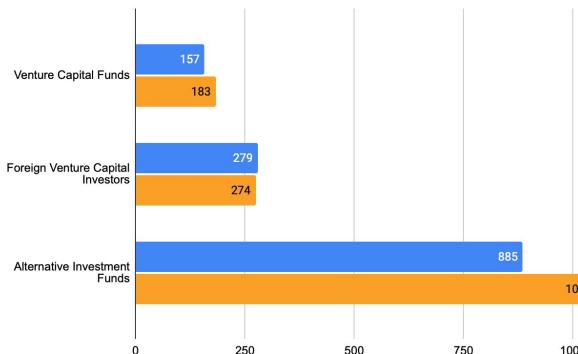
Source: Zone4 Capital, Tracxn | *2 Unicorns are now listed



Indian VC ecosystem has matured

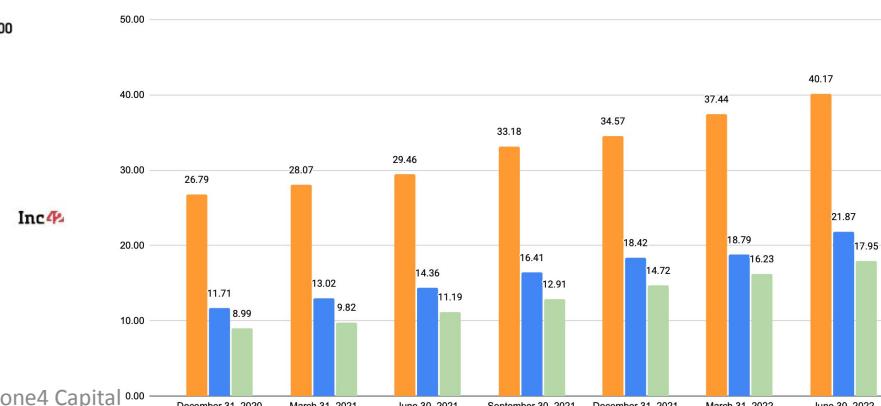
Number of AIFs and VCs in India

2021 2022



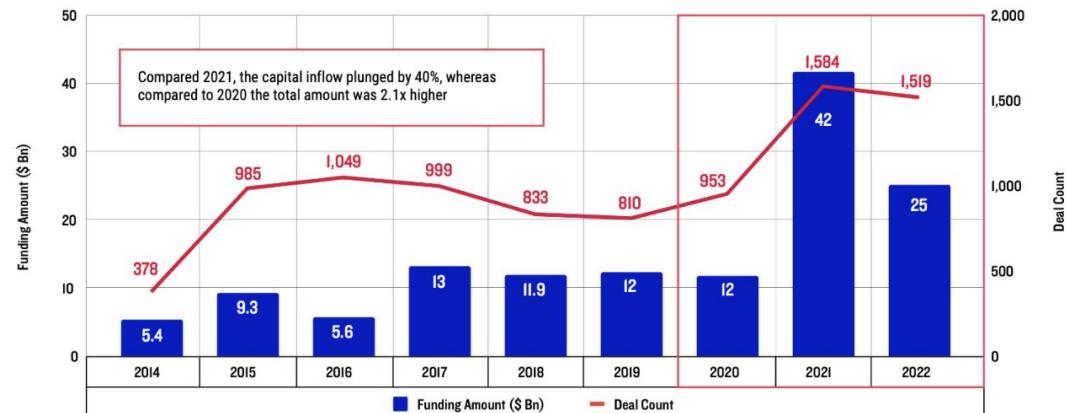
VC deployment numbers in India (in INR thousand crore)

Commitments raised Funds raised Investments made



Indian Startups Have Bagged \$136 Bn In Funding To Date

Of this, over \$110 Bn has been raised by Indian unicorns and soonicons alone

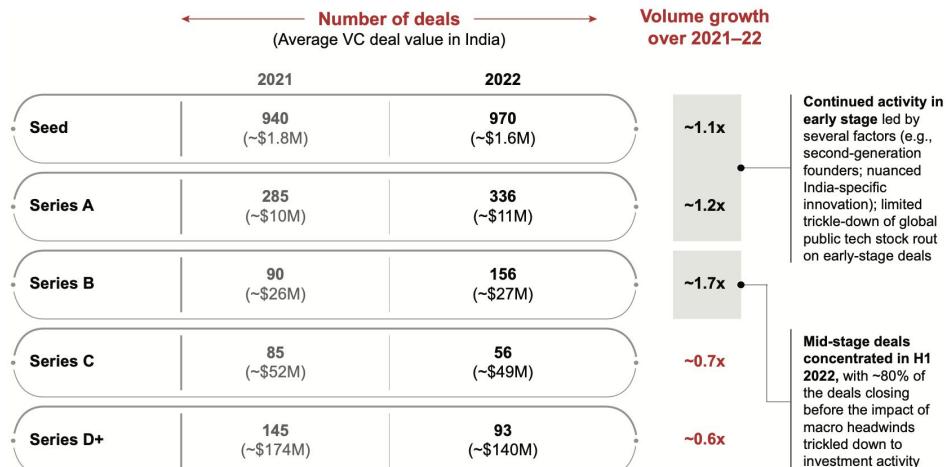


Source: Inc42
Note: 2022 data is as of 25th December

Source: Inc42, SEBI

TV Mohandas Pai © 3Zone4 Capital

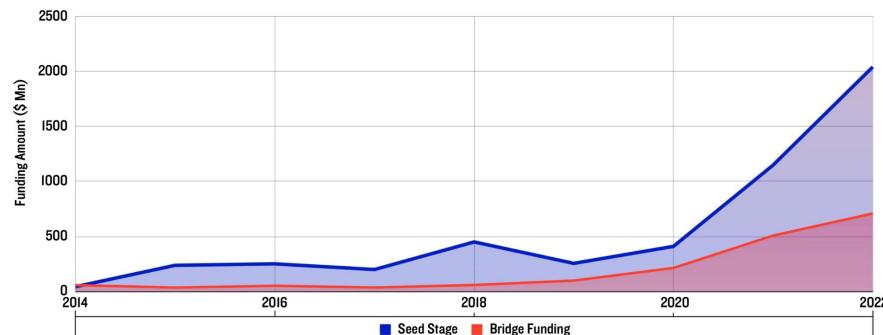
Early stage investing has shown strong growth despite global headwinds



Note: Series D+ includes series D to series K
Sources: Bain & Company; Pitchbook

Seed Stage & Bridge Funding Rise Despite The Bearish Sentiment In 2022

Almost 41% of the total seed funding (\$5 Bn) raised by Indian startup ecosystem since 2014, was secured in 2022



Source: Inc42
Note: 2022 data is as of 25th December

Inc42

VCs have generated above average returns

CRISIL AIF Benchmark – Cat I (USD)

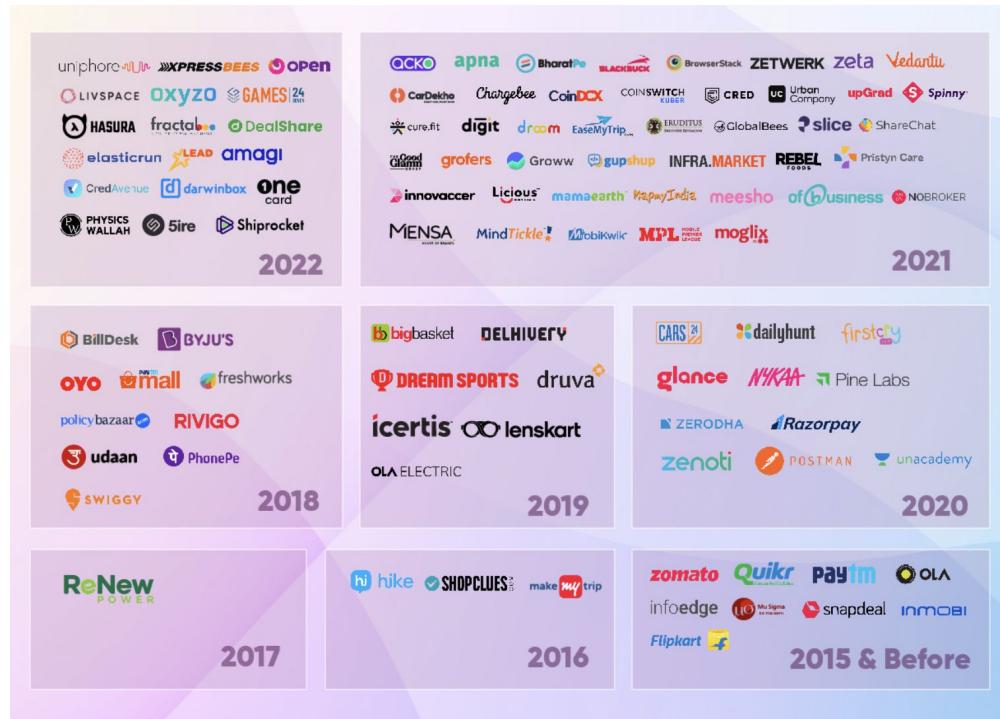
Vintage year	No. of schemes	Pooled IRR (%)	Investment multiples and ratios		
			DPI	RVPI	TVPI
FY14	5	8.89	0.54	0.98	1.51
FY15	9	5.91	0.82	0.52	1.34
FY16	22	31.30	0.29	2.74	3.03
FY17	12	38.65	0.21	2.35	2.57
FY18	11	36.76	0.19	1.85	2.04
FY19	13	41.56	0.02	2.04	2.06
FY20	18	56.51	0.00	1.84	1.85
FY21	5	47.96	0.00	1.36	1.36
Total schemes	95				

Global Early Stage Investing Performance Benchmarks (Top Quartile)

Vintage	2016	2017	2018	2019	2020
IRR	37.11%	34.75%	55.64%	62.41%	42.75%
TVPI	4.43x	2.68x	2.95x	3.51x	1.50x
DPI	0.94x	0.60x	0.29x	0.41x	0.01x
RVPI	4.16x	2.333x	2.12x	2.62x	1.40x

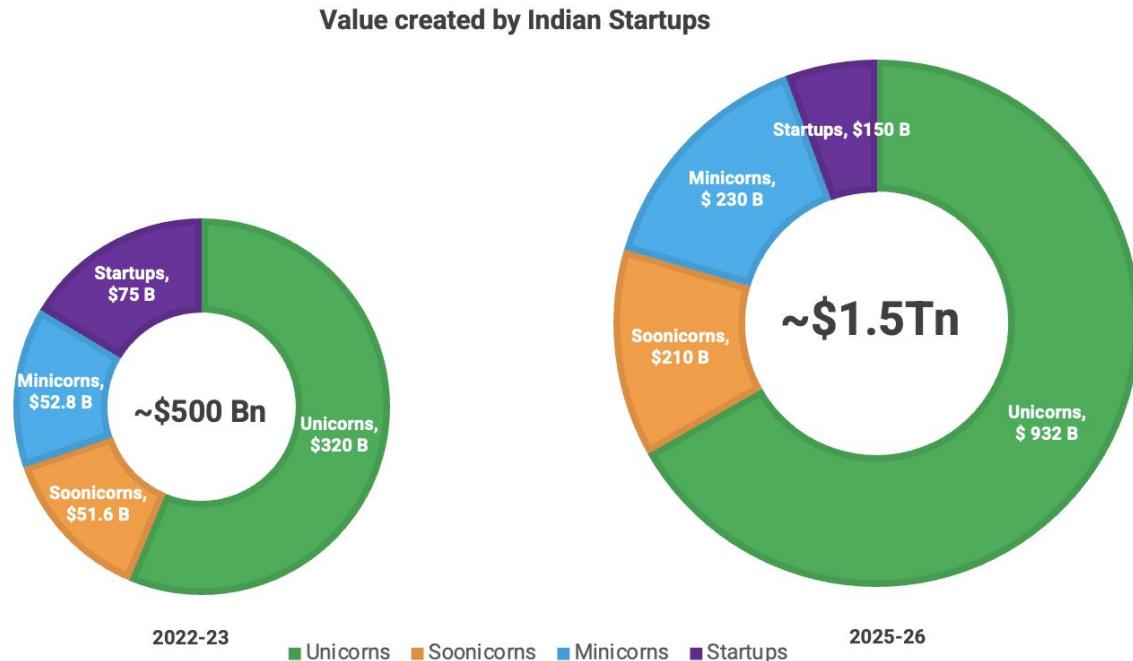
Value Creation at unprecedented pace

42 startups emerged as Unicorns over 2021, more than the figure for the last six years combined. In 2022, 22 new companies have emerged as Unicorns.



Value Creation at unprecedented pace

3x valuation growth by 2026



Source: Zone4 Capital Estimates, Tracxn, Inc42

India growing as a deep-tech hub



3830+ AI
startups

glance

Personalises
content on
smartphone lock
screens



1170+ IOT
startups

PINOTY
Connected Care

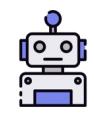
IoT based
wearable
healthcare
monitoring device



190+ AR/VR
startups

shifu

AR based
ed-tech
player for
kids



40+ Robotics
startups

UNBOX
ROBOTICS

Robot enabled
logistics
solutions

kaleidofin

Personalised
financial solutions
company

dozee

Contactless health
tracker and at-home
step-down ICU

JADOOZ

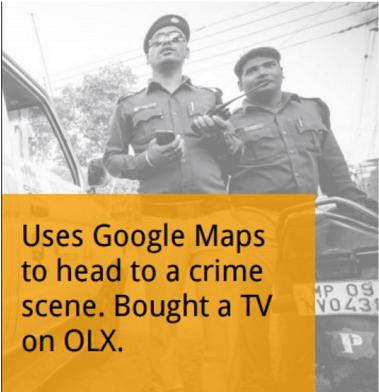
VR powered
entertainment

Invento
ROBOTICS

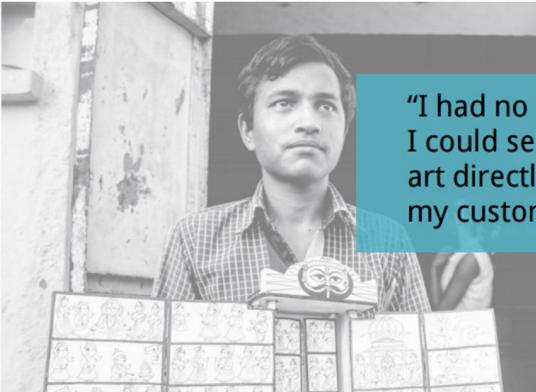
Service robots
for banks, malls,
events

Source: Tracxn

Use of Digital Platforms



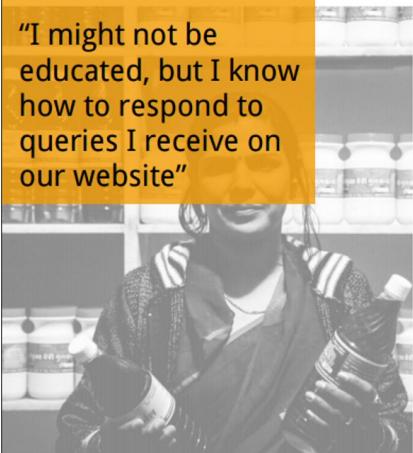
Uses Google Maps to head to a crime scene. Bought a TV on OLX.



"I had no idea I could sell my art directly to my customers"



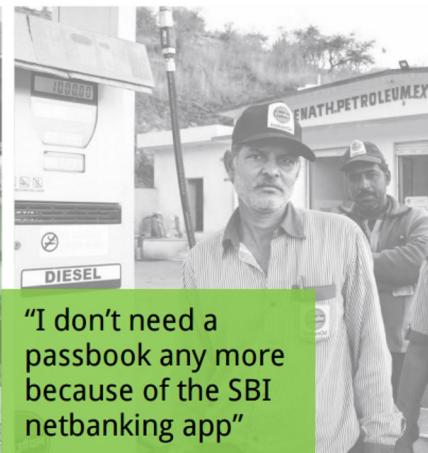
"3G nahi to hotspot sahi"



"I might not be educated, but I know how to respond to queries I receive on our website"



"The internet has helped us cut the middleman and changed our lives forever"



"I don't need a passbook any more because of the SBI netbanking app"

Access to the basic necessities of living



HEALTHCARE

Health assurance to **362M** beneficiaries under Ayushman Bharat Scheme



ELECTRIFICATION

100% village electrification achieved in 988 days covering 18,452 villages



MOBILE

1.2Bn Mobile phone users in India in 2022, 600 Mn smartphone users, **162Mn** smartphones sold p.a.



EDUCATION

Drop off rate to be curbed - enrollment in **class 10 at 77% vs. class 11 at 52%**



ROADS

99% of the country's habitations connected with all-weather roads under PMGSY



INTERNET

Total 800 Mn users another **400Mn** first-time internet users are expected to come online



HOUSING

27.4 million houses completed under PM Awas Yojana



SANITATION

99% individual household latrines (IHHL) achieved under Swachh Bharat Mission



BANKING

More than 85% Indians owned a bank account owing to PM Jan Dhan Yojana



WATER

99% of population has access to clean water close to home, 110M rural HHs provided tap water connections.



FOOD SECURITY

All 36 states/UTs now covered under NFSA vs. 11 in 2014



GAS CONNECTIONS

95.65M rural women provided free LPG gas connections

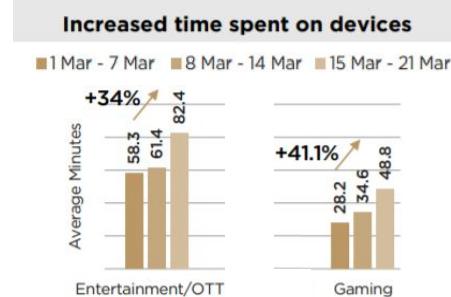
Digital Media is Mainstream

Rise of Jio



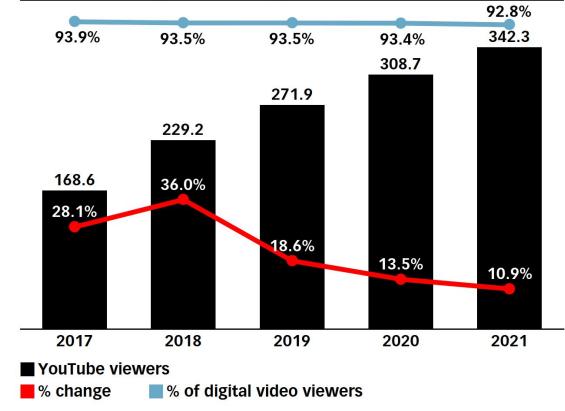
Per capita Data Consumption and voice usage in 2023 is **22GB** per month with **422.8 Mn** subscribers.

2022 Data Consumption per Subscriber was 20 GB per month with 366 Mn subscribers



Consumption proliferation

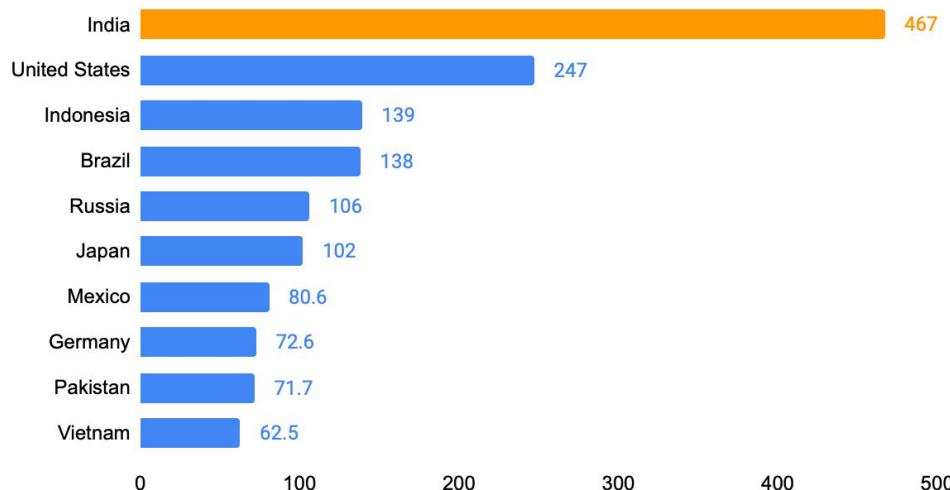
YouTube Viewers in India, 2017-2021
millions, % change and % of digital video viewers



India constitutes YouTube's biggest user base

India has the highest number of YouTube users in the world

Leading countries based on YouTube audience size

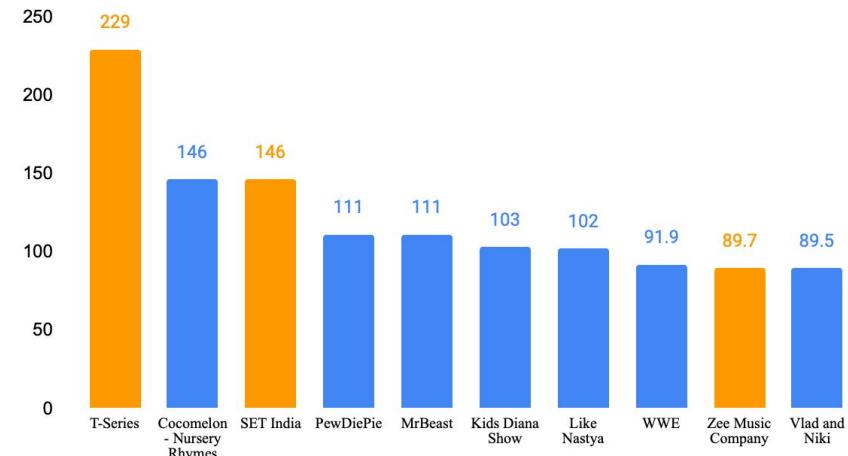


All figures in millions.

Source: Statista, YouTube

3 out of the top 10 most subscribed YouTube channels are Indian

Top 10 most subscribed YouTube channels



All figures in millions.

Zone4 Capital | TV Mohandas Pai

Online Gaming: Social distancing and lockdowns transitioning sporting to the digital realm



Market size (FY20)
~US\$ 1.6B



Growth rate (FY20-24)
30-35%



Funding (2020)
~US\$ 400M

	Real money games – Fantasy sports	Real money games - Others	Casual games	E-sports & Streaming
Players	 	 	 	
COVID-19 impact	<ul style="list-style-type: none"> Getting back on track □ Sporting activities were cancelled during COVID, but traction is building fast as sporting events (cricket) resume under bubbles Pivotal role in fan engagement when stadiums remain in full/partial lockdown 	<ul style="list-style-type: none"> More time available □ higher participation □ more organic downloads Focus on user engagement and retention □ a wider product offering for varying consumer tastes 	<ul style="list-style-type: none"> Social distancing □ adoption of social games User growth was slightly softened by lower ad revenues Introduction of new games to cater to increased demand 	<ul style="list-style-type: none"> Disruption of outdoor sports □ increase in e-sports viewership Social distancing □ shift from physical to virtual events and competitions Time spent by each user increased by 21% to 191 minutes

Degree of COVID impact

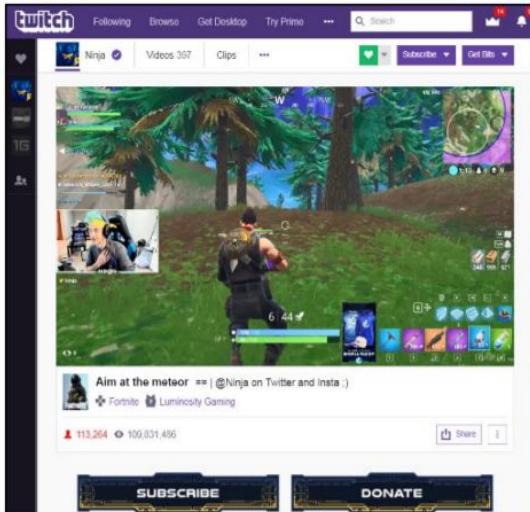
Highly negative Highly positive

More hours streamed watching esports than Youtube & Facebook combined

Global

Fortnite Battle Royale

Most Watched Game on Twitch



India

India's leading home-grown gaming streaming app



Edtech: Indian edtechs fundamentally altered education delivery in India



Market size (FY20)
~US\$ 80B



Growth rate (FY20-24)
50-55%



Funding (2020)
~US\$ 2.2B

	Supplementary education & tutoring	Test preparation	Out of school / extra-curricular	Certification & training platforms	Digital education tools and enablers
Players	 	 	 	 	
COVID-19 impact	 <ul style="list-style-type: none"> School closures □ increase in user adoption Partnerships with schools □ higher B2B growth Market leaders to benefit the most □ trust + content variety Limited online schooling hours □ increased user engagement time 	 <ul style="list-style-type: none"> Physical to digital shift with more preparation times due to exam delays □ increased customer acquisition High stakes □ content quality key USP Focus on vernacular modules 	 <ul style="list-style-type: none"> Nascent stage Increased emphasis on STEM in National Education Policy to enable growth Competition for student's time □ Surge in adoption to continue 	 <ul style="list-style-type: none"> Job uncertainty + time availability □ increased demand for upskilling More organic reach, referrals, repeat usage □ lower CAC Increase in # customers over a long period 	 <ul style="list-style-type: none"> Acute need for online enablers to tackle digital learning due to shutting down of physical facilities Online enablers to remain important post Covid due to behavioral changes in users

Health-tech: Growing need for deeper healthcare infrastructure



Market size (FY20)
~US\$ 1.6B



Growth rate (FY20-24)
30-40%



Funding (2020)
~US\$ 410M

	E-pharmacy	Telemedicine & scheduling	Diagnostics and care	Health and fitness
Players	 		 	
COVID-19 impact	<ul style="list-style-type: none"> Continued operations amidst lockdowns Fear □ panic buying + PPE demand Strengthening supply chain □ increased hiring 8.8M were using e-pharmacy services during lockdown, 2.5x growth from pre-COVID levels 	<ul style="list-style-type: none"> Fear of getting infected in hospitals □ People started using telemedicine apps to avoid hospital trips 500% increase in online doctor consultations in May 2020 from March 2020, with 80% users experiencing it for the first time 	<ul style="list-style-type: none"> Increased demand for at-home service both for mandatory Covid testing for travel and other outpatient diagnostics New offerings □ faster testing & approvals for essential services 	<ul style="list-style-type: none"> Fear of illness □ better health management Change in business models □ Curefit shifted focus from outdoor to indoor fitness, started monetizing free content Customer interest □ Consumers started taking their health more seriously

India Stack

India has pioneered the use of Digital Public Goods (DPGs) as technology enabled force multipliers for growth

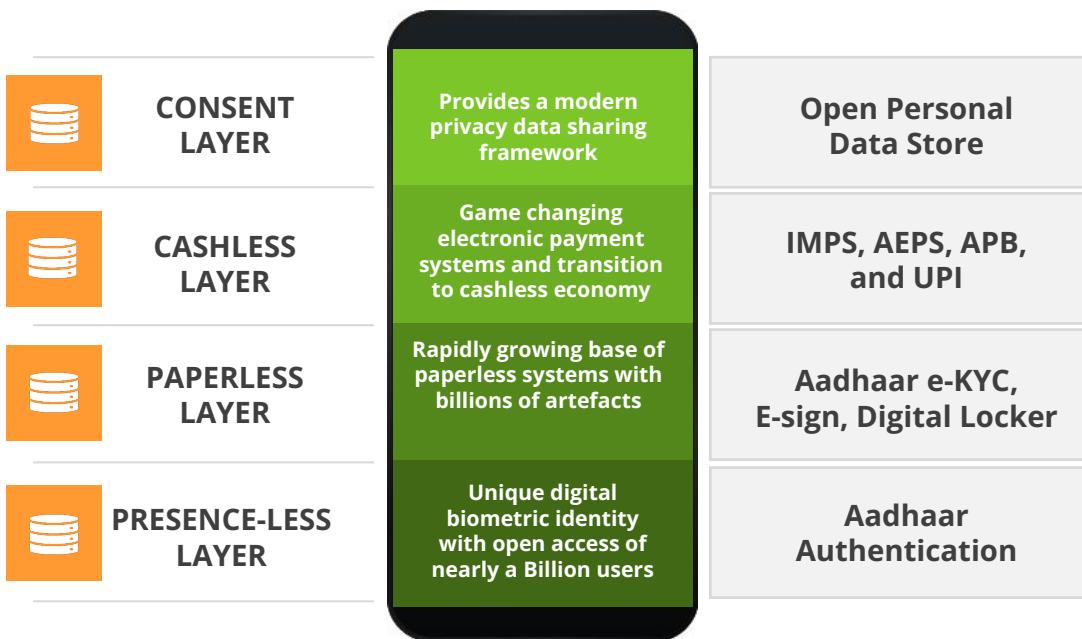
COMMERCE
(GSTn)

CREDIT
(RBI)

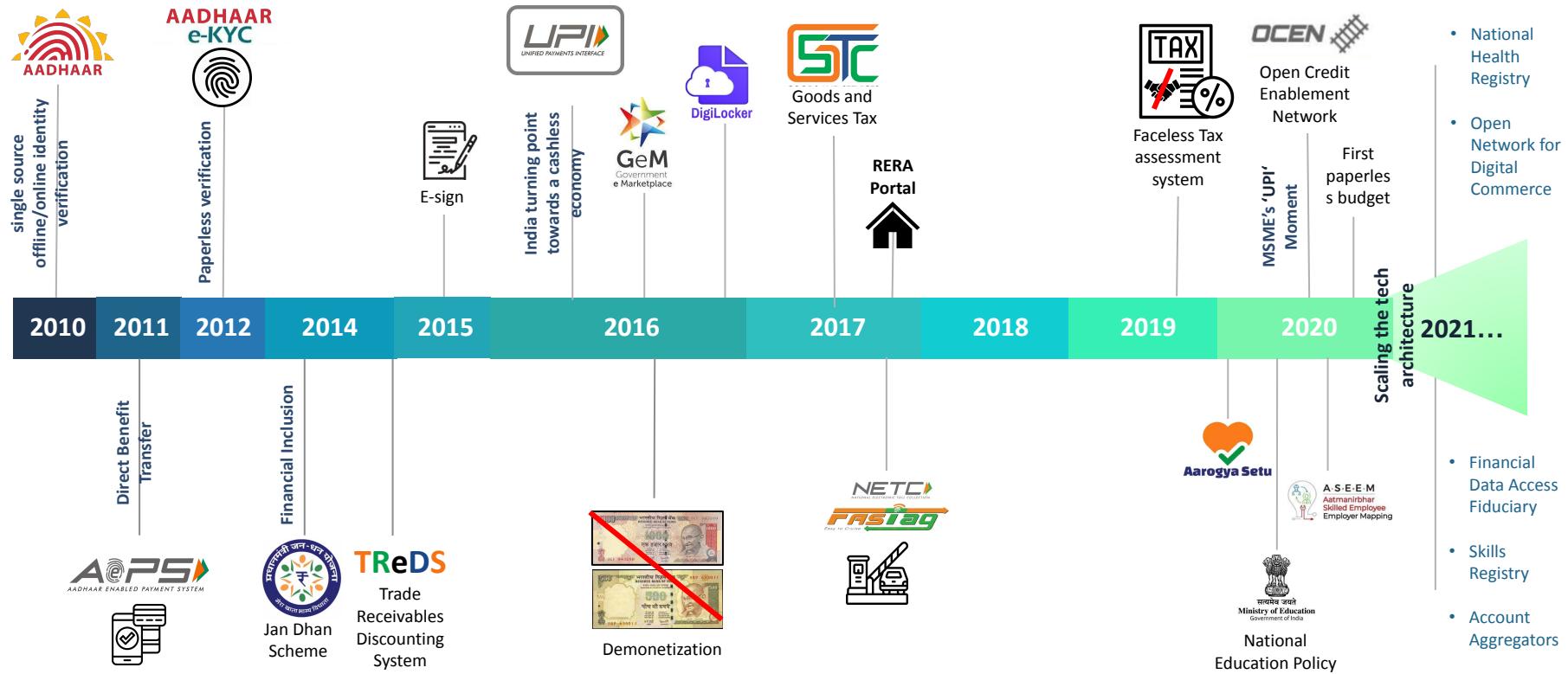
INVESTMENTS
(SEBI)

SKILLS

OTHERS

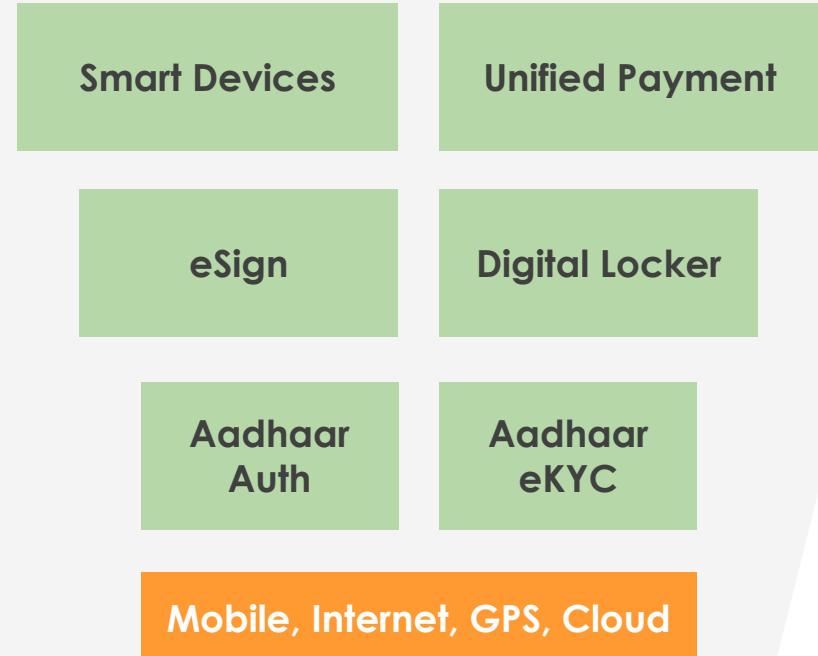


The evolution of India Stack



Source: BCG

**World-Class Products
are being built
on INDIA STACK,
a set of **open API**
based PUBLIC
PLATFORMS**



Impact of the India Stack

Retail Customer Onboarding

Reimagining the User journey with Aadhaar, eKYC, e-Sign and Digital Locker

Reimagining Channel Management - Digital Transformation with Aadhaar eKYC

Customer Onboarding - Digital Transformation with Aadhaar eKYC

-  Turnaround Time down from 6 days to 1 hour
-  Reduced Drop Offs
-  Branch Capacity Freed upto 10%
-  >99% First Time Right
-  Back Office No Longer Required

-  Transaction Time down from 4 hours to 2 minutes
-  Statement Processing Time down from 1 hour to 1 minute
-  Reduced Operational Cost
-  Capacity Freed-up for Lead Generation
-  Improved Customer Retention

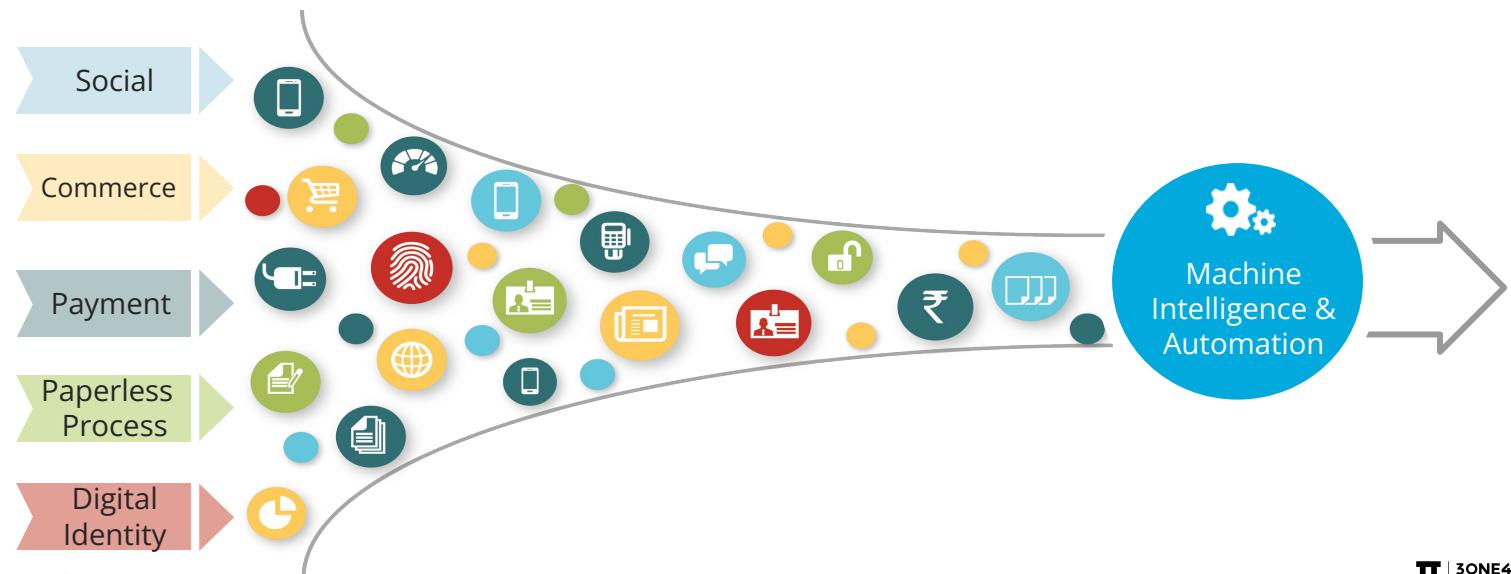
-  Onboarding Time down from 1 day to 4 minutes
-  Onboarding Rate 50M < 2 months
-  Saved INR 15 / Sim Issued
-  Customer Experience "Walk Out Working"
-  Saved 15000 Trees

Source: McKinsey & Company - Financial Services and Digital practices

TV Mohandas Pai © Zone4 Capital

We will go from data poor to data rich nation in 5 years!

Cashless, Paperless & Presence-less Service Delivery



India's Banking fundamentals are strong



122,102
bank branches of
scheduled
banks in India



209,507
ATMs of
scheduled banks
in India



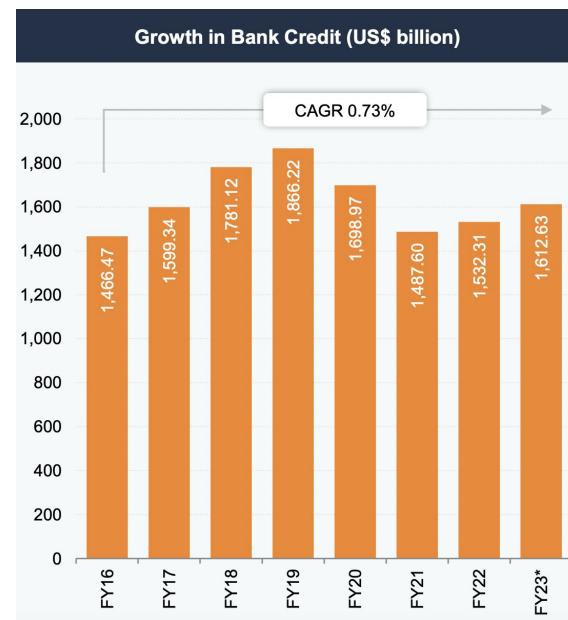
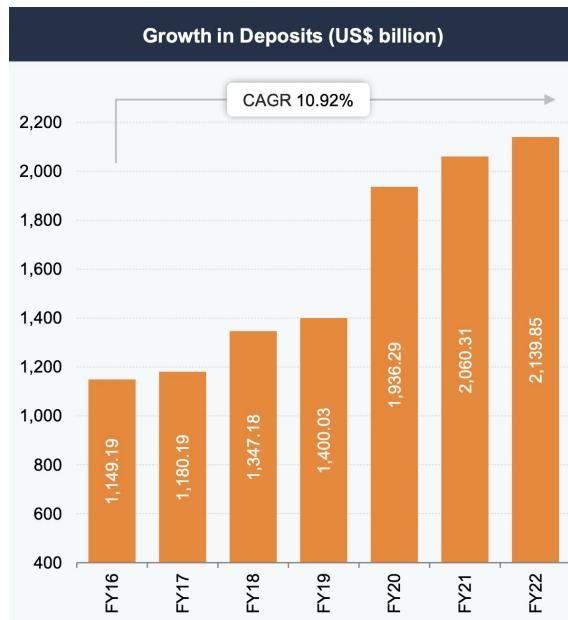
485 Mn
Bank accounts opened
by the Government
since 2014



USD 1.6 Tn
Aggregate credit for
scheduled commercia
banks in India



USD 2.1 Tn
In total scheduled
commercial bank deposits
in India

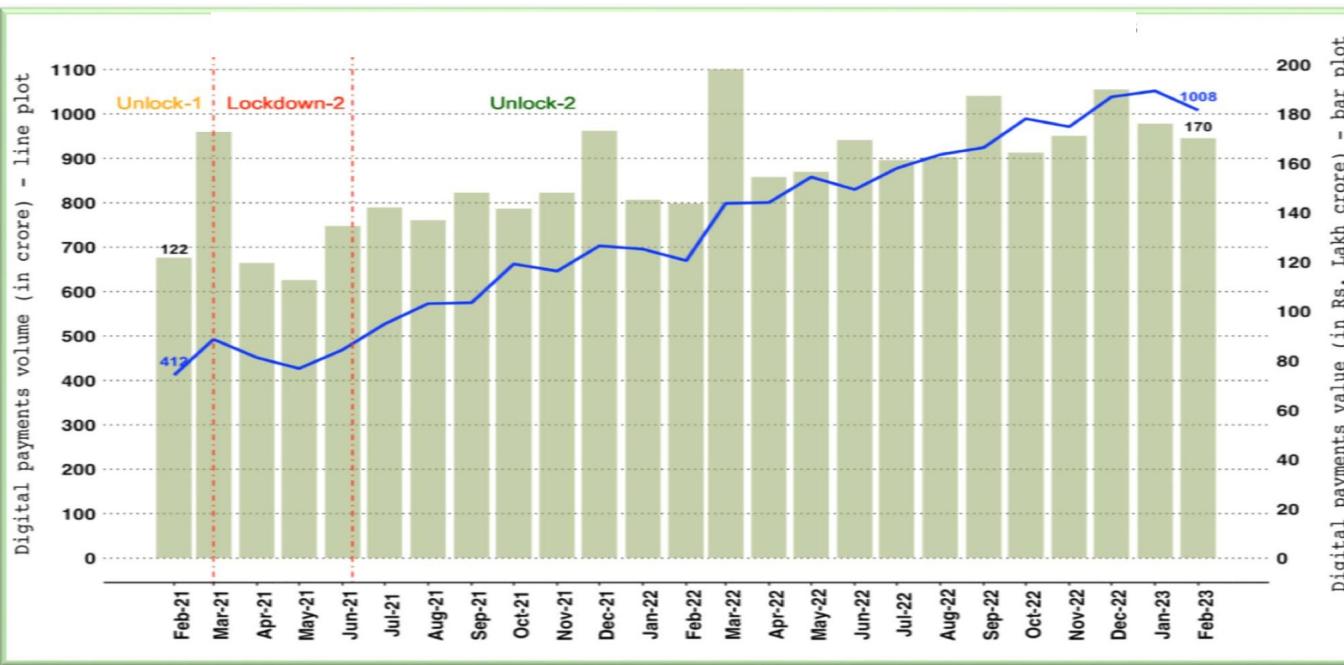


Full Stack Digital Banking Services by Neo Banks is the Future

Top Players	Traditional Banks	NBFCs	Neo Banks
2010	   	Diversified  Gold Loan  	Housing Finance  Indiabulls HOUSING FINANCE Consumer – SME & Vehicle  Reliance CAPITAL
2022	     	Diversified   Gold Loan  	Housing Finance  Consumer – SME & Vehicle   For SME  For Consumer     

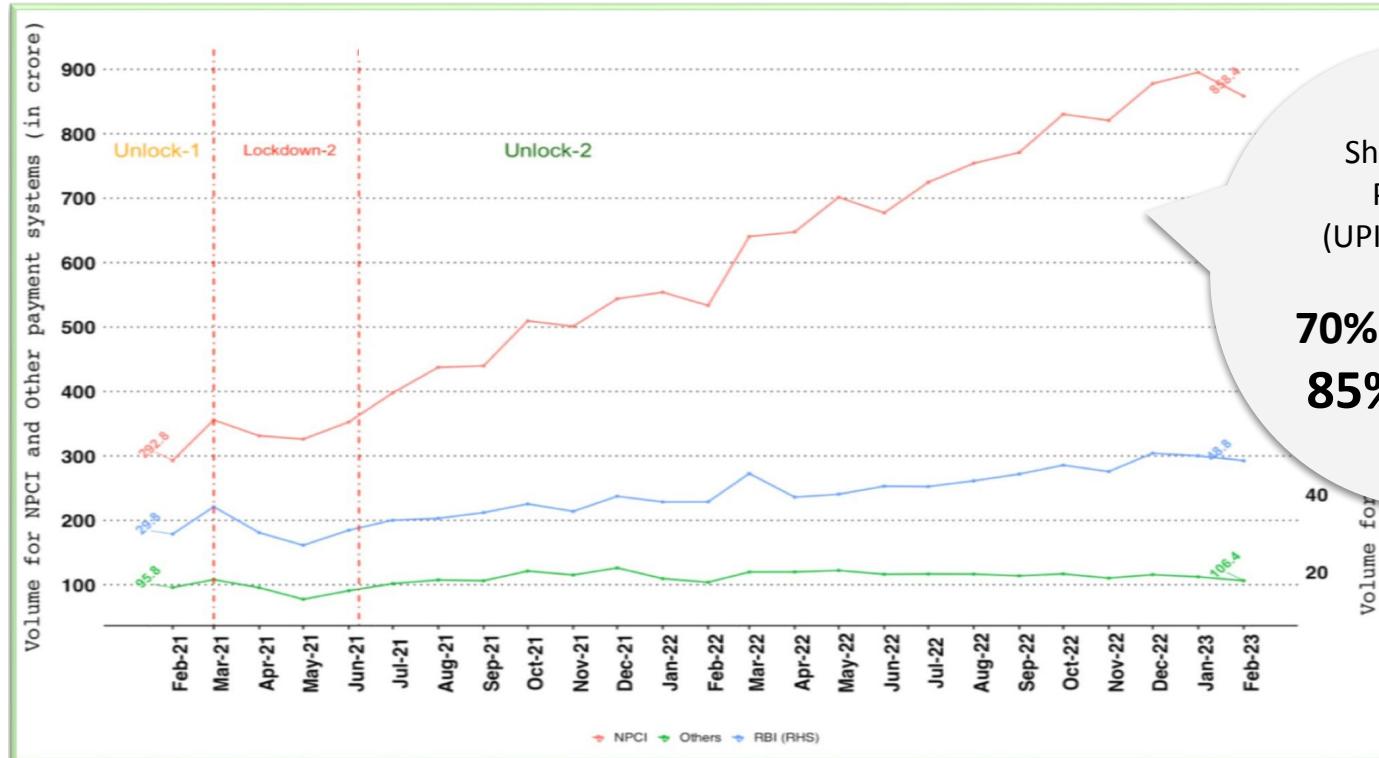
Digital Payments in India

Trends in Digital Payment Transactions



Digital Payments Volume grew from **4.12 billion** in February 2021 to **10.08 billion** in February 2023.

Share of Digital Payment Methods



Share of NPCI Payments (UPI+IMPS) grew from

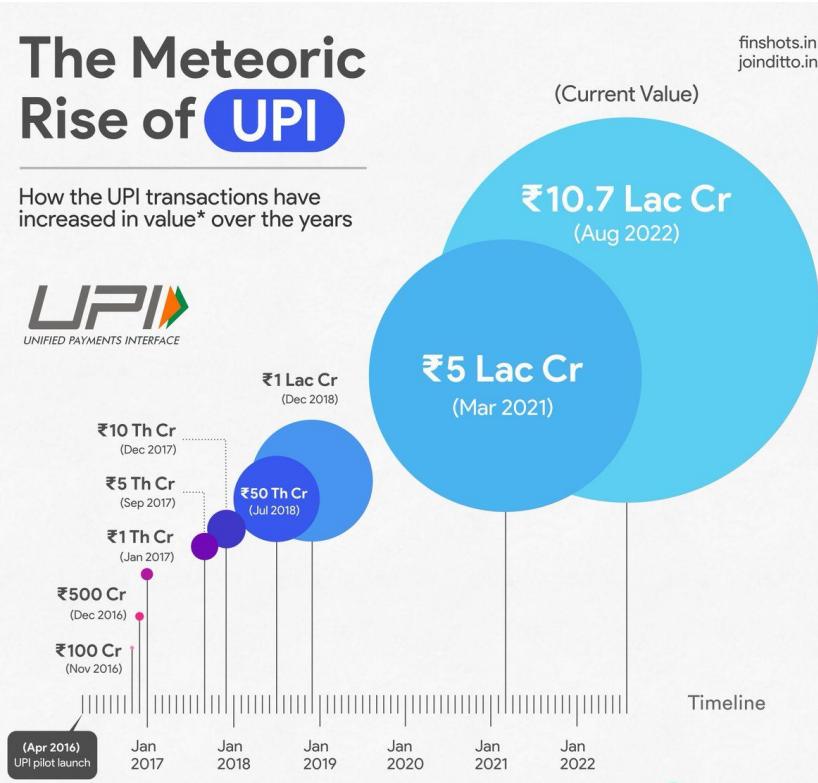
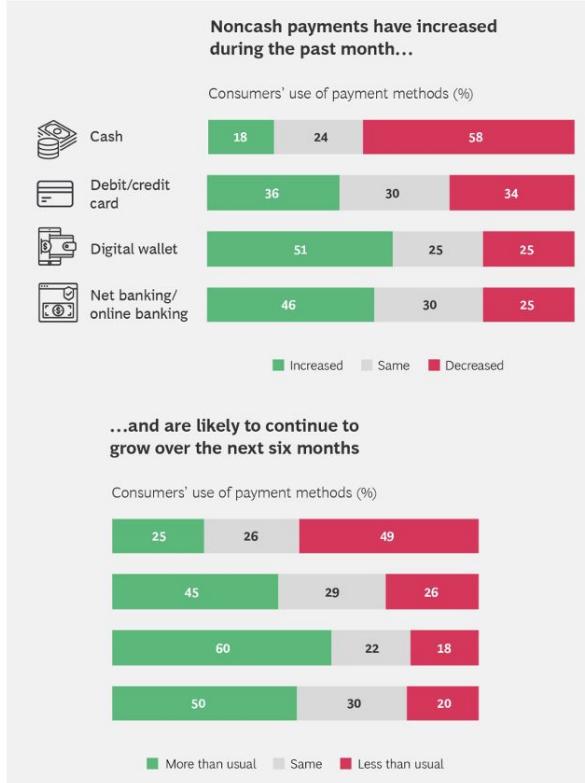
70% in Feb 2021 to
85% in Feb 2023

RBI payment systems: RTGS (customer and inter-bank transactions) and NEFT

NPCI payment systems: IMPS, NACH, UPI (including BHIM & USSD), BHIM Aadhaar Pay, AePS fund transfer and NETC (linked to bank account).

Other payment systems: debit and credit card payment transactions (excl. cash withdrawal), wallet and PPI card payment transactions (excl. cash withdrawal).

Steady Transition to a No-Cash future

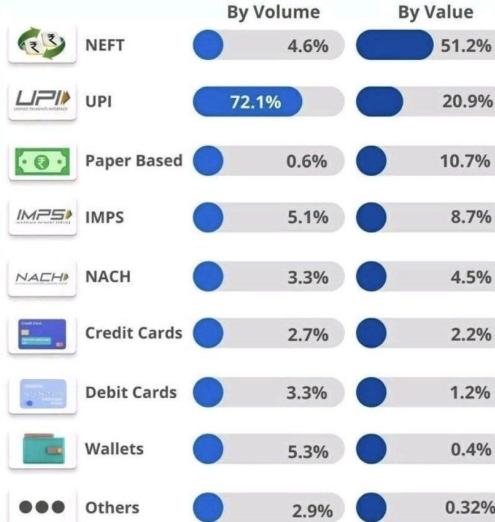


8.68 Bn
Monthly UPI transactions volume in March 2023

USD 176.31 Bn
Monthly UPI transaction value for March 2023

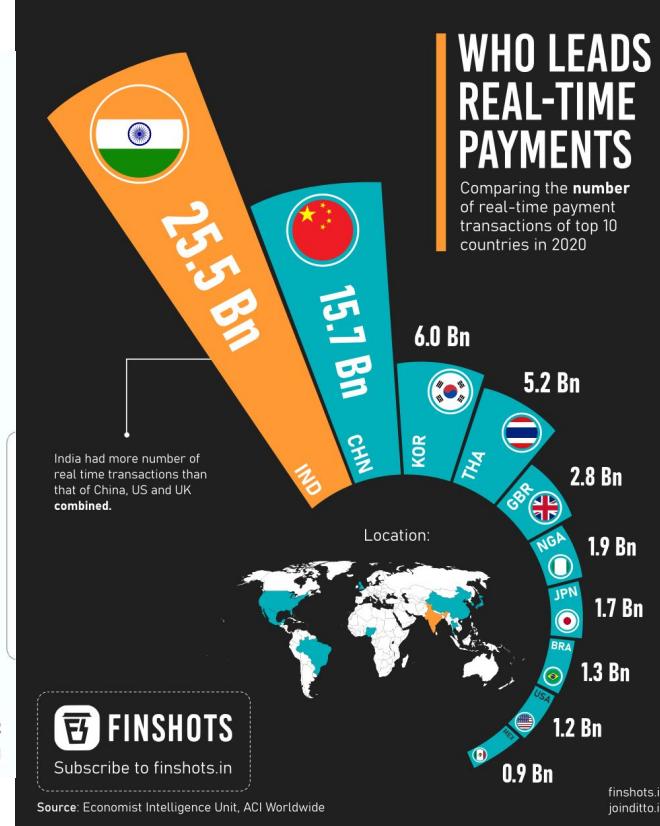
India is a leader in real-time payments

HOW INDIA PAYS



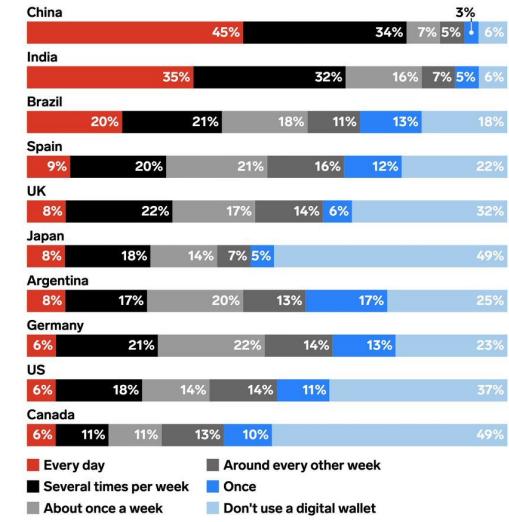
(%) Retail Payments Share for Aug 2022

Source: rbi.org.in



Digital Wallet Usage Among Adults in Select Countries, May 2022

% of respondents



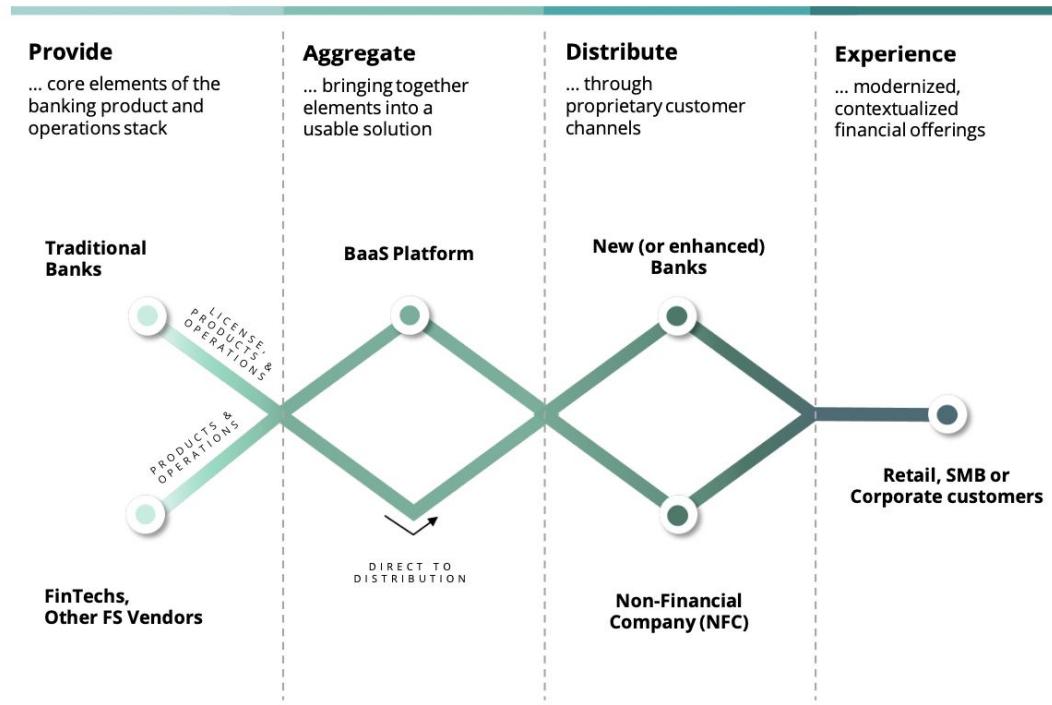
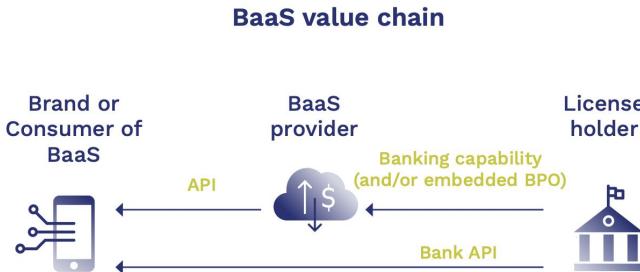
Source: Morning Consult, "The State of Consumer Banking & Payments H2 2022," Aug 16, 2022

277518

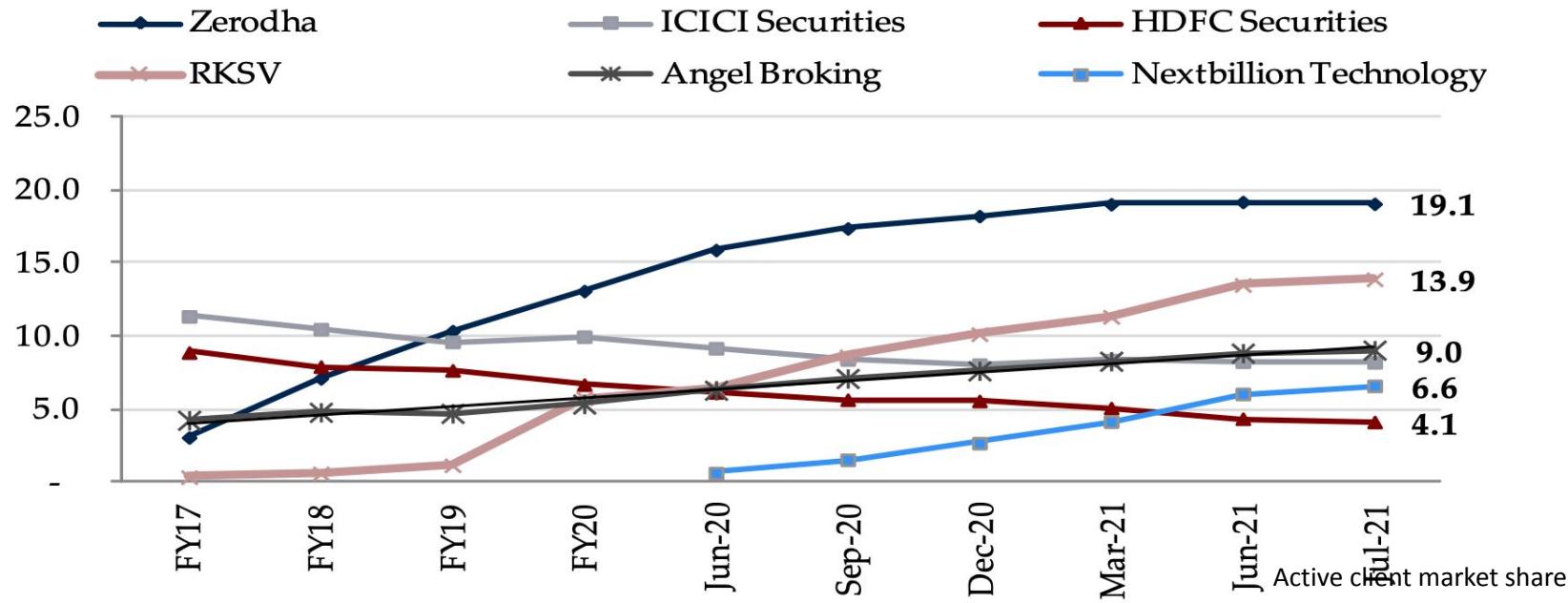
InsiderIntelligence.com

Banking-as-a-Service is disrupting banking value chains

BaaS is reconfiguring the banking value chain by enabling third-party distributors to offer banking products and services.



Zerodha and the Rise of Digital Broking

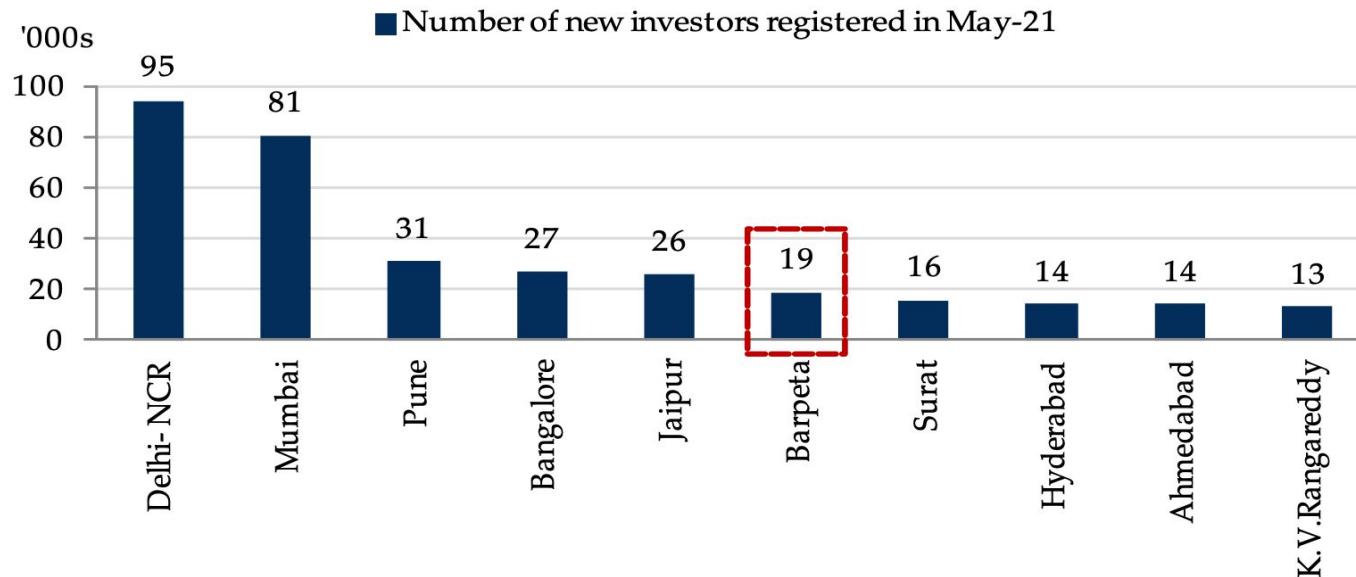


Note: HSIE Research operates under the HDFC securities legal entity
Source: NSE, HSIE Research

Digital Broking - Not a Tier-1 Phenomenon

Barpeta, a city in Assam with a population of just 1.9mn (1/4th of Hyderabad, 1/5th of Ahmedabad and 1/3rd of Surat) beat Surat, Hyderabad and Ahmedabad in terms of new investor additions.

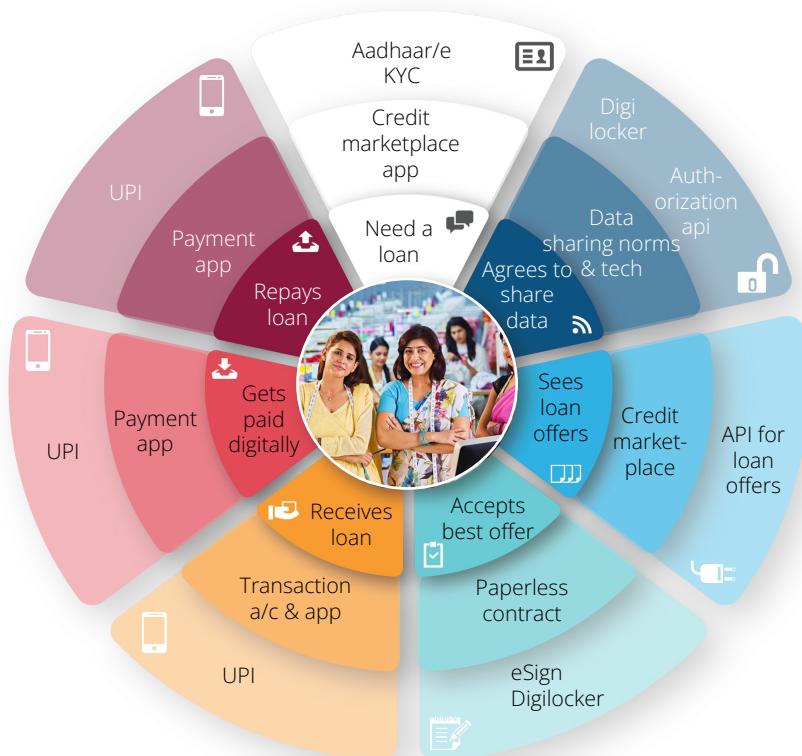
Top 10 districts in terms of new investors



Source: NSE, HSIE Research

TV Mohandas Pai | Zone4 Capital

Credit without friction



Paperless instant credit markets based on digital tools

Bringing millions into the formal economy



“ New Digital Public Goods
(DPGs) will serve as India’s
startup flywheel for this decade ”

Consented Data Exchange

Account Aggregator

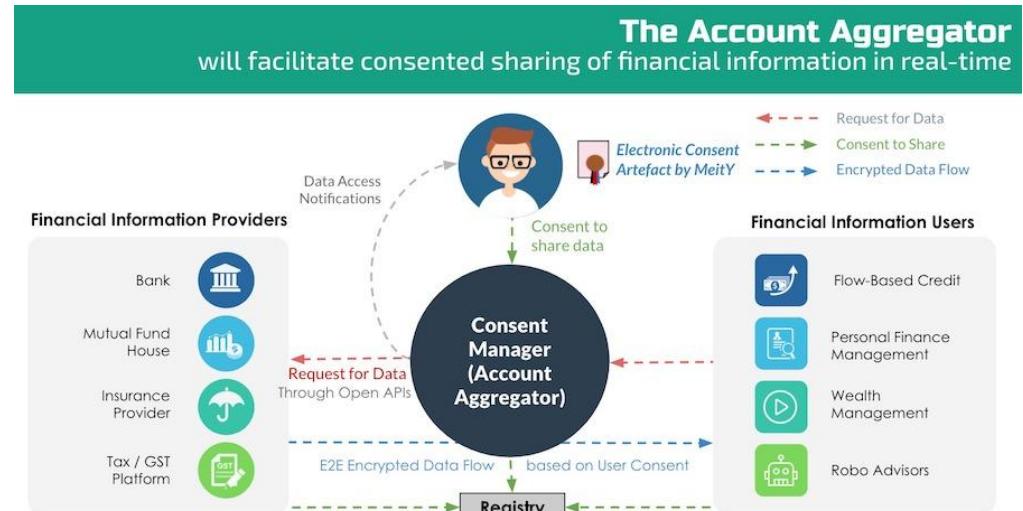
Problem(s)

- Individual data siloed between financial institutions and service providers.
- Collation & centralization is hard, expensive, time consuming, still a largely physical process.

Solution(s)

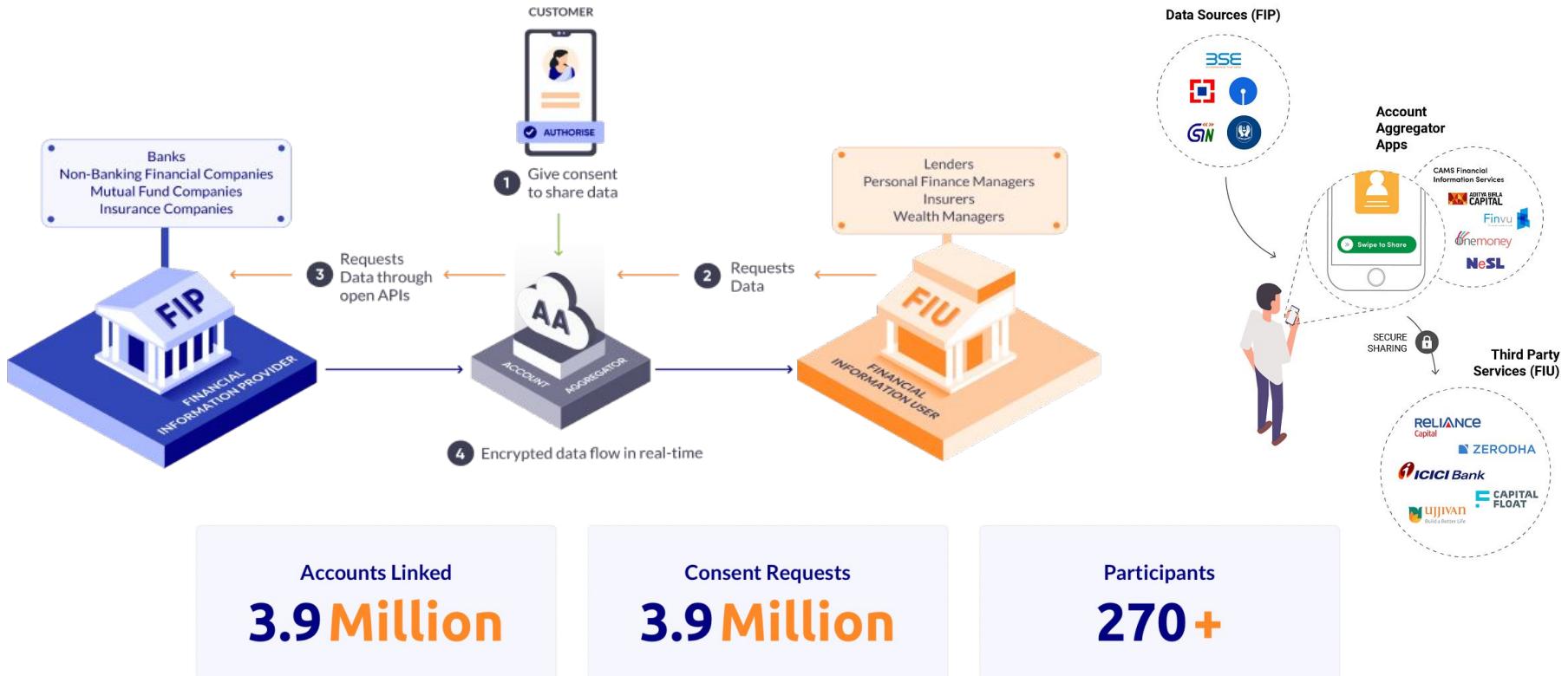
- An AA acts as the digital intermediary to manage data flows based on consent from an individual.
- AA is data-blind. Data that flows through AA is encrypted.
- Electronic Consent Artefact is architected and approved by MeitY.
- RBI approves AA through licenses and has oversight on the ecosystem including FIPs, and FIUs.

AA is supported by RBI, SEBI, PFRDA, IRDA.

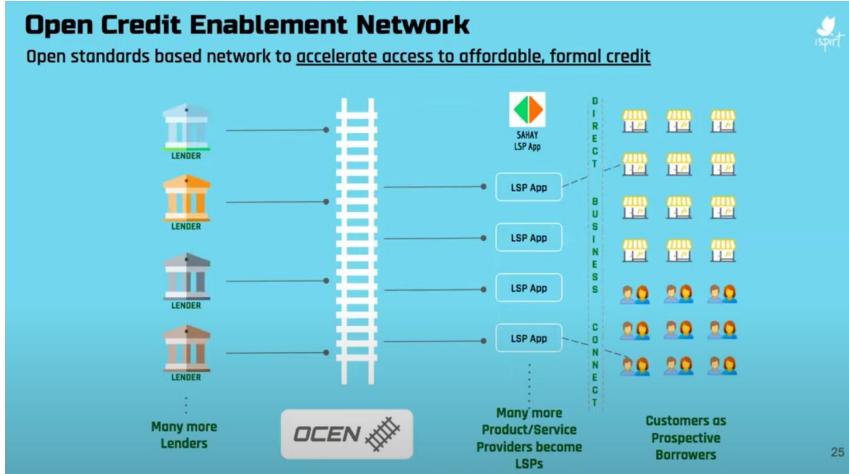


Account Aggregator framework at work

India's AA framework is pioneering consented, real-time sharing of financial information.



Consented Data Exchange



Problems

- Cost of lending is so high that small loans become unfeasible.
- MSME credit gap of over \$330Bn.

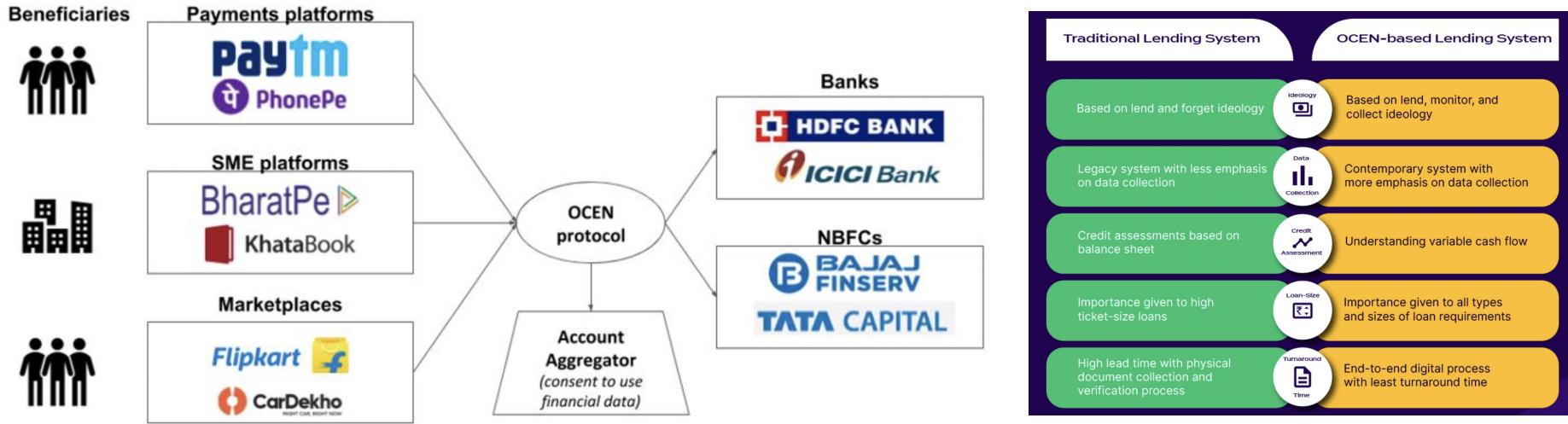
Solutions

- Shift focus from balance sheet lending to cashflow-based lending.
- Common language for lenders and marketplaces to build innovative, financial credit products at scale.

- Connecting Lenders, LSPs, and Borrowers in a secure marketplace framework.
- Open APIs for credit products.

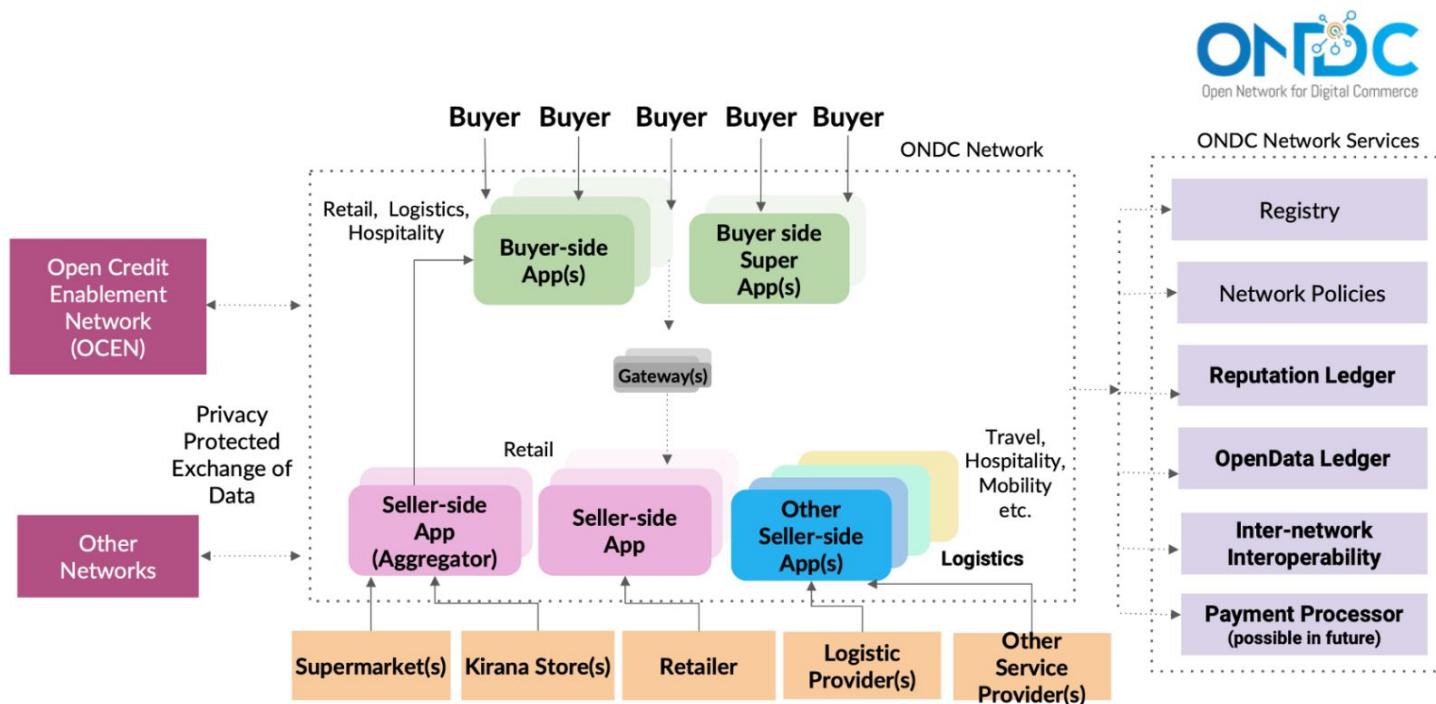
OCEN will holistically disrupt Digital Lending

Using the AA framework, the Open Credit Enablement Network (OCEN) will revolutionise digital lending



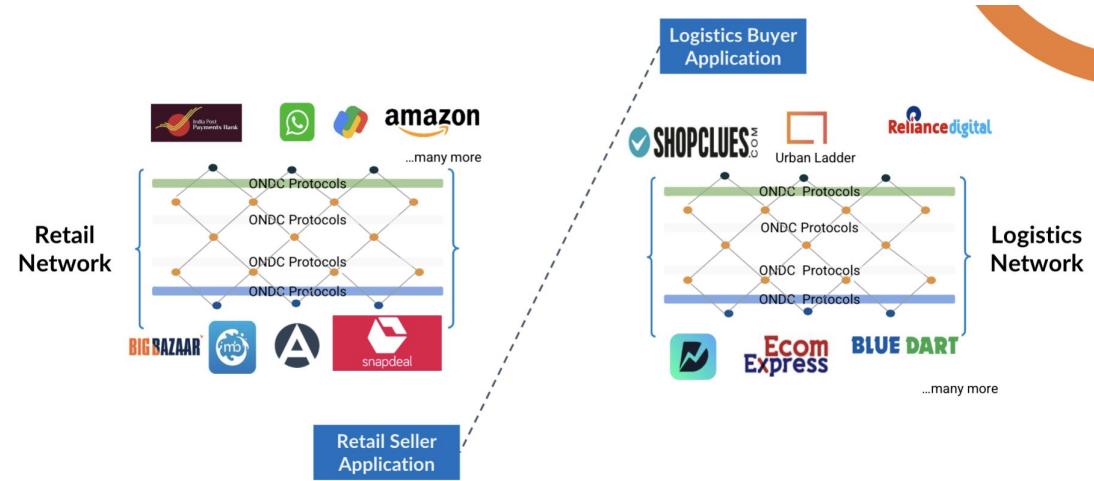
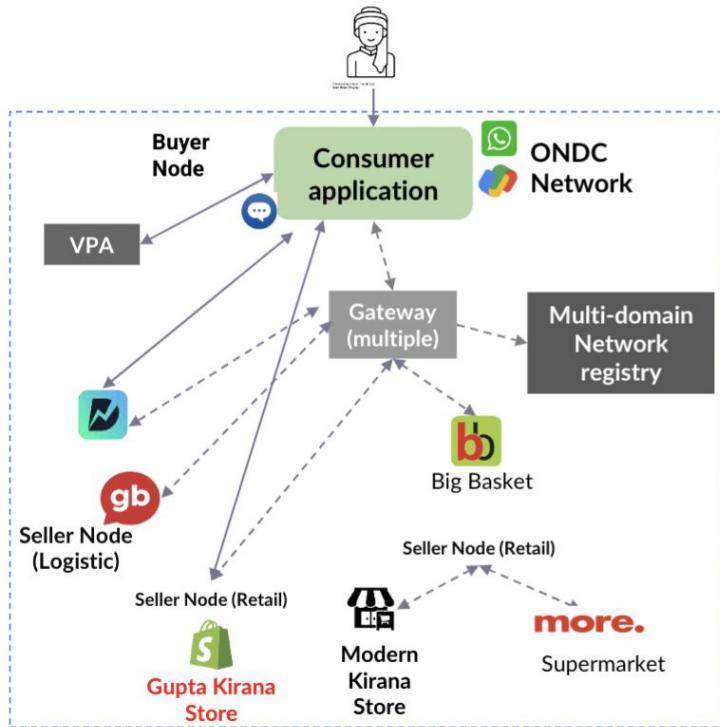
ONDC is set to unbundle digital commerce

Open Network for Digital Commerce (ONDC) is a network based on open protocols and will enable local commerce across segments, such as mobility, grocery, among others, to be discovered and engaged by any network-enabled application.



The ONDC platform has received investments of Rs. 157.5 crore (US\$ 20.30 million) for the first stage of the project from 17 banks and financial institutions.

Taking a peek into the future: a sample buying journey on ONDC



India's emerging National Health Stack



National Health Stack

GOVT & PRIVATE APPS & PLATFORMS

Diverse user experiences & innovative solutions



Augmentation Layer
Enhancing capabilities of all actors



Plumbing Layer
Streamlining flow of patients, health information and money



JAM & INDIA STACK
Cross domain generic building blocks

CONSUMER APPS/PORTALS

Private Sector

Public Sector

Other Apps

HEALTH PROVIDER APPS/PLATFORMS

HIMS/ LIMS

Other Platforms

Gamifier Payers

Preventive Care Fiduciary

Treatment Care Fiduciary

PROTOCOL SERVER

PERCEPTRON/ DIAGNOSTIC BOTS

MATCHING ENGINE

ELECTRONIC REGISTRIES

Doctor registry
Facility registry
Procedure registry
Drug registry
...

PERSONAL HEALTH RECORDS

E-prescription
E-discharge summary
Diagnostic e-reports
...

ELECTRONIC CLAIMS SWITCH

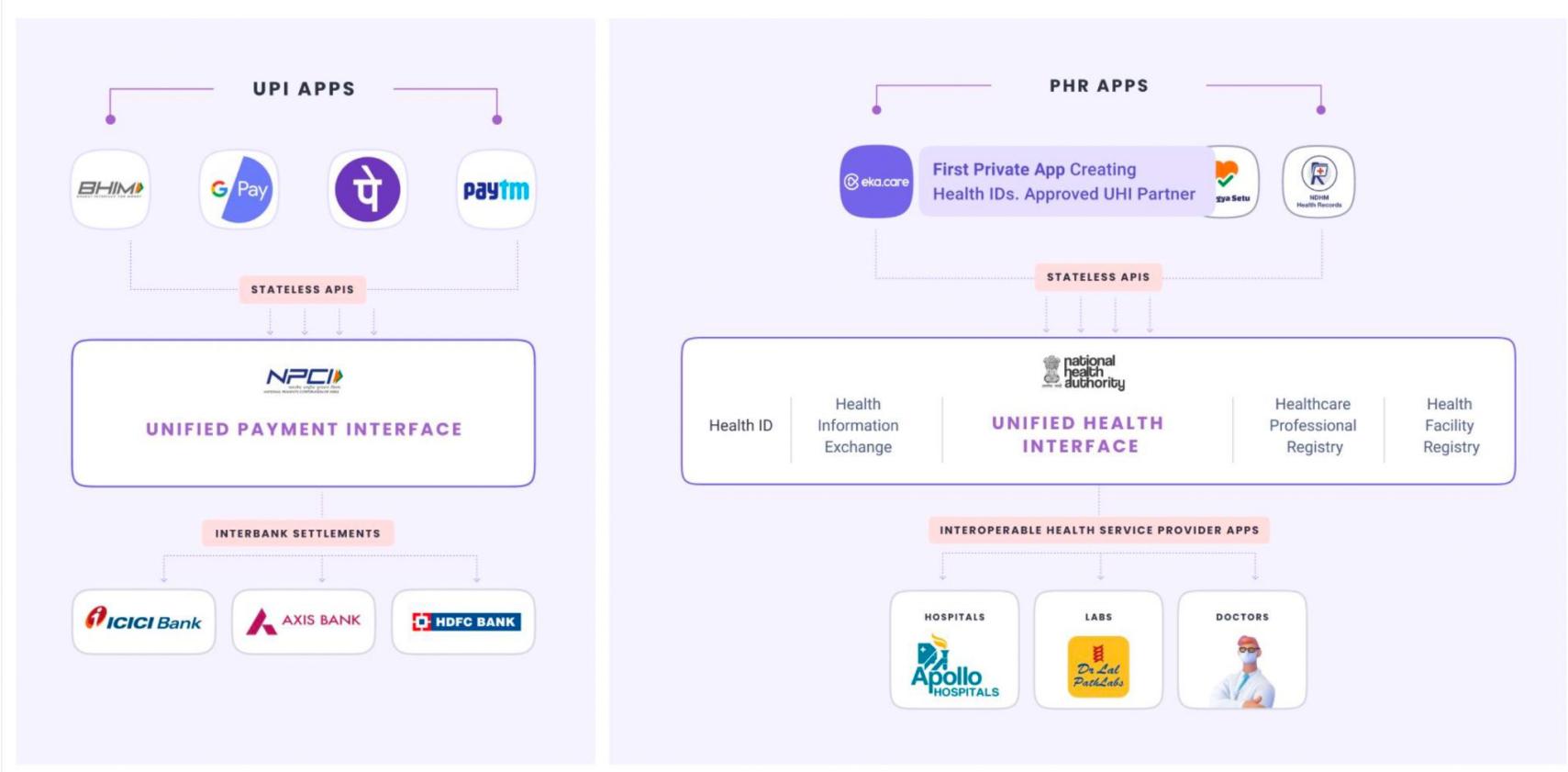
E-claims
Ayushman Bharat e-Vouchers
...

JAM & INDIA STACK

Private Innovation

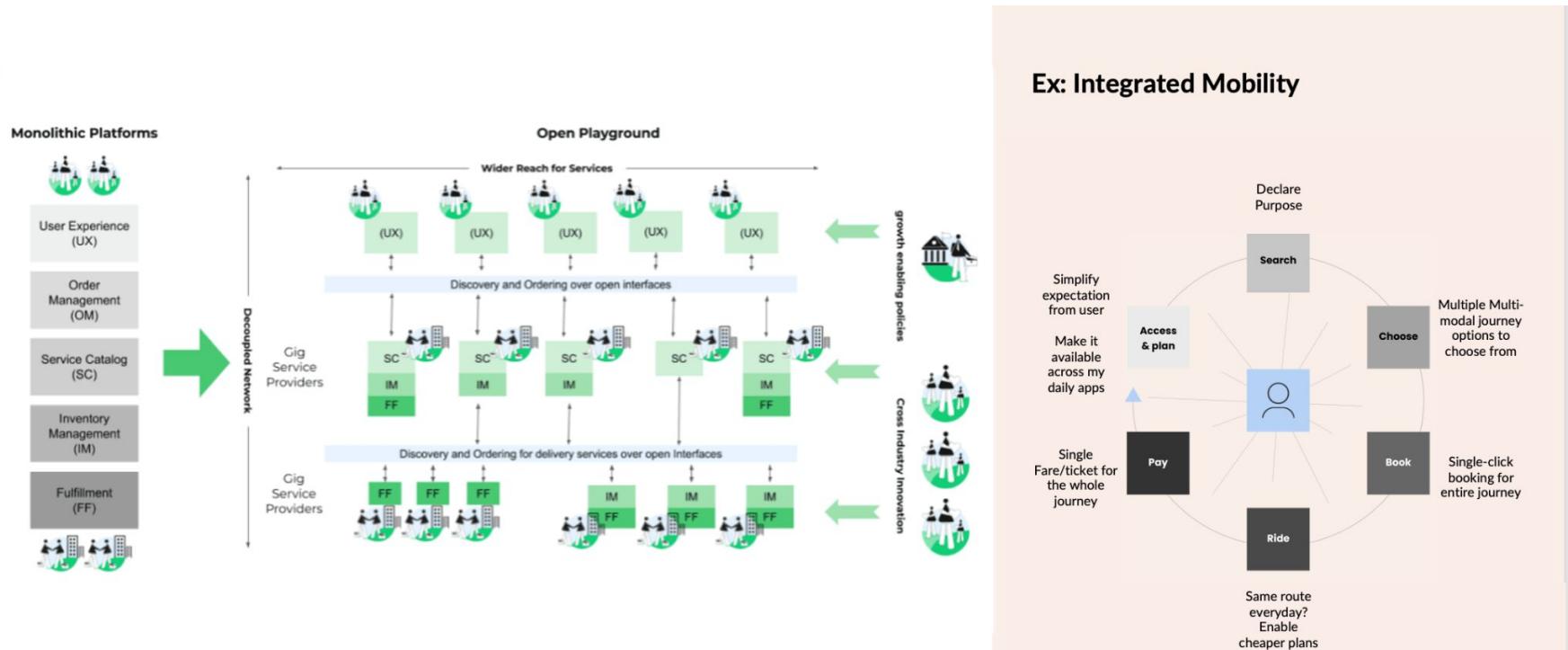
Digital Public Infrastructure

UPI moment in Indian Healthcare

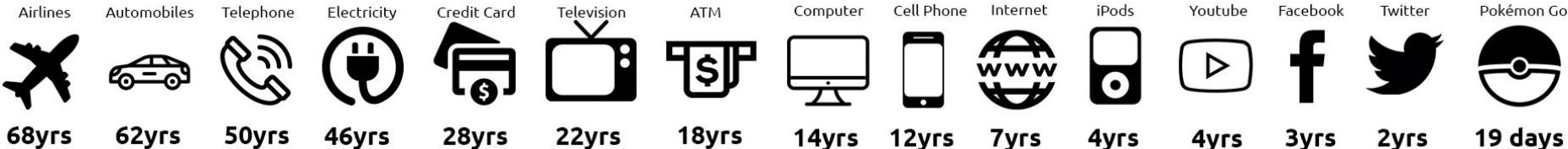


Open protocols are reimagining entire industries and ecosystems

The Beckn Protocol, for instance, is revolutionising urban mobility.



Number of years to 50Mn users



Aarogya Setu becomes world's fastest app to reach **50M downloads**.
Now at +220M users.



Aarogya Setu

मैं सुरक्षित | हम सुरक्षित | भारत सुरक्षित

13 days

Rise of Indian Tech Conglomerates

FANTASTIC FOURTEEN

INVESTOR	DEAL VALUE (₹ crore)	STAKE
15 JULY Google	33,737	7.7%
12 JULY Qualcomm	730	0.15%
3 JULY Intel	1,894.5	0.39%
18 JUNE PIF	11,367	2.32%
13 JUNE L Catterton	1,894.5	0.39%
13 JUNE TPG	4,546.8	0.93%
7 JUNE ADIA	5,683.5	1.16%
5 JUNE Silver Lake	4,547	0.93%
5 JUNE Mubadala	9,093	1.85%
22 MAY KKR	11,367	2.32%
17 MAY General Atlantic	6,598	1.34%
8 MAY Vista	11,367	2.32%
3 MAY Silver Lake	5,656	1.15%
22 APRIL Facebook	43,574	9.99%



Stake Sold: 32.97%
 Money Raised: INR1.52L
 Cr
 Debt: Zero

FACEBOOK **Google**

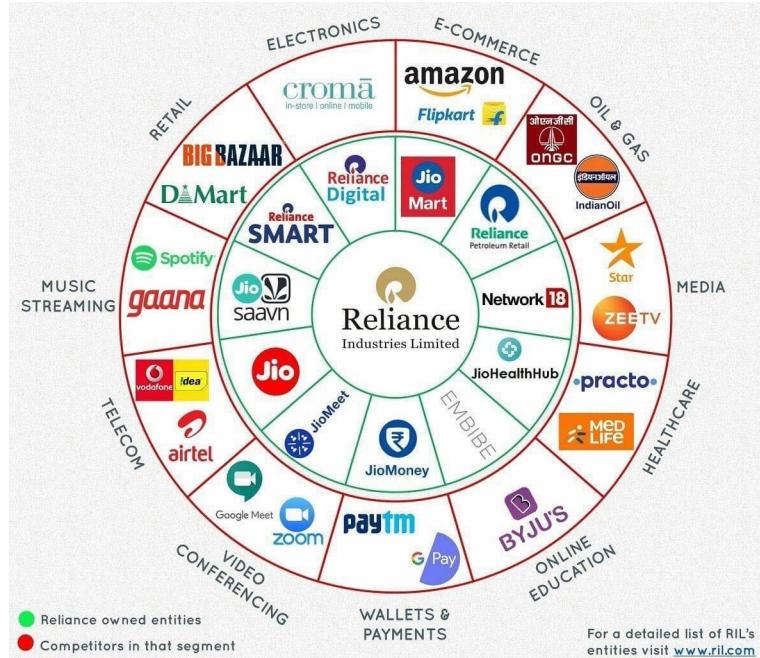
Technology Partners & Investors



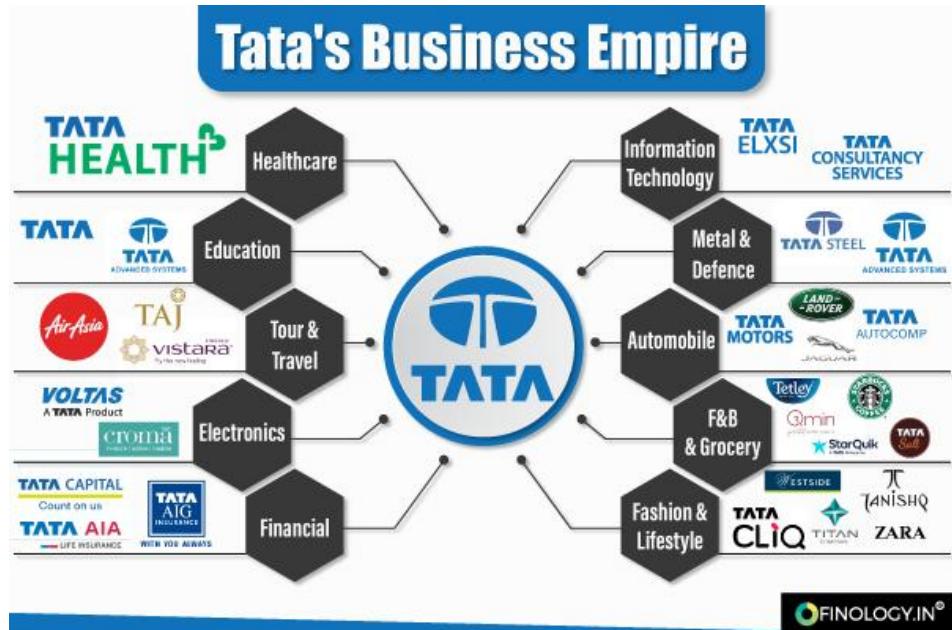
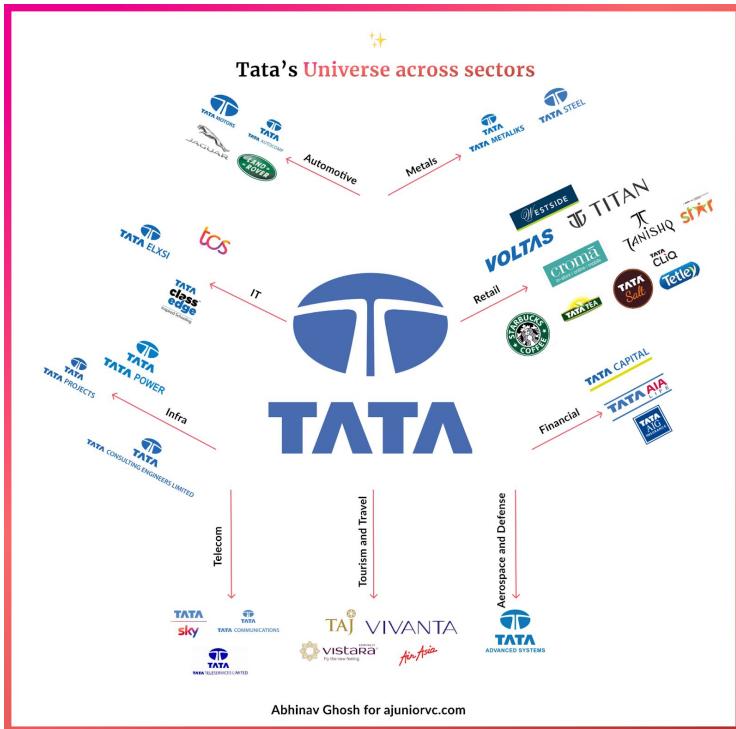
Sovereign Fund Investors



Institutional Investors

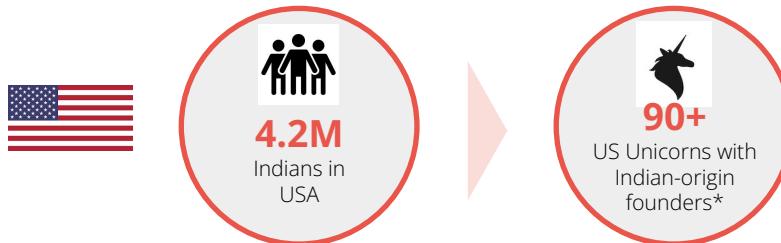


Rise of Indian Tech Conglomerates



Abhinav Ghosh for ajuniorvc.com

Indians are creating Unicorns Globally

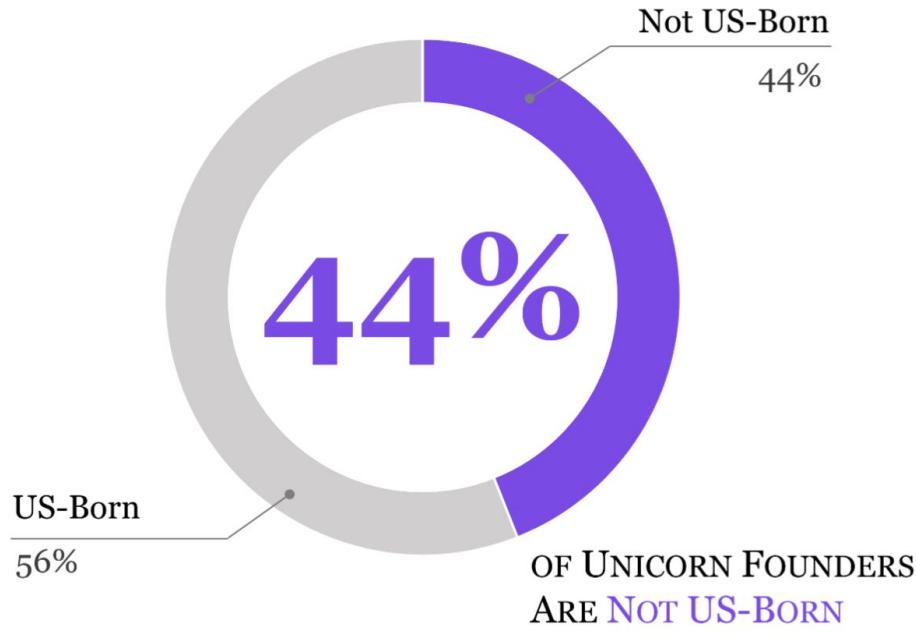


Notable US startups with Indian origin founders



Indians are creating Unicorns Globally

Indians dominate the list of non-US born unicorn founders in the United States



Top 10 Countries for Not US-Born

- | Country | Number of founders |
|---------|--------------------|
| India | 90 |
| Israel | 52 |
| Canada | 42 |
| UK | 31 |
| China | 27 |
| Germany | 18 |
| France | 17 |
| Russia | 14 |
| Taiwan | 12 |
| Ukraine | 12 |

Data covers 531 US companies that became unicorns between 1997 – 2019.

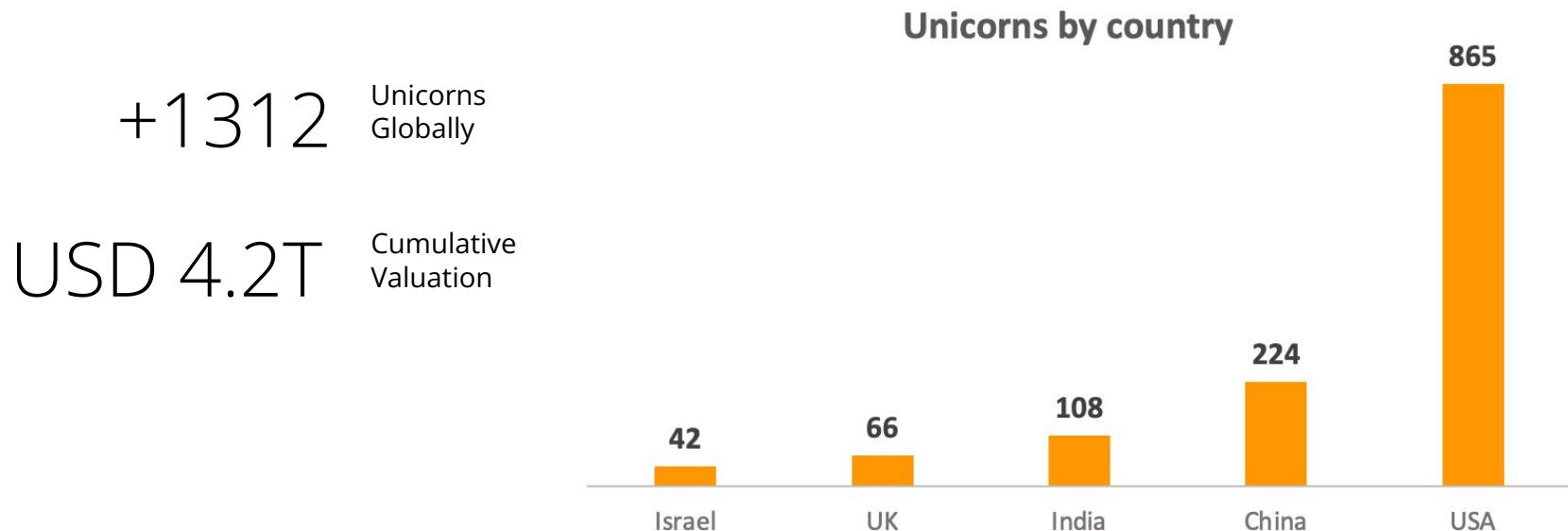
Source: ILYA STREBULAEV, VENTURE CAPITAL INITIATIVE, STANFORD GRADUATE SCHOOL OF BUSINESS (01/2022)

IlyaStrebulaev



India – Now Top 3 for Value Creation

After US and China, India remains the top startup ecosystem for value creation



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

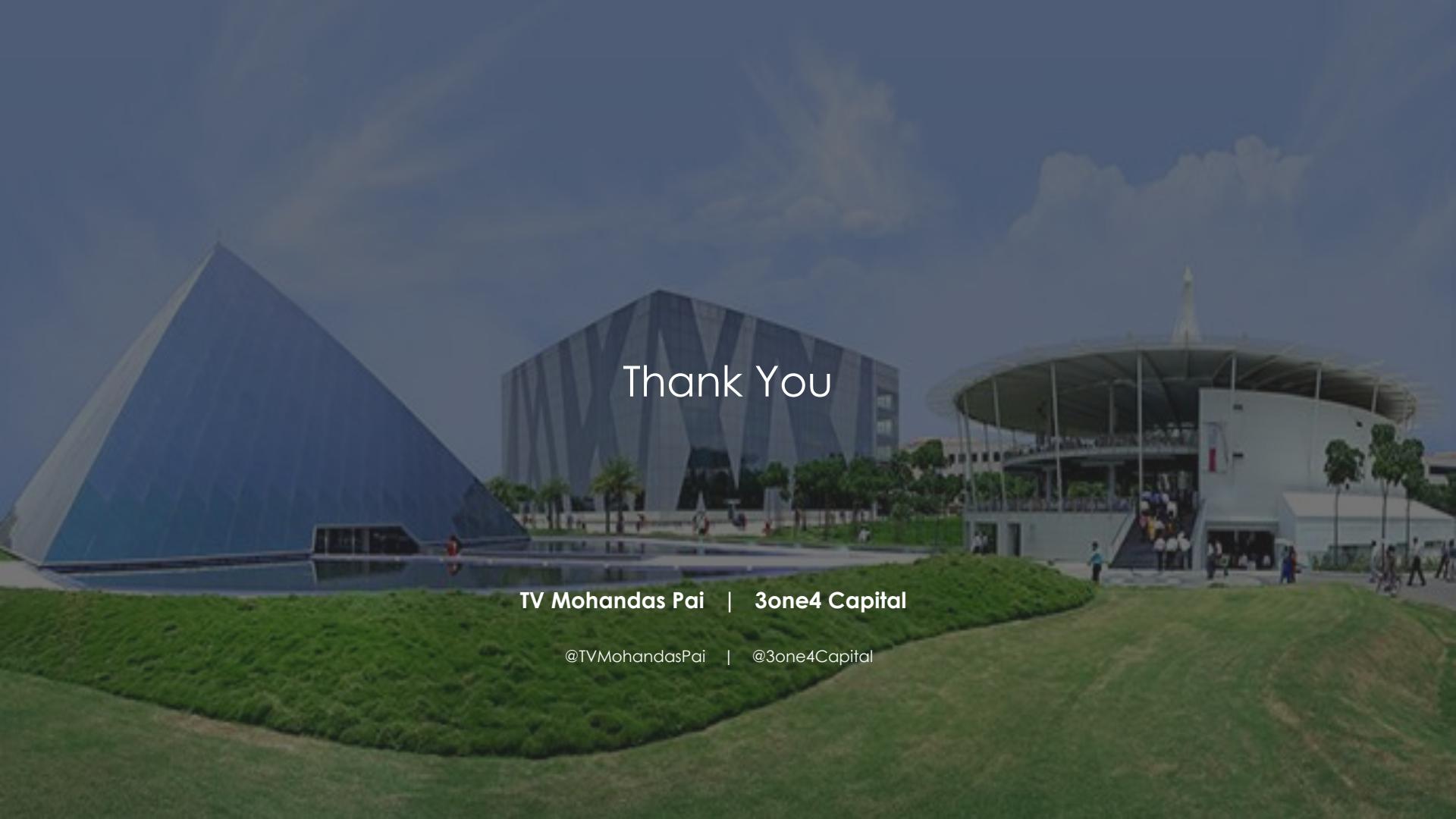
100s of Experiments

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



“ India is optimizing to empower problem solvers. Startups will be the force multiplier to catapult the country into a **USD 10 Trillion** economy ”

Join the conversation on Twitter with @TVMohandasPai and @3one4Capital



Thank You

TV Mohandas Pai | 3one4 Capital

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