

# Indus Valley Annual Report 2022

Sajith Pai | [sp@blume.vc](mailto:sp@blume.vc)

Amal Vats | [amal@blume.vc](mailto:amal@blume.vc)



## Introducing Indus Valley, and welcome to the *Indus Valley Annual Report 2022*

India's vibrant startup ecosystem, concentrated in the eastern suburbs of Bangalore, the satellite cities of Gurgaon and Noida in National Capital Region (NCR) surrounding Delhi, the districts of Lower Parel & the Andheri East – Powai belt in Mumbai, the Southern suburbs of Chennai, and in the various scattered pockets across many other cities such as Pune, Hyderabad, Chandigarh etc., has lacked a name.

At Blume, we like to use **Indus Valley** as a catch all moniker for the Indian startup ecosystem. It is a twist on the typical Silicon Wadi / Glen / Fen naming convention, as well as a reference to the Indus Valley Civilisation, one of the vibrant centres of the ancient world, and the ancestral civilisation of the Indian people.

Unlike Silicon Valley which has a geographical connotation, the term Indus Valley has no such overtone. It is instead a reference to the entire Indian startup ecosystem, spread throughout the nation. It is also an attitude, a mindset; of invention, and 'jugaad' and chutzpah.

The **Indus Valley Annual Report** is an opportunity to celebrate the rise of Indus Valley, and its emergence as one of the centres of innovation and enterprise in the startup world. It gives us a chance to look back, and take stock of its rise and evolution, and also look ahead to what is coming. We welcome you to the first edition of the Indus Valley Annual Report!

## How to read this report

This is not a data book. We didn't create it to serve as an exhaustive repository of data or reportage on India. Rather, it is more a narrative, and less a dataguide. Or even better, you should see it as a source of perspective on the Indian startup ecosystem. And as with all perspectives a lot depends on the vantage point of the observer. As the leading seed fund in India, we do think we have a unique perspective and insight into the Indian startup ecosystem, or Indus Valley, as we term it. And with *The Indus Valley Report*, we hope to get you, dear reader, to view the Indian economy through our lens. Do tell us how you see it. Compliments, criticism, feedback all welcome.

# Section I: Understanding India



# India in one tweet

QR codes for traffic signal shopping



Guy selling pens at signals using Gpay to accept payments.. [@peakbengaluru](#)



4:50 PM · Oct 3, 2020 · Twitter for Android

11 Retweets 90 Likes

UPI merchant payments accounted for 43% of POS digital payments in FY21, overtaking credit and debit cards in FY20.

It is now the most universal mode of payments either Peer to Peer or Peer to Merchant. So much so that street and traffic vendors have adopted it.

The pic is a great example of two contradictions in one picture - a world class state of the art payment system, married with a traditional format of commerce - that of a street vendor.

# Understanding India Through



Contradictions



Data



Ideas of India

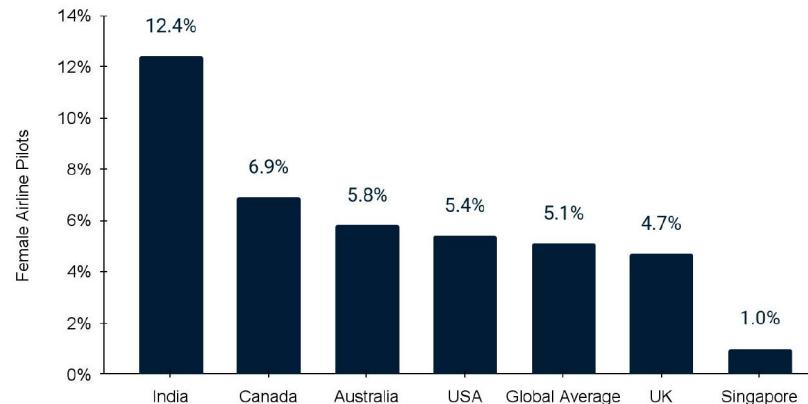


# A country of contradictions: women

India has the highest % of women pilots (of total pilots) globally but also a low & declining female labour participation rate.

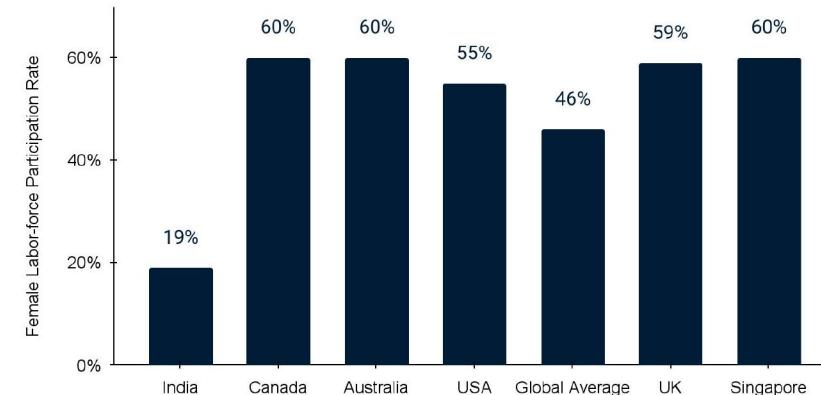
Female airline pilots

As % of overall pilots



Female labor-force participation

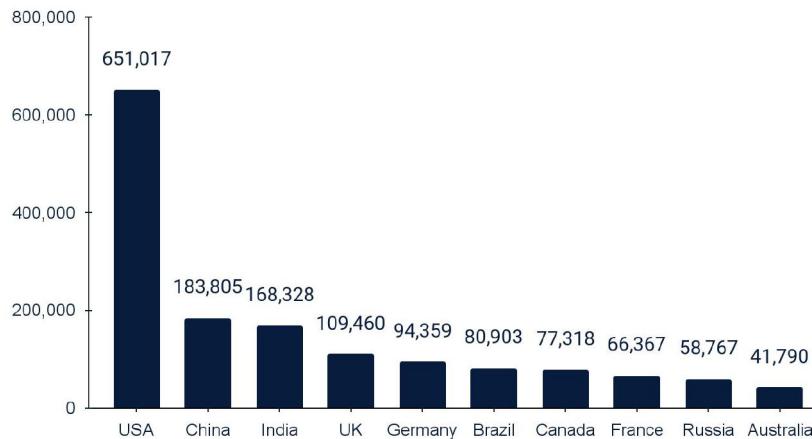
As % of all employable women



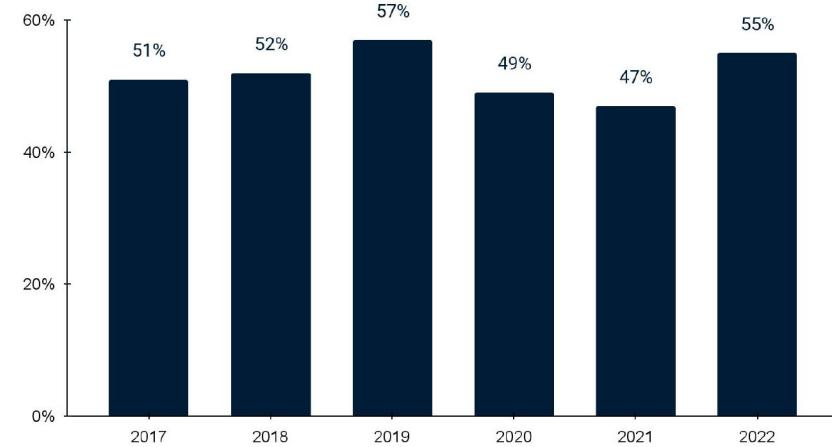
# A country of contradictions: engineers

India has the third highest representation on Github; yet just ~55% of engineers are employable.

#Github Accounts



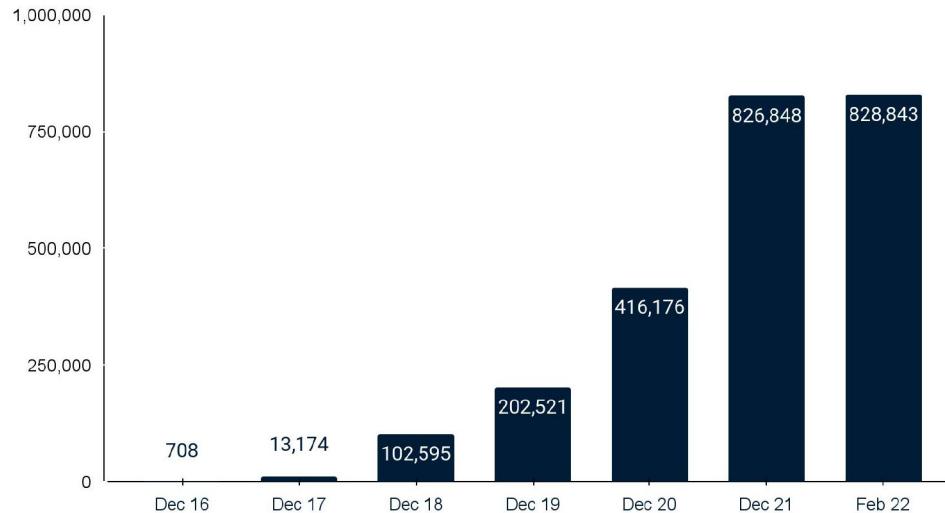
Employability % of Engineers



# A country of contradictions: payments

A frictionless payment system yet half of all ecommerce purchases are cash on delivery.

UPI - GMV (₹Cr)



of all eCommerce GMV is through cash-on-delivery



of all metro/ tier 1 eCommerce orders are paid for via cash-on-delivery



of all tier 2 eCommerce orders are paid for via cash-on-delivery



of all tier 3/ beyond eCommerce orders are paid for via cash-on-delivery

## Understanding India Through



Contradictions



Data

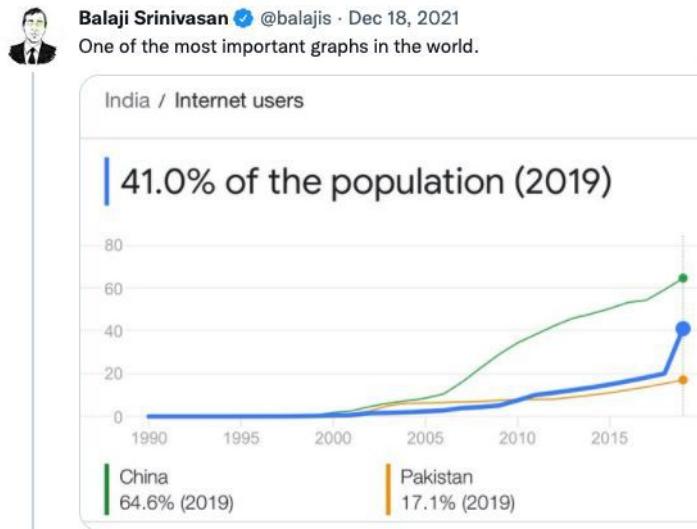


Ideas of India



# 'Give me a single chart to explain Indus Valley's rise'

Jio's entry into telephony through a 4G data first network in '17 expanded Internet access in India dramatically



Replies to @balajis and @Seb\_Vaessen

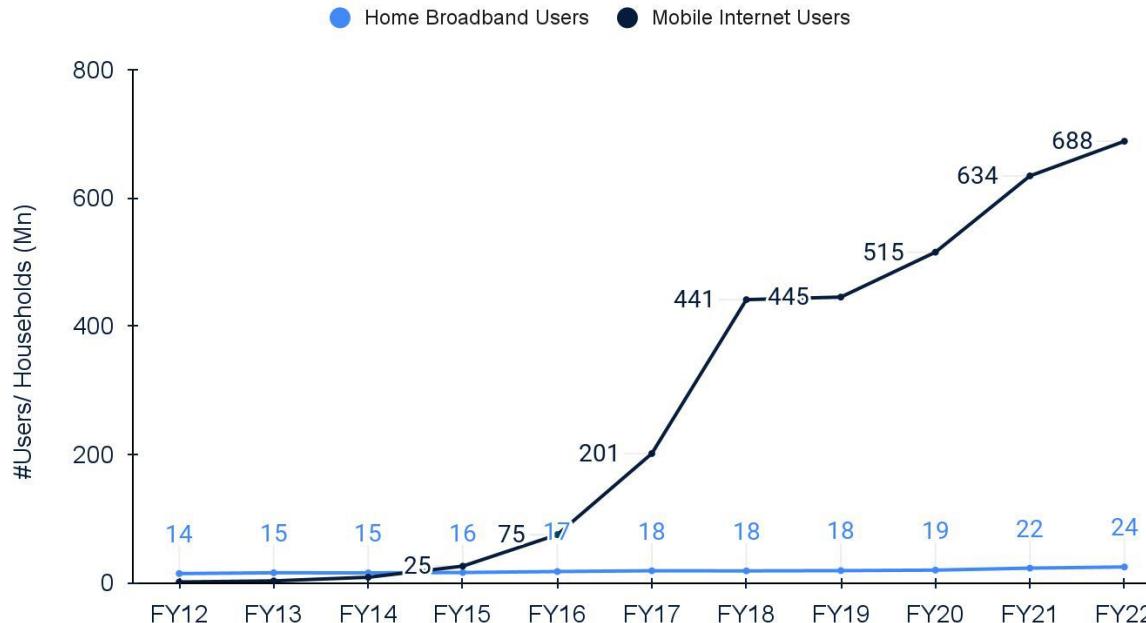
Amazing what a fight between two brothers straight out of a daytime soap opera can do for humanity ;)

8:23 PM · Dec 18, 2021 · Twitterrific for iOS

# All of that Internet is really the mobile internet though

And it emerged through an intense price war that saw the cost of data dropping by 97% from 2014!

Mobile internet users vs Fixed line broadband users

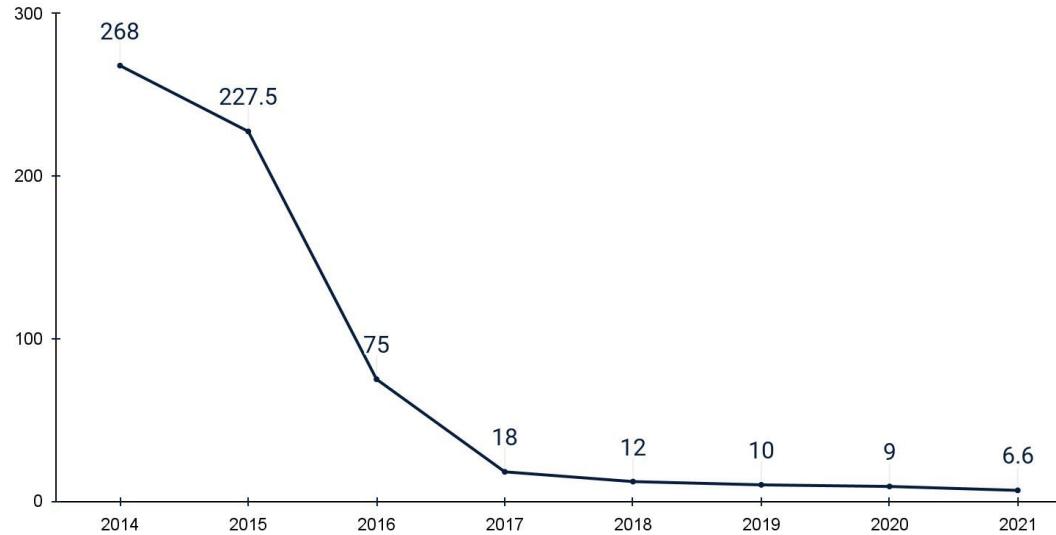


# Data Price Deflation

The sharp drop from '16 to '17 is thanks to the intense price war unleashed by Jio - the market shrank from 12 to 4 players!

Cost of 1GB of data in India

in INR

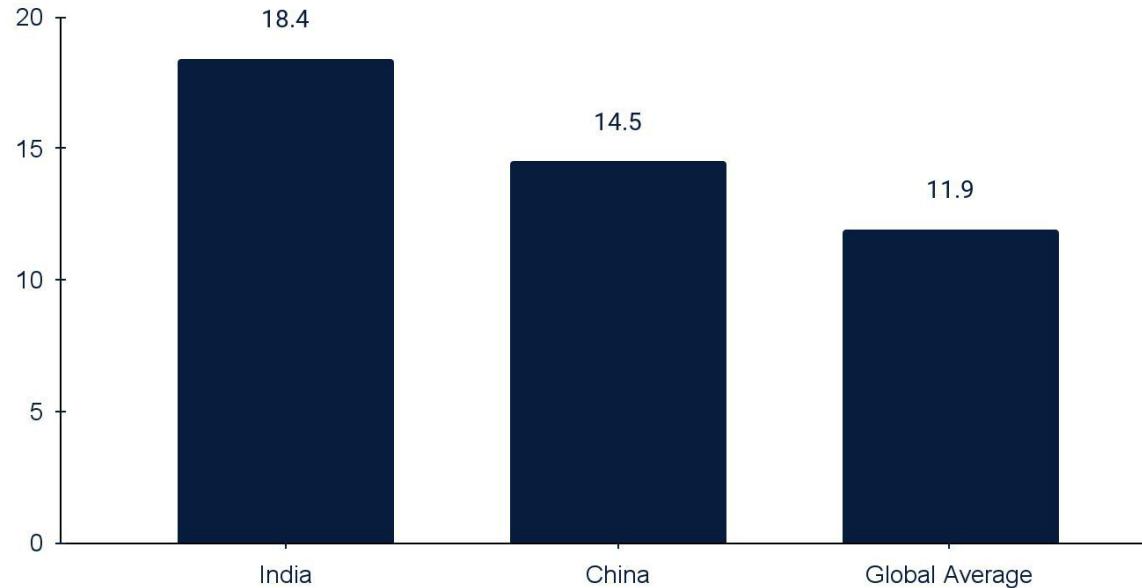


# A nation of browsers

All of that cheap data means that Indians are gorging on content and video calling.

Data Consumption per Smartphone

GB per month



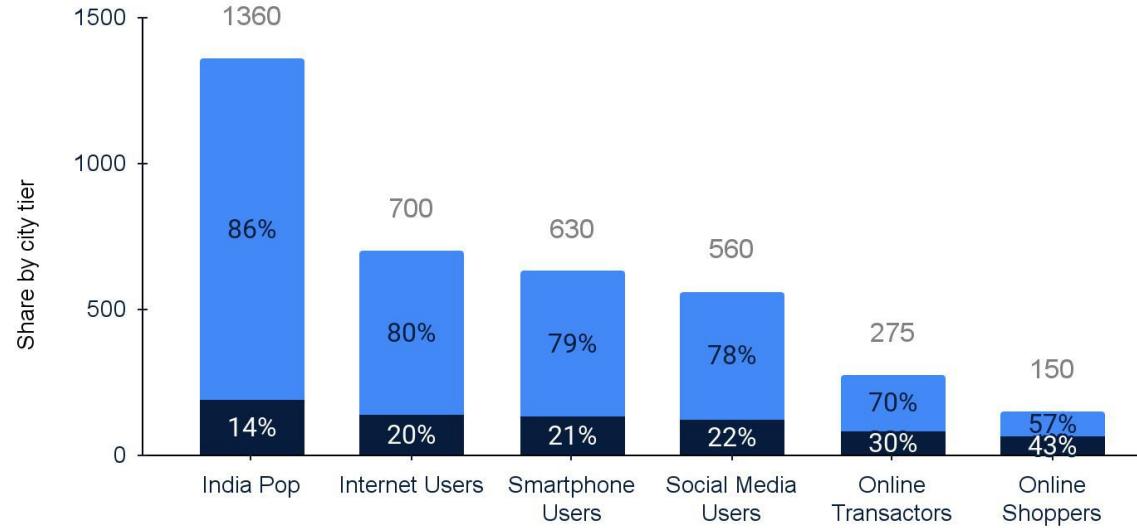
# Not all internet users are alike, though

Just over a tenth of Indians have shopped online, ever, compared to USA's ~60%, China ~50%.

## India Internet Funnel

In Mn

Tier 2+      Metro + Tier 1

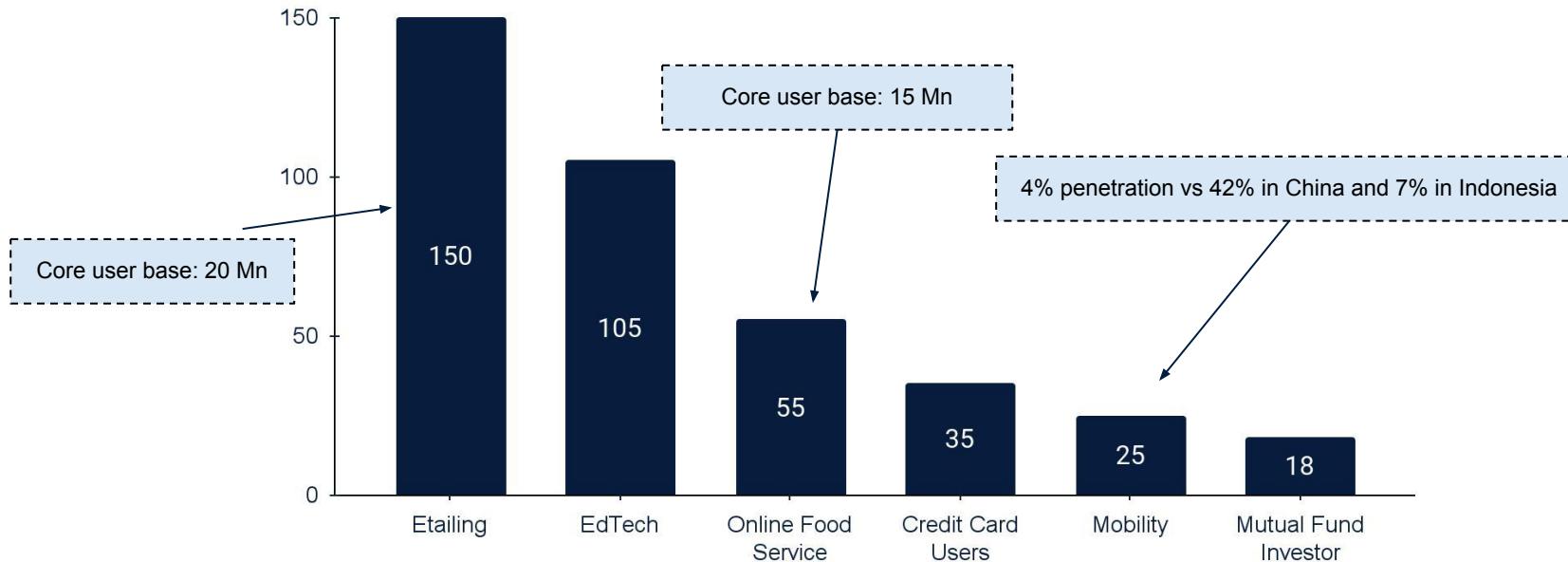


# How the user bases for other categories stack up

Frequent users tend to be anywhere from a quarter to a seventh of the user base.

## User Base

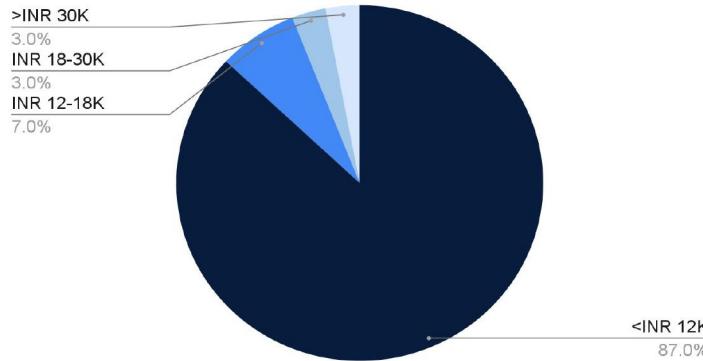
in Mn



# A slim, growing consuming class sustains the Indian consumption story

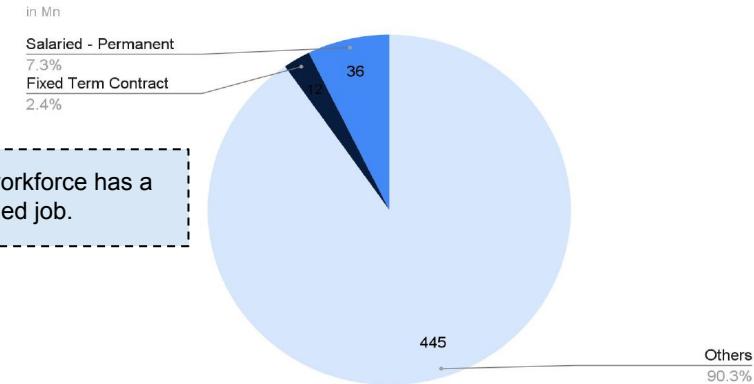
The consumption class is growing but hasn't exploded the way their peer class in China did.

School Fees



Only 13% of K12 students (260m total) go to schools with fees > ₹12k per year.

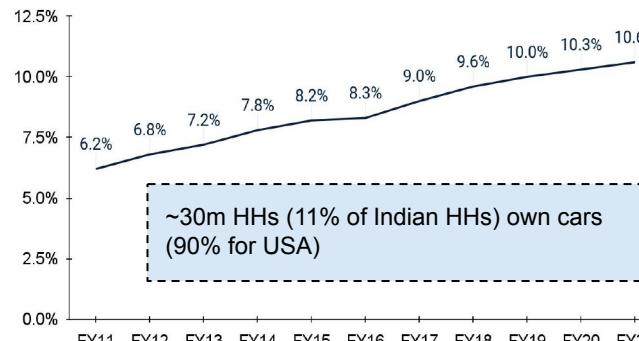
Indian Labour Force



~10% of India's workforce has a 'permanent' salaried job.

PV penetration

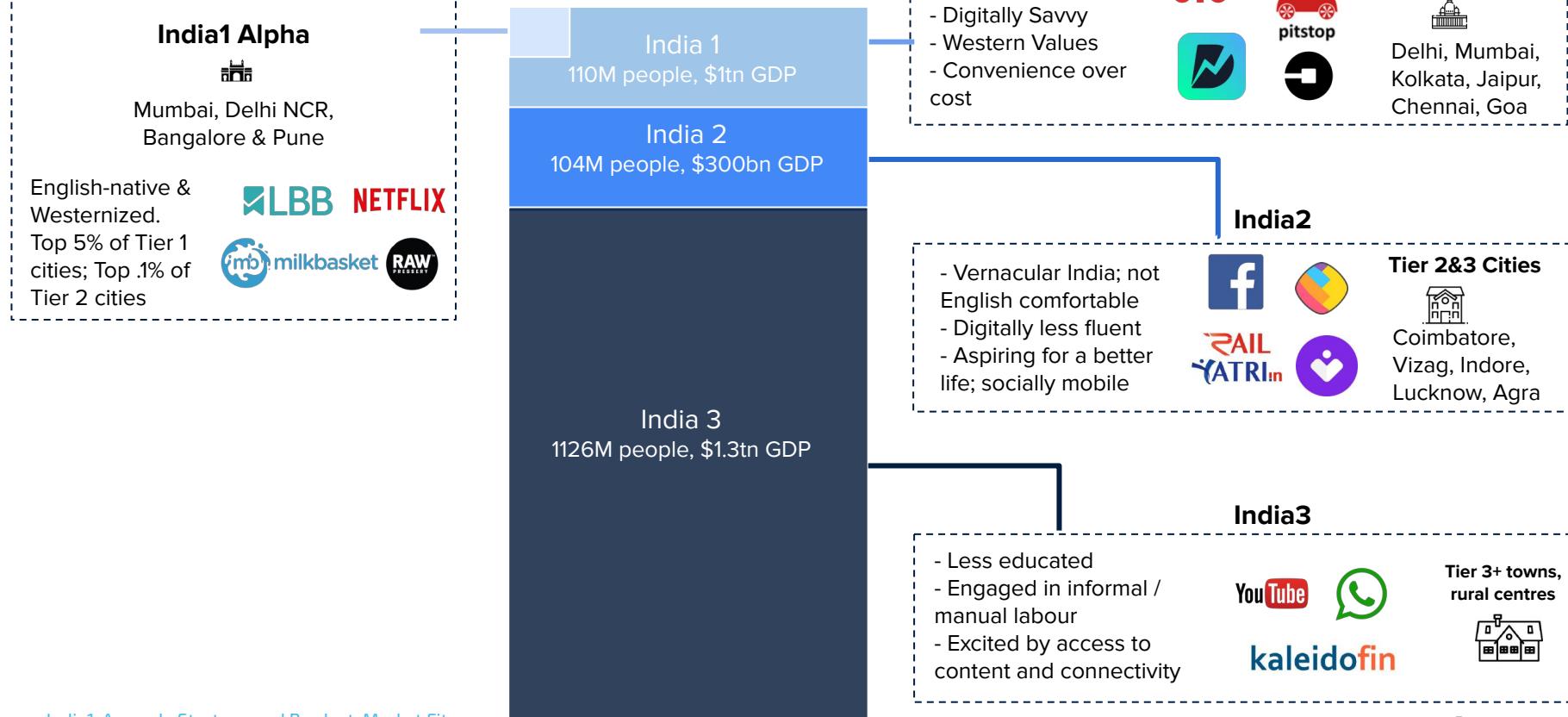
as % of HH



~30m HHs (11% of Indian HHs) own cars (90% for USA)

# How to understand India

The India Consumer Stack, 2019



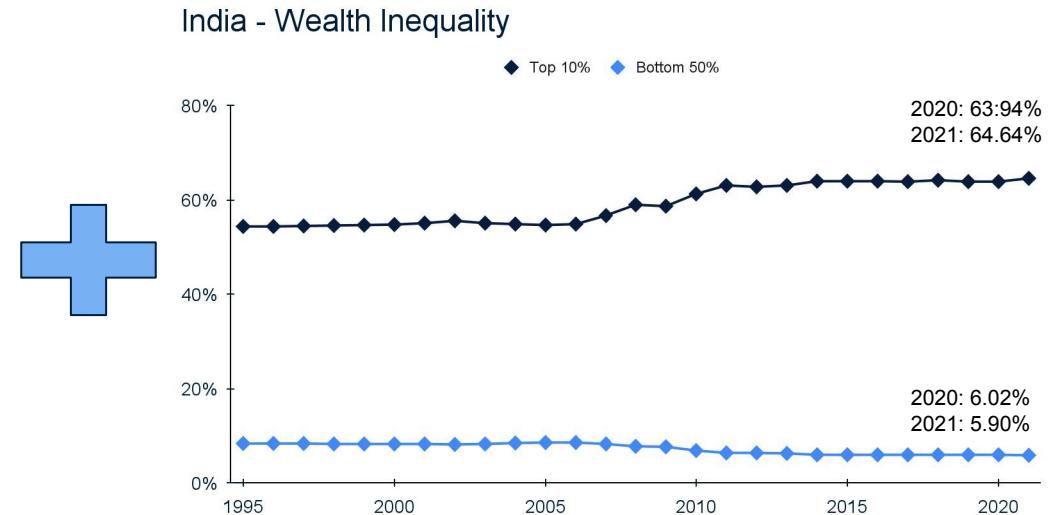
# A tale of two studies

PostCOVID, the rich have gotten richer, the poor have gotten poorer.

**ICE360 Survey, 2021**

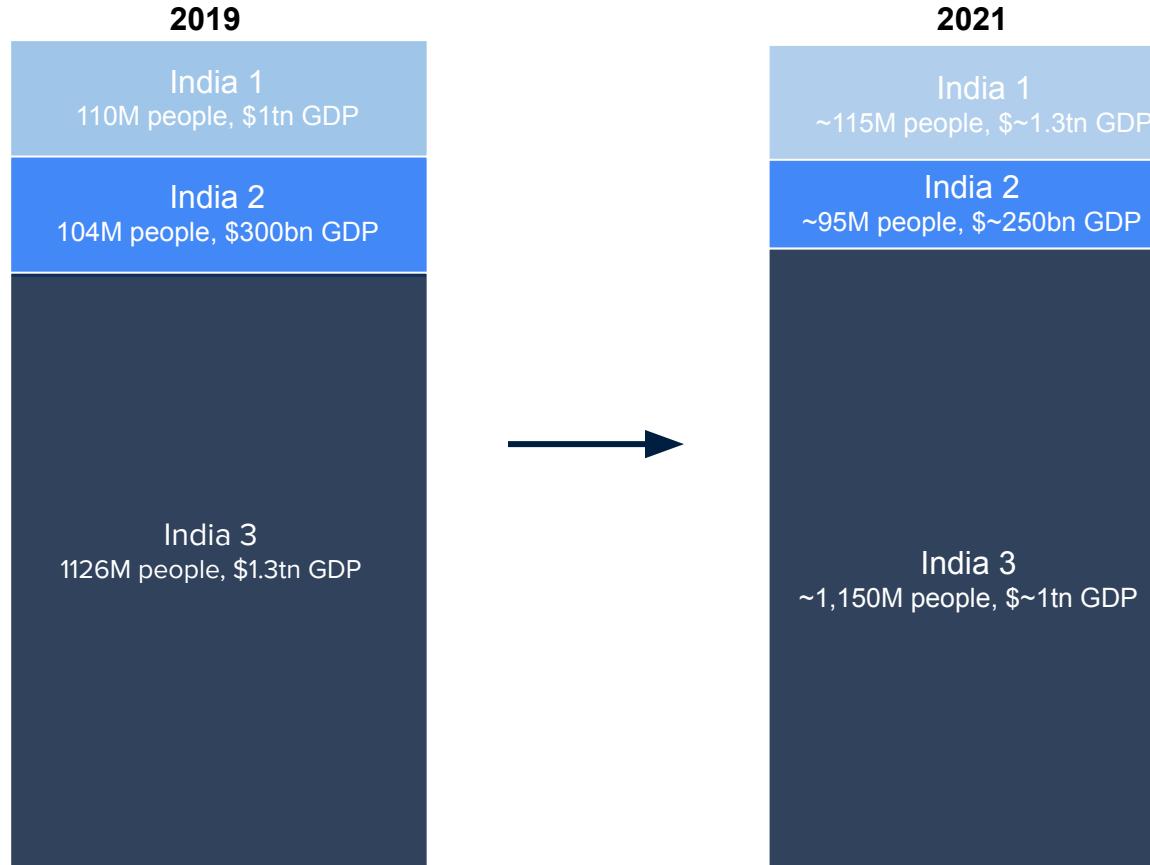
Quintile	Income 2016 vs 2021
Richest 20%	39% (rise)
Upper Middle 20%	7% (rise)
Middle 20%	-9% (drop)
Lower Middle 20%	-32% (drop)
Poorest 20%	-53% (drop)
All INDIA	8% rise

**World Inequality Report 2022**



# The India Consumer Stack, 2021

Reflecting the Matthew Effect<sup>1</sup>



Notes: <sup>1</sup>Matthew Effect = 'The rich get richer, the poor get poorer'; Source: Sajith Pai;

# Understanding India Through



Contradictions



Data



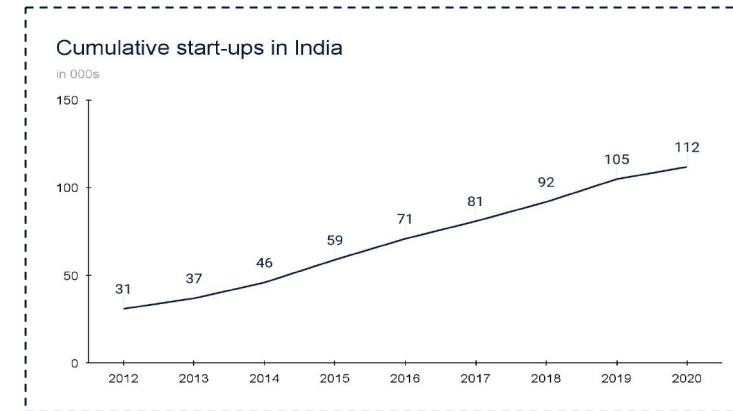
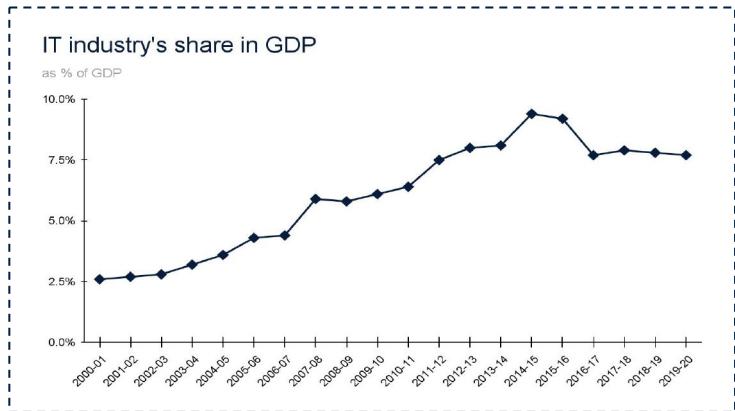
Ideas of India





# 'India grows at night' / Cloud country

India's fastest growing industries are bits, not atoms, and are often invisible to the regulator.



Nischal (Shardeum) ⚡ ✅  
@NischalShetty

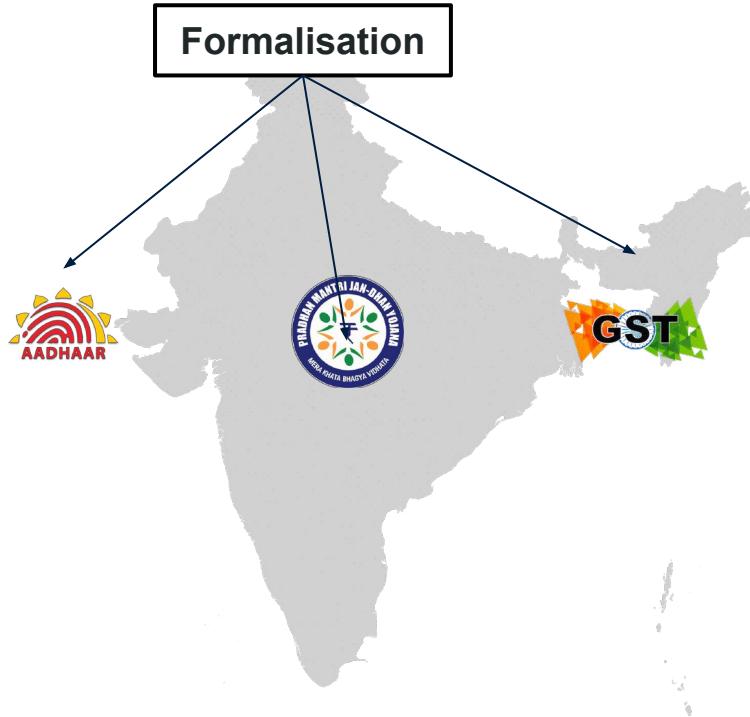
India does not have 10 crore people in crypto. Someone published an incorrect random number and now other parts of the media is picking it up.

About 2 crore is a conservative number for the total number of people in crypto in India 🤘

12:21 PM · Oct 26, 2021 · Twitter for iPhone

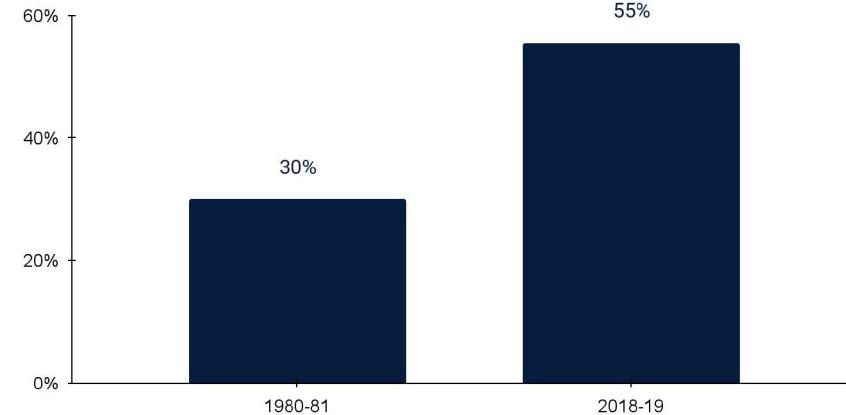
# 'Seeing like a state': India is growing more 'legible'

Implementation of Aadhar, GST and Demonetisation, COVID's side effects driving formalisation in India.



Formal sector's share in domestic output

A % of GDP



# India seen through the ‘axes of advancement’

There are 3 traditional paths to social & economic mobility in India: English, Exams and Exit

## English



Arvind Kejriwal  
@ArvindKejriwal

Govt school students mostly come from economically poor backgrounds. When i meet them, this was their biggest demand - sir, hame english bolna sikhwa dijiye. I am so happy this course is now starting for govt school students.



10:42 AM · May 20, 2018 · Twitter for iPhone

*...hame English bolna sikhwa dijiye.*  
translated to "...help us learn spoken English."

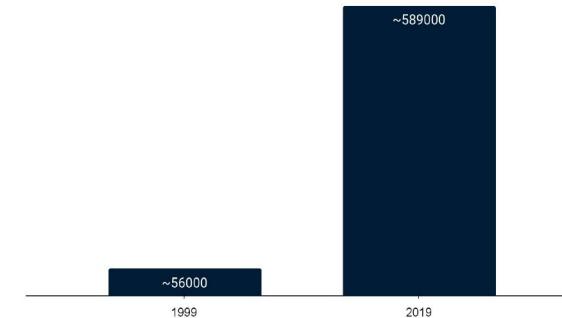
## Exams

Exam	Test - Takers	Seats
IIT-JEE	2.2M	16K
UPSC	1.1M	1K
Railways NTPC	12.5M	35K

India is a nation of 60m test-takers, ranging from UG admission to government jobs of every kind.

## Exit

Students Going For Higher Education Abroad



Indians going abroad has grown 10x over the past two decades and is gathering pace

Enterprise has historically been the weak fourth amongst these; but has typically been associated w the MSME sector thus far.

# Government jobs are few, hard to get, but well paid

This explains why young men (mostly) spend their 20s preparing for exams, and rioting when the exams get postponed.

**What is your salary? Are you happy with it?**

Naveen Kumar · Follow

Track Maintainer at Indian Railways (2017–present) · Updated Jan 14

I am a track maintainer 4 in Indian Railways I got 32000 salary per month after deduction and I am very happy I have to do 8 hours duty per day with one day weekly rest I got my salary on last day of month if that day is Sunday then I get my salary 2 days before apart from my salary



37K 78 881

The main duties of track maintainer is to take care of track say railway line. Other than this track maintainer responsibility to maintain track ,removes the rocks and concrete over there on track between some stations which is allocated to him.

gov add 6500 per month in my nps I got 5000 for dress allowance every year also I get 18000 bonus at durgapuja every year my salary will increase by approx 2000 I am very happy I spent 10000 per month in tamilnadu and 22000 send to my mother she is saving for me from last four year I am a village person I have no more expenses but what I like to eat I am eating what I want to dress I take that cloth sorry for my bad English I got this job through railway recruitment cell chennai



On 10th May 2017 I got this job and my mother and father life increase by 10 years not only I am happy but my whole family happy

735.8K views · View 37,022 upvotes · View 78 shares

37K 78 881



**scroll.in**

Monday, March 21st 2022

Video Latest The Reel The Field Trending Sections

## COMMON GROUND

### Inside Patna's exam hub, where a million hopes die every year

Young people spend years to prepare for exams for government jobs. But the number of jobs is dropping and frustrations are boiling over.

#### Number Theory | Protests over railway jobs are a grim reminder of the state of India's job market

The protests over problems with recruitment for railway jobs in the states of Bihar and Uttar Pradesh, may well be India's first large-scale unemployment riots



## Section II: Introducing ‘Indus Valley’



# India in one tweet

## The Philosophy-student turned Plumber



Abhiraj Singh Bhal

@abhirajbhal

Met Ashok Kumar Tripathy in Kolkata today. He is an @urbanclap plumber who has a Bachelor of Arts degree in Ancient History and Philosophy from Allahabad University. He is consistently earning INR 30-40k per month through the platform. Average rating of 4.5/5.0. Inspiring!



12:49 PM · Jun 9, 2018 · Twitter for Android

15 Retweets 4 Quote Tweets 59 Likes

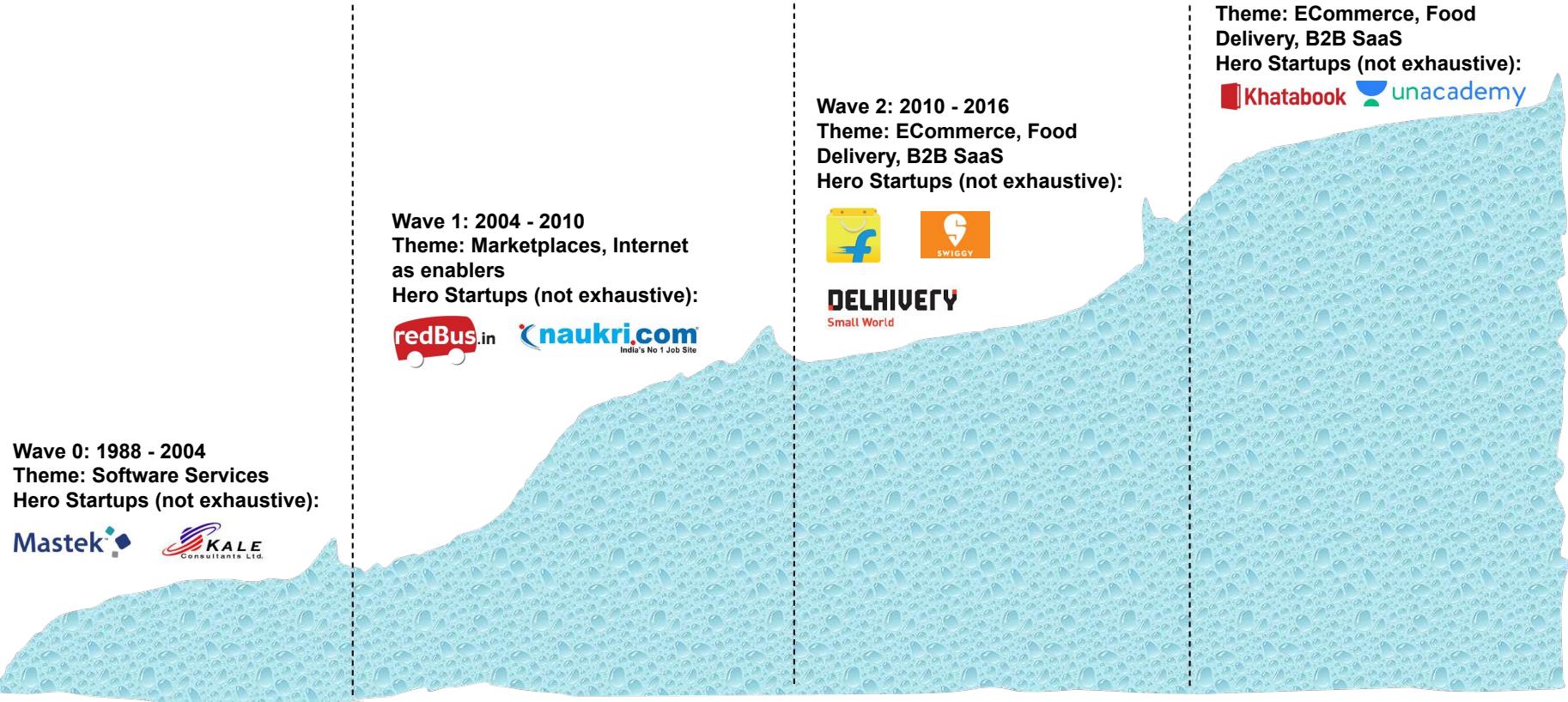
'Tripathy' is a Brahmin surname; Plumbing as a historically 'unclean' profession is typically shunned by Brahmins. It is extremely unusual to see a 'Tripathy' as a plumber.

A philosophy student who has to work as a plumber is a telling statement on the quality of Indian higher education. Outside of a handful of colleges, a BA degree (or rather most degrees) is a weak signal for employers. ~9m or so Indians graduate with a Bachelor's degree every year, but less than <500k of those graduates get absorbed into the formal organized economy.

How Indus Valley is creating jobs which didn't exist before. Mr Tripathy is earning what entry-level engineers in Infosys and TCS earn. Indicative of blue-collar earning opportunities as much as how Indian ITES companies have kept entry salaries low.

# Indus Valley: the prehistory

India's startup sector evolved through distinct phases of tech adoption and customer evolution.



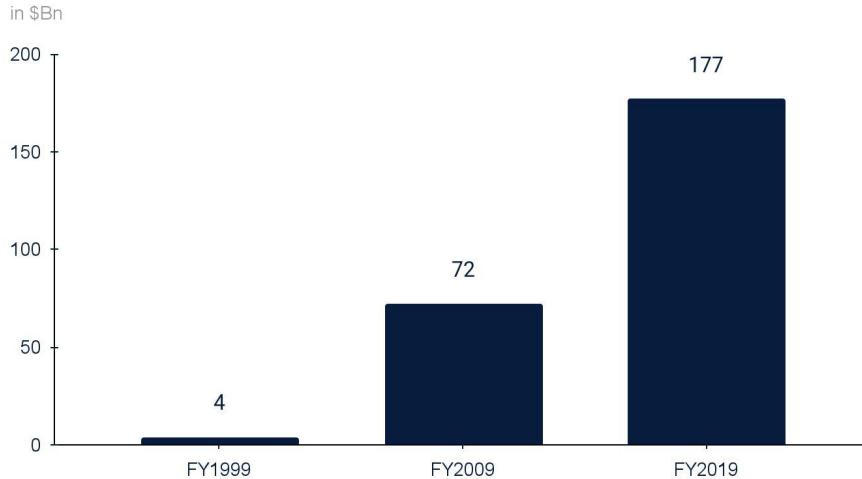
# From Late '90s to Noughties, the 'IT Sector' was India's growth engine

The IT / BPM Sector has created 4.5m direct jobs & 12m indirect jobs, ~30% of India's white collar sector

IT / BPM sector accounts for 35-40% of total exports for FY22  
(~\$400b estimated total exports; \$150b estimated IT exports)

IT / BPM sector accounts for 10.5% of total stock market capitalization.

## IT BPM Revenues



## Nifty IT vs Nifty 50

2014 - 2021



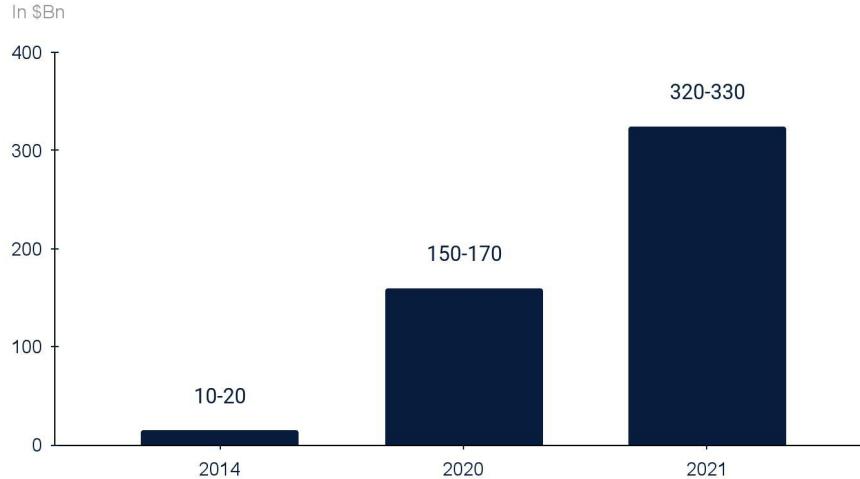
# Visualising Startups / Tech as the new ‘IT Sector’

Indus Valley is emerging as the new engine of wealth and job creation today.

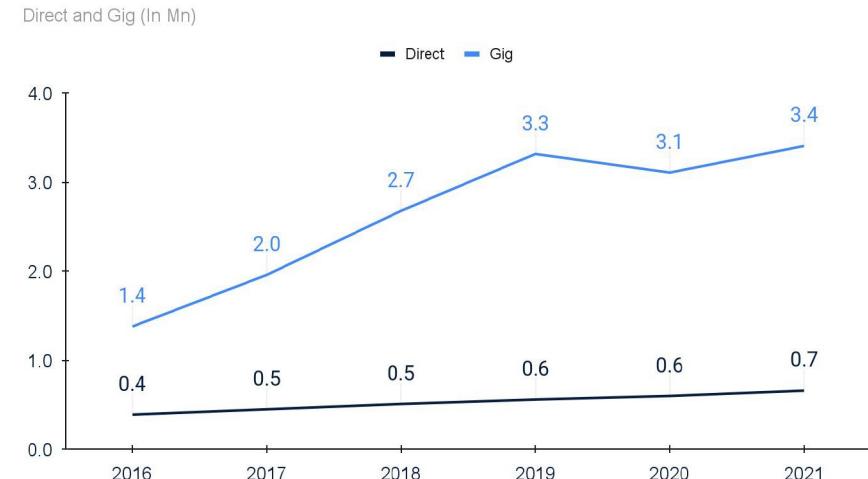
Infosys has a market cap of \$100b and employs 260k presently.

At 3m jobs<sup>1</sup>, startups have enabled ~6% of white collar jobs.

Cumulative Valuation of Indus Valley



Cumulative No. of Jobs



Source: Nasscom, Zinnov, Indian Staffing Federation;

<sup>1</sup>Presuming that every startup job indirectly supports the creation of three jobs in industries supporting them - financial services, creative services etc.

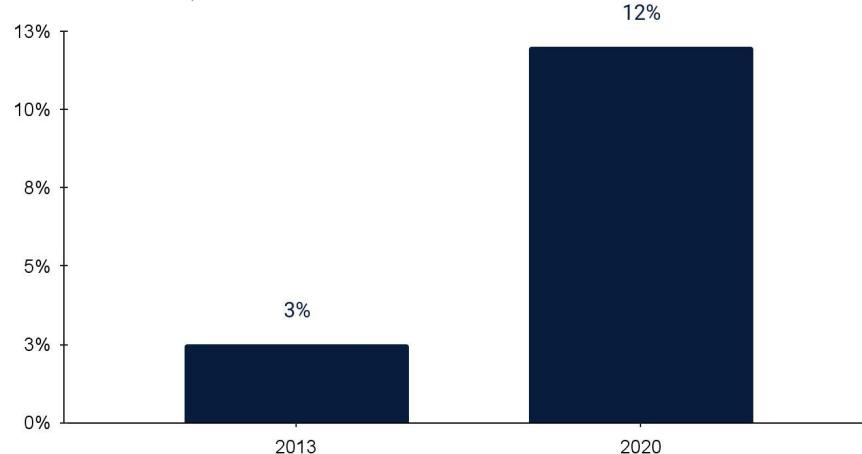
# Indus Valley is no longer at the economic periphery

The # of startups registered annually is a steady line upward, though the actual % that get funded has stayed the same.

One in every eight new companies is a startup today

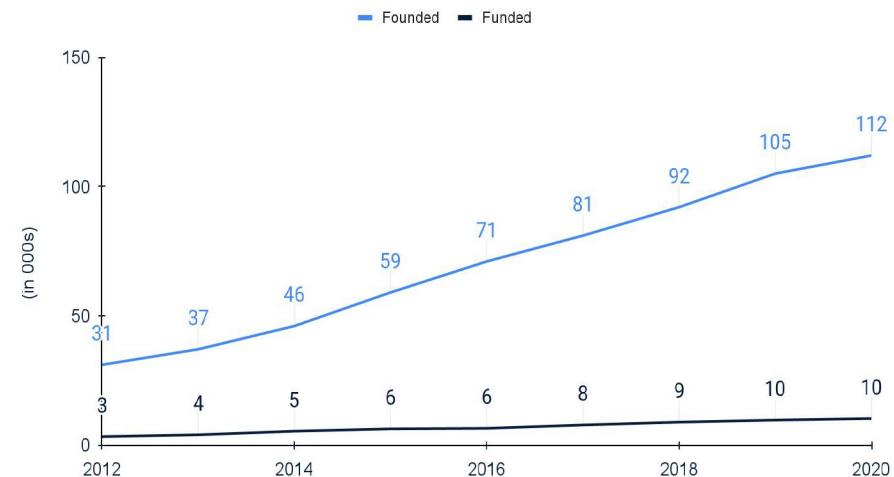
## # of Startups

as % of total new companies



Just under a tenth of these startups get venture funding.

## Founded and Funded



# Startup culture is emerging into the mainstream now

The local *Shark Tank*, the Zomato & Nykaa IPOs as well as the rise of Unicorns has made startups front page stuff.

## Shark Tank India is Quietly Changing Dinner-Table Conversations for the Better



## I want to be a scientist, says IIT-JEE topper

Divy Khare / TNN / Updated: May 19, 2012, 22:14 IST

### JEE Main topper with AIR 1 looks up to Elon Musk and wants to start his own company

*We got talking to JEE Main topper Amaiya Singhal, a student of Apeejay School, Noida, who secured AIR 1 in the JEE Main 2021 results. He looks up to Elon Musk and wants to launch his own company in the future.*



Roshni Chakrabarty

New Delhi

September 21, 2021 UPDATED: September 21, 2021 18:25 IST



# ThePrint

Home > National Interest > Arvind Kejriwal's start-up AAP is the political 'Unicorn' of the decade

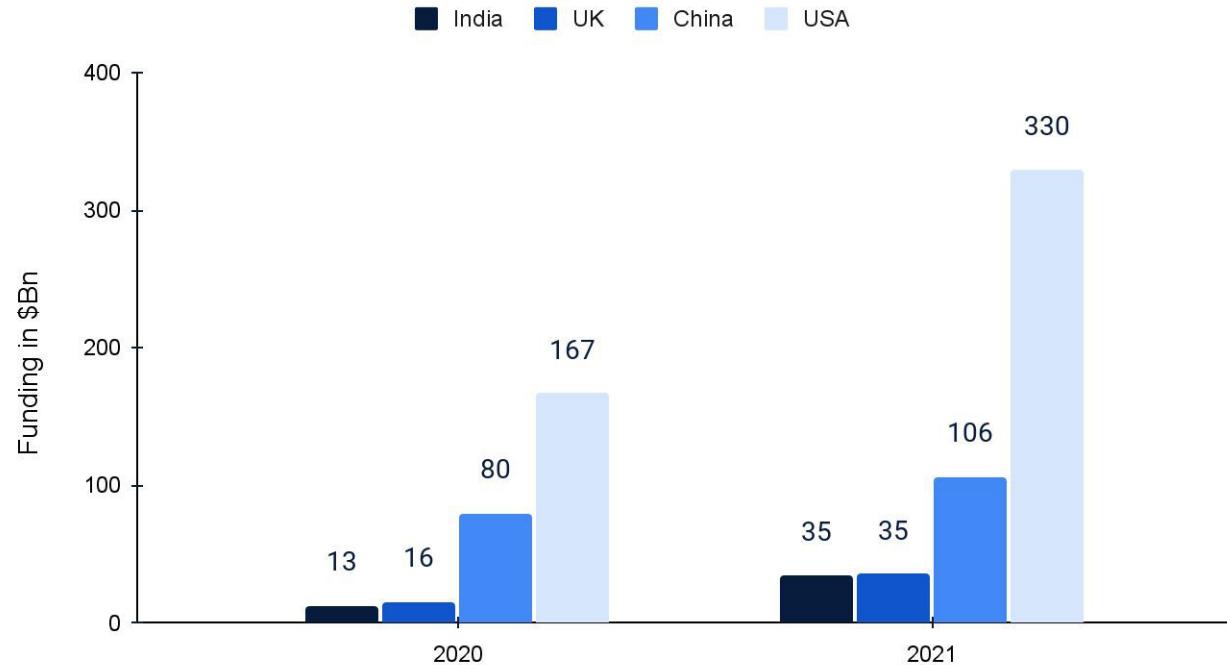
National Interest

## Arvind Kejriwal's start-up AAP is the political 'Unicorn' of the decade

# India is the 4th largest country by size of venture funding

Rise in new internet users, signs of monetization, visibility of exits all helping fuel the rise of the Indian startup ecosystem.

## Tech VC Funding by Country



# India's venture capital sector had its coming out party this year

Unlike in past years, we saw a sudden jump in domestic money (family offices, local institutions) as well.

VC Investments in India



# Half of all Indus Valley startups belong to five sectors

EdTech, Enterprise SaaS, RetailTech, HealthTech and FinTech are the most popular sectors to startup

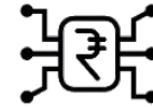
Share of Startups in the Indus Valley



## A Dramatic Shift in How Indians Shop, Pay, and Do Business



ECommerce



FinTech



SaaS



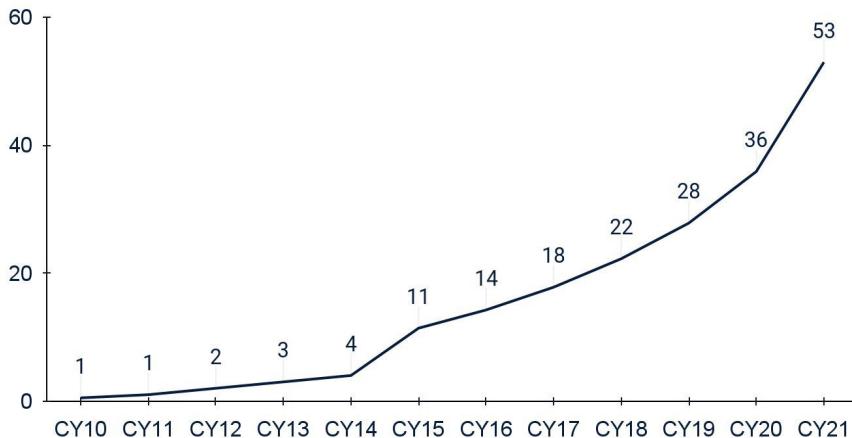
# From \$4b in '14 to \$53b in '21

ECommerce / Etailing accounts for ~6% of India's retail sales in '21, doubled from 3% in '19 (US 12%, China 24%)

37% of ecommerce = mobile phones; Electronics & White Goods account for 60% of ecommerce sales.

India E-tailing GMV

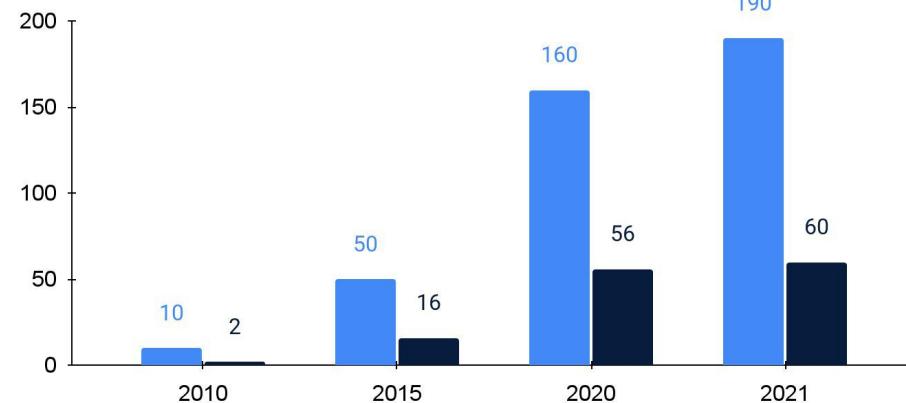
in \$Bn



Total Shoppers and Shoppers from Tier 2

All #s in Mn

Total Shoppers      Shoppers from Tier 2



~70% market share with Amazon, Flipkart

# But, all of this rests on a narrow base

A large number of 'ecommerce shoppers' are occasional shoppers

E-retail Shoppers



Kunal Shah  
@kunalb11

Was speaking to senior folks at eCommerce companies and found that top 5 million customers probably drive 60% of all online sales in India.

12:10 PM · Sep 10, 2021 · Twitter for iPhone

156 Retweets 32 Quote Tweets 3,108 Likes

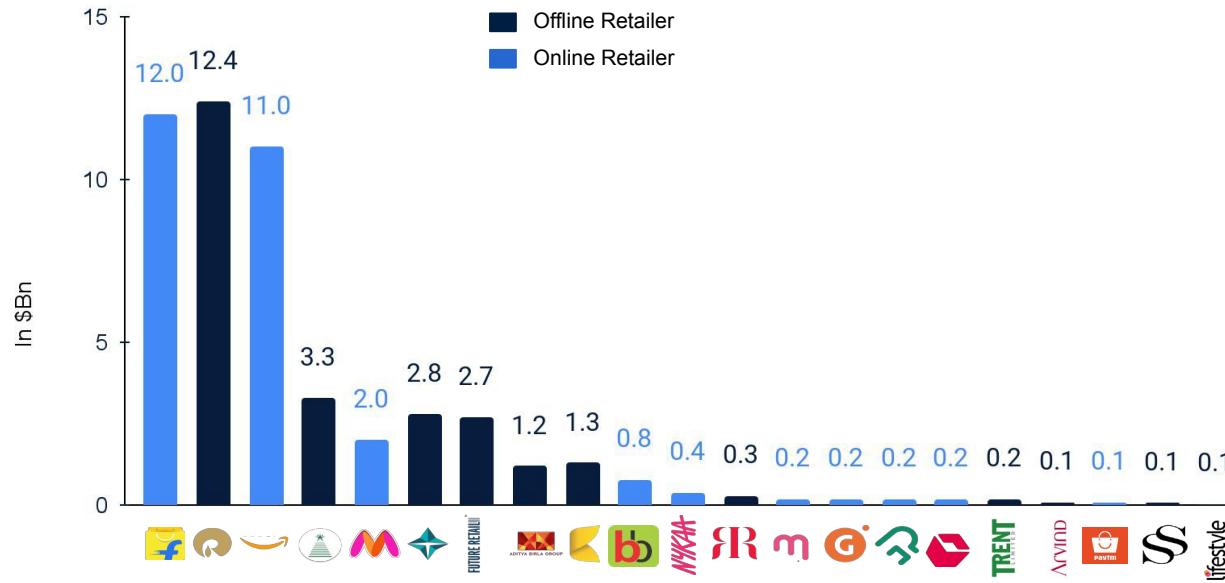
And according to one person I spoke to, in India, Amazon's Prime customers are just 5-7 million users, but account for over 50% of the company's Gross Merchandise Value. This is a small, but extremely valuable base for the company.

# Indian ecommerce brands have penetrated top retail ranks

4 of the top 10, and 10 of top 20 retail brands are online brands; a key reason being modern retail's low share of ~13%

## Top 20 Retailers

GMV



## A Dramatic Shift in How Indians Shop, Pay, and Do Business



ECommerce



FinTech



SaaS

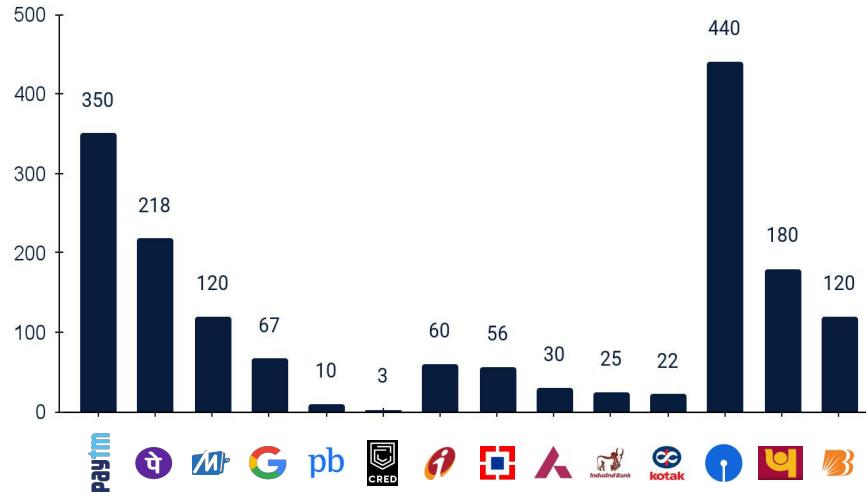


# Fintech players and brands have gathered scale and share

Fintech startups have acquired user bases and engagement in years, that have taken legacy brands decades to build.

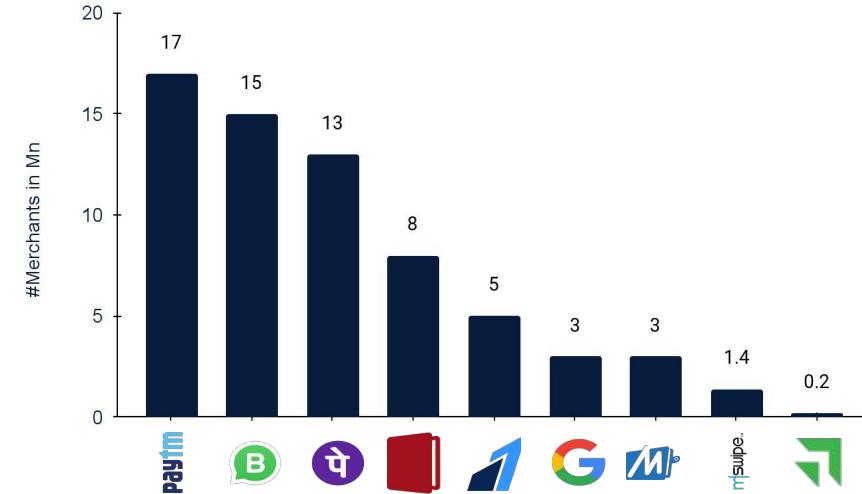
## Customers

Banks vs FinTechs (in Mn)



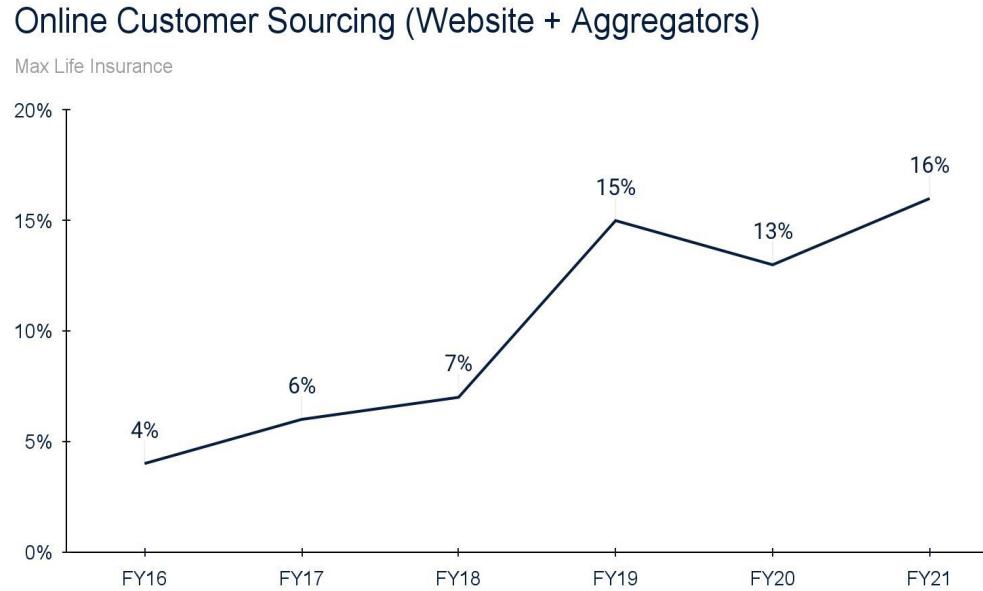
## Merchants onboarded

In Mn



# Even legacy players are leveraging digital for scale

A sixth of Max Life's customers are sourced online



# Digital brokerage Zerodha is India's leading digital broker

The biggest legacy broker Angel Broking is at half of Zerodha's customer base today.

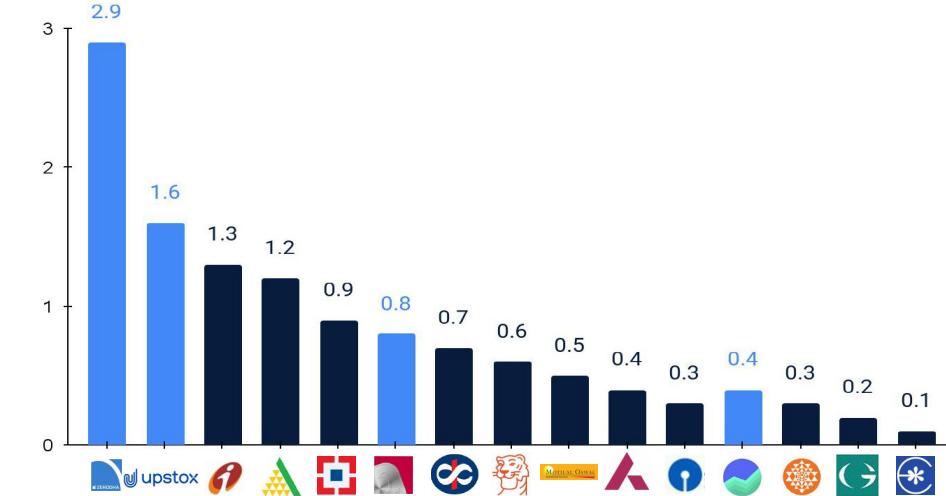
## Market Share - Traditional vs FinTech

Broking accounts (active) market share %



## Active Broking Customers

in Mn

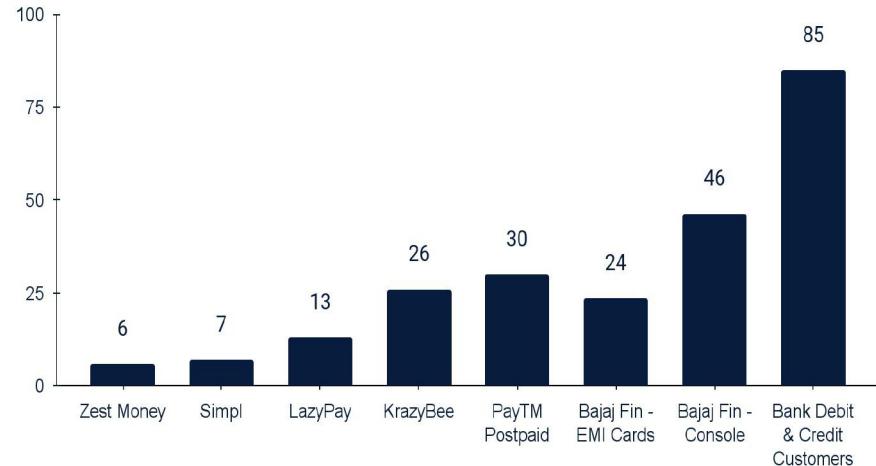


# Fintech players have built large lending books and user base

Speed of disbursement as well as use of alternative / user data to underwrite risk, helping Fintech lenders gather pace

#Customers

#s in Mn



Digital lending in India

in \$Bn

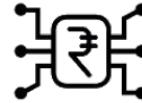


Has reached ~6% of retail loan book by '19

## A Dramatic Shift in How Indians Shop, Pay, and Do Business



ECommerce



FinTech



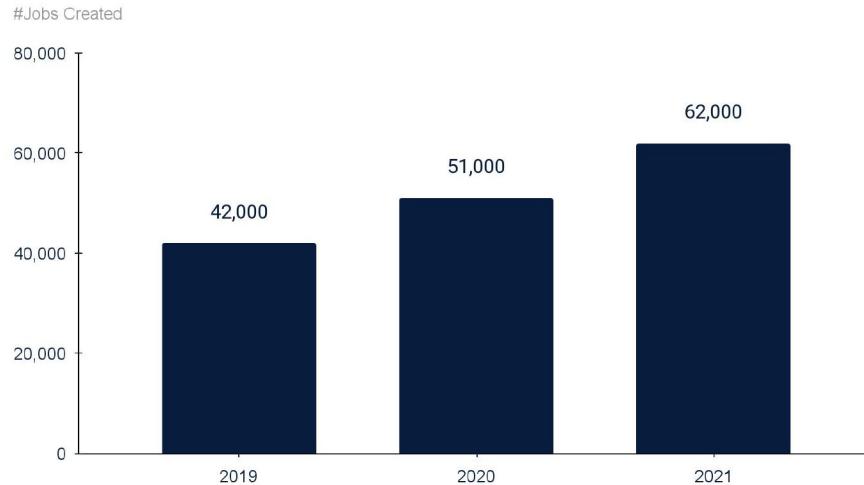
SaaS



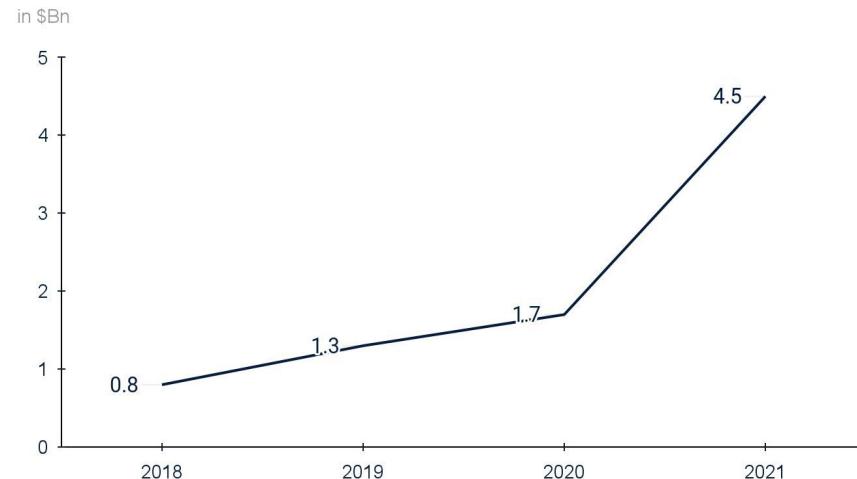
# SaaS is the flagbearer of Indian Tech

SaaS startups are the most recognized Indian tech brands abroad; they account for 12% of funding and 10% of direct jobs.

Growth of SaaS Jobs in India



Investments into Indian SaaS Companies



# Parallel to the rise of GlobalTech SaaS is the rise of Bharat SaaS

OG brand Tally, and new age brands Khatabook, Classplus have demonstrated that there is a market for domestic SaaS



Sajith Pai  
@sajithpai

...

SaaSTra - SaaS + Transaction as a model for domestic SaaS plays.

24/25

## 3.6 SaaSTra

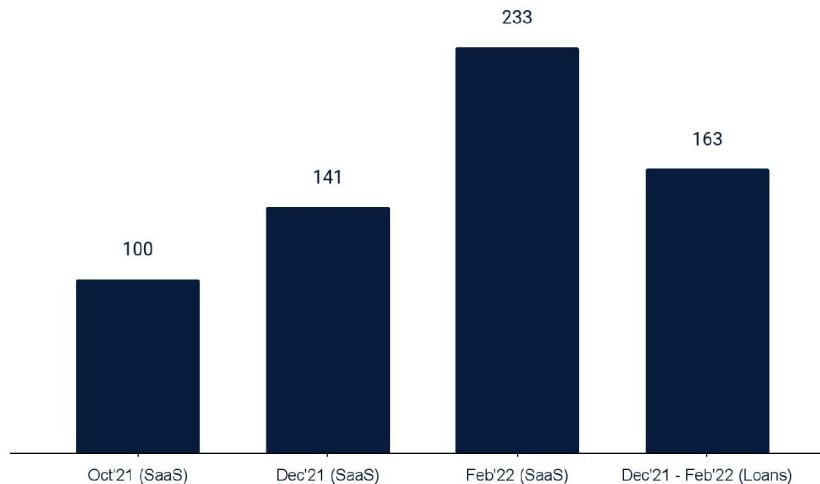
It is worth noting that none of the SaaS unicorns in India have come from serving the domestic market – from *Zoho* to *Freshdesk* to *Druva* to *Postman* to *Zenoti*, all of them are global plays. Much of their revenue comes from serving global customers. Is a Bharat SaaS play possible – one where all of your customers are based in India? Well, yes, but the playbook that is emerging for domestic SaaS plays is as a SaaS + Marketplace model, one where you use SaaS software as a hook to fashion a marketplace, and then facilitate transactions and take a cut of it, or sell fintech / loan products. I like to call this model as SaaSTra – a portmanteau of SaaS + Transactions. It is this thesis that Indian SaaS would grow as SaaSTra and not a pure SaaS like in the West, that inspired our bet on *Classplus* and *Procol*.

3:50 PM · Jan 7, 2021 · Twitter Web App

# SaaS + Transactions as a two-step act

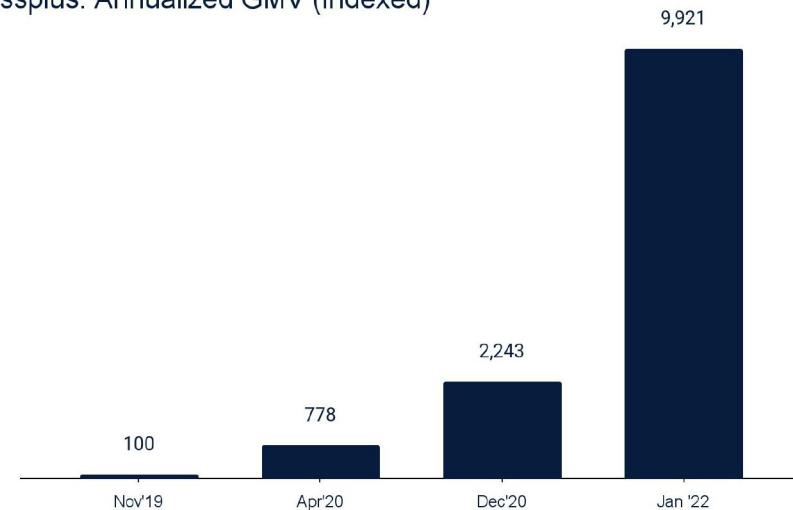
SaaS creates the wedge, and provides data to create a lending business, or even a marketplace.

Procol: Annualized Recurring Revenue - SaaS + Financing (Indexed)



Loan disbursal revenue (in just 3 months!) has already reached ~70% of SaaS ARR (of Feb '22)

Classplus: Annualized GMV (Indexed)



# What explains the rise of Indus Valley, and its impact?

The following 'growth drivers' underpin the rise of Indus Valley, and explain its dramatic impact.



# The ‘Wang Trifecta’

Jio, UPI and smartphone affordability created a perfect storm for the consumer internet economy.



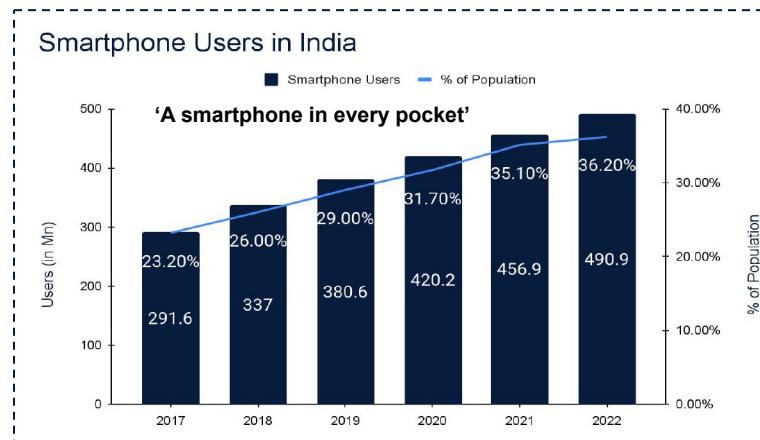
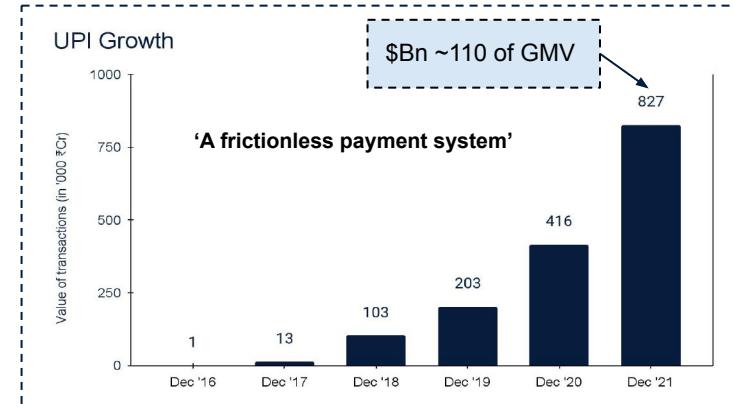
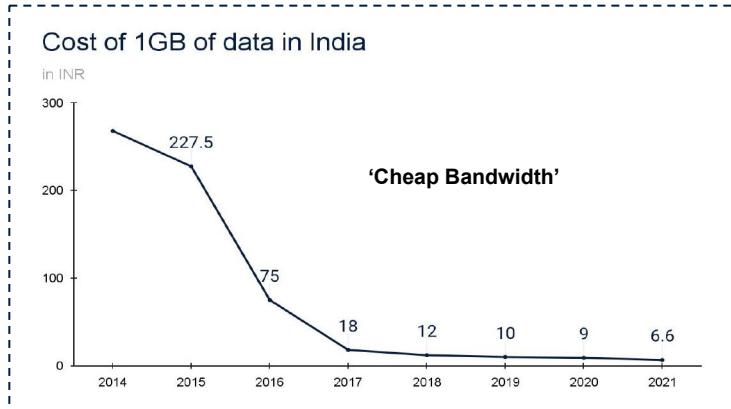
**Sajith Pai** @sajithpai · Jan 15

...

In 2018, Tony Wang cofounder [@agoralO](#) told me that the Chinese consumer app economy took off when 3 things happened

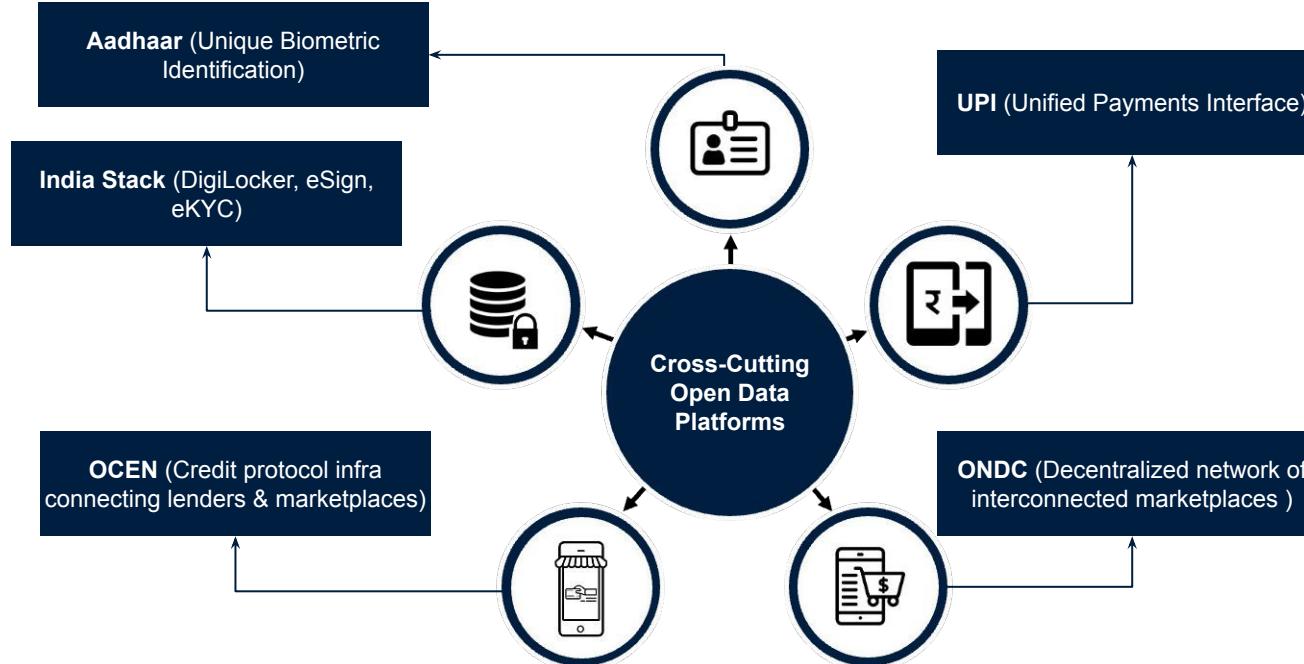
- cheap bandwidth
- a smartphone in every pocket
- a frictionless payment system

# The ‘Wang Trifecta’ illustrated



# Public digital infrastructure

Aadhar and UPI's success is spurring creation of shiny new public digital infrastructure with potential for new unlocks



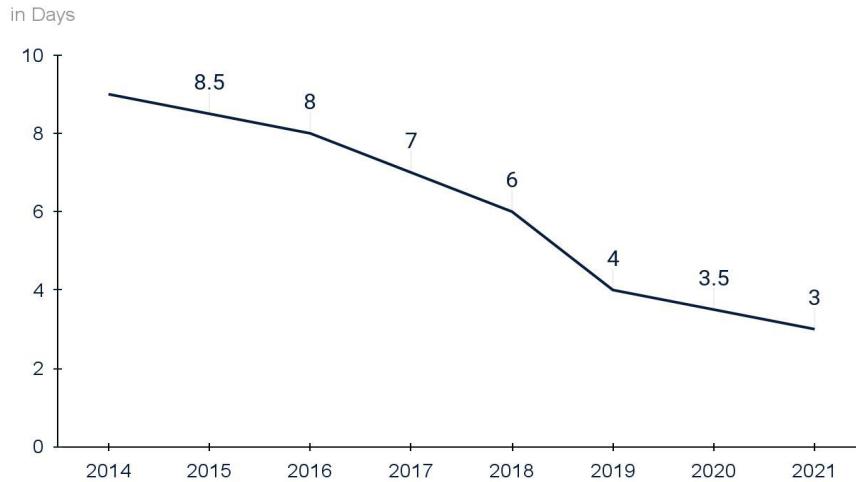
Multiple platforms across core sectors have also emerged, which will create multiple new unlocks:

- Marketplace - **GEM**
- Healthcare - **UHI**
- Education - **SWAYAM**
- Agriculture - **eNAM**
- Travel - **Parivahan**
- Logistics marketplace - **NLIP**

# Faster, cheaper, better, more.

India's eLogistics companies have systematically engineered wider reach, faster delivery and reduced the cost of delivery.

Average time for delivery in eCommerce



Average delivery cost per eCommerce parcel

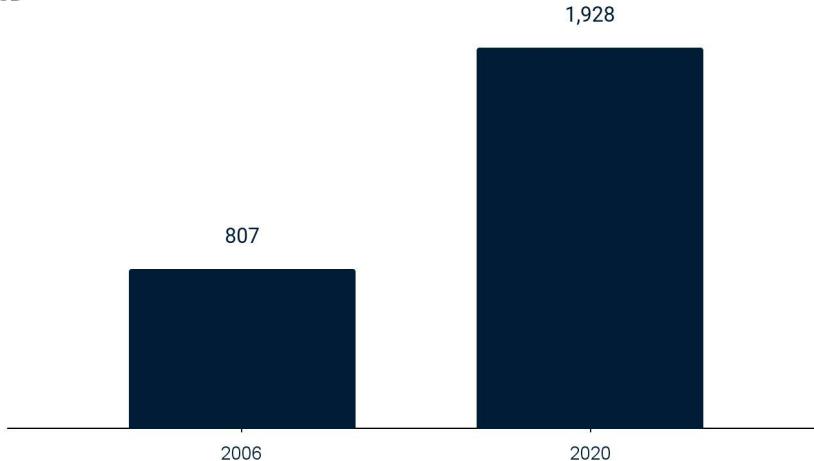


# Rise in per capita incomes, led by the creamy layer

The top 10% of households are driving the consumer internet economy in India.

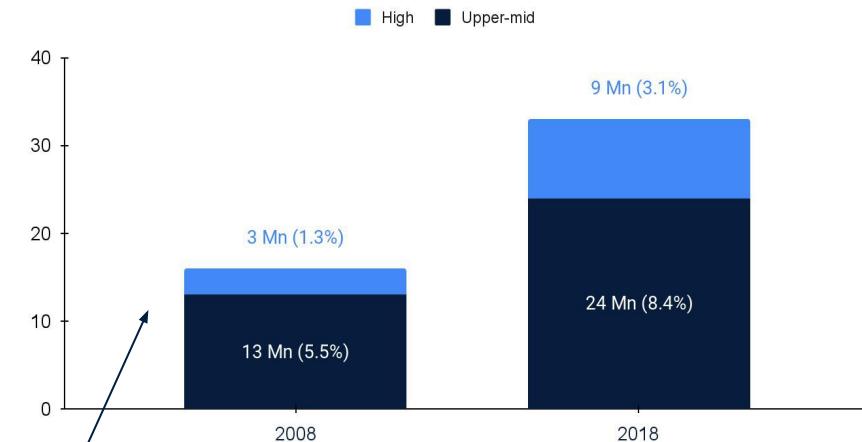
GDP Per Capita - India

in USD



Households by Income

in Mn



1) Figures in brackets refer to share of overall households

2) High income HHs → ₹2 Mn / year; Upper-mid income HHs → ₹1-2 Mn / year

# Founder 2.0

As the ecosystem matures, there are more repeat founders emerging, wiser and fluent to the startup playbook.

***“Number of startups has declined. But founders today come with more experience and have better and more differentiated ideas”***

- Rajan Anandan,  
MD, Sequoia Capital India

***“It’s easy for a unicorn to build another. Champions breed champions”***

- Rajat Tandon,  
President, IVCA

***“There are a record number of repeat founders or CXO talent leaving large companies and starting up. That means at the seed stage the time to take the decision to fund a company is cut down, leading to more deals getting done ”***

- Siddharth Pai,  
Founder, 3one4 Capital

***“Recent exits and a growing give-back mentality have helped create a broader ecosystem of advisors and angel investors”***

- Rohit Bodas,  
Partner, Propel Venture Partners

# **Section III: State of the Valley 2021**



# India in one tweet

Anticipating the delivery person's challenges



Mangesh Panditrao  
@mpanditr

Indian eCommerce is different.



7:21 PM · Jul 7, 2020 · Twitter for Android

COD = Cash on Delivery. The user pays the delivery person on receipt of the product, almost always in cash. This is a distinctly Indian innovation. 65% of all ecommerce orders are still COD, and paid in cash!

The text (Hindi written in Roman font) says 448 Chaoth Mata Temple, Shivpuri, Kota Town Please reach the temple and call me, I will come to pick this up.

Most smaller towns in India have layouts and addresses that do not fit into Western mapping systems. The recipient has clearly gone through several previous tries of the delivery man struggling to locate the place, and is planning for this.

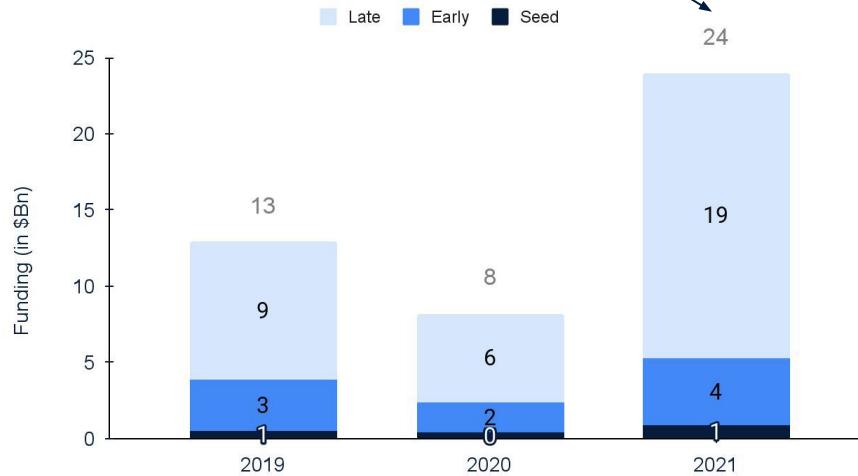
73% of online shoppers are located outside the top 8 cities (metros) today. In 2016, this was at 56%. We see that 85% of new online shoppers emerging in the last 5 years are from nonmetro markets.

# A year of records

2021 saw startups raise 3x the number they raised in 2020. Much of the funding (~60%) went to the 42 unicorns minted in '21.

As we see here, seed + early stage financing doubled over last year's but growth stage financing nearly quadrupled.

Investment Distribution by Stage



Global tailwinds helped; the global venture financing market grew from \$347b to \$671b; This was one big reason.

VC deals in India



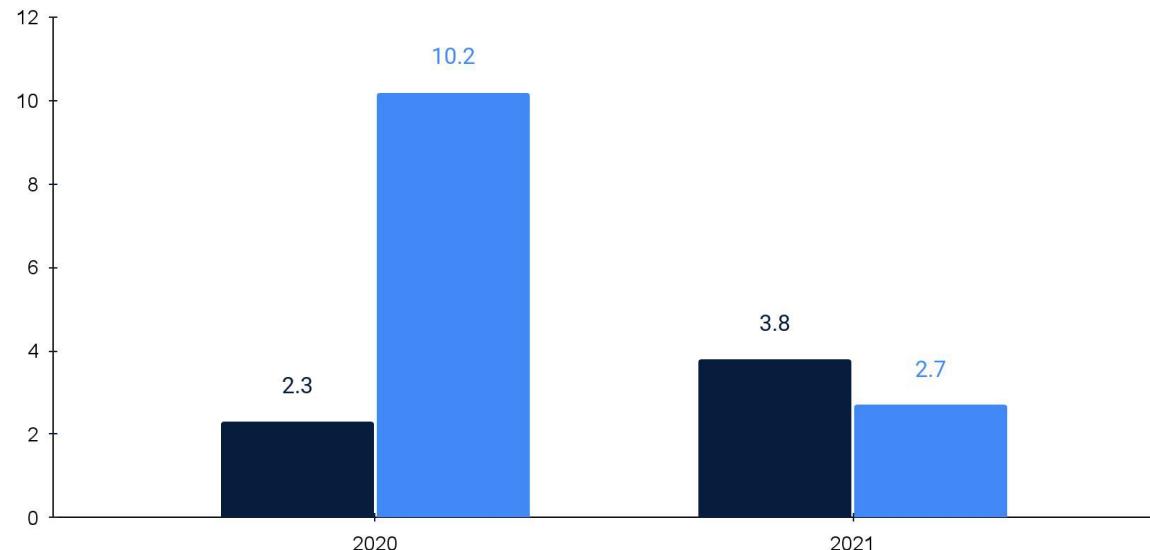
# Beyond the usual global tailwinds, China's own goals too helped

China's 80% drop in EdTech funding due to government regulation saw growth funds looking at Indian edtech players

India vs China - EdTech Funding

Funding in \$Bn

■ India ■ China

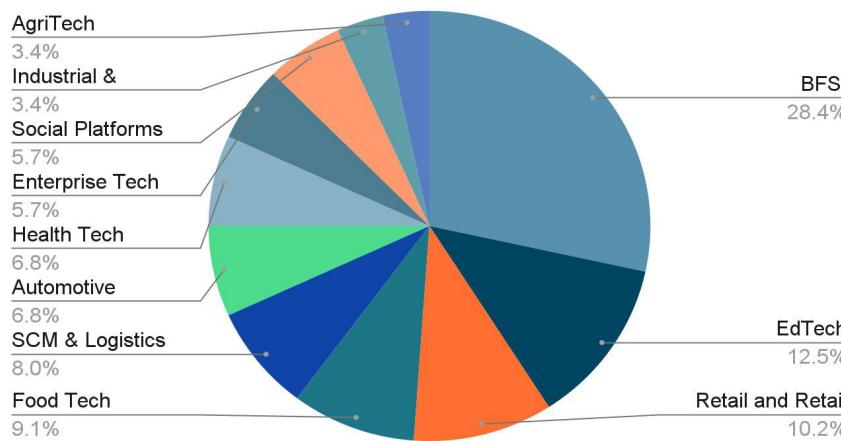


# Where the money went

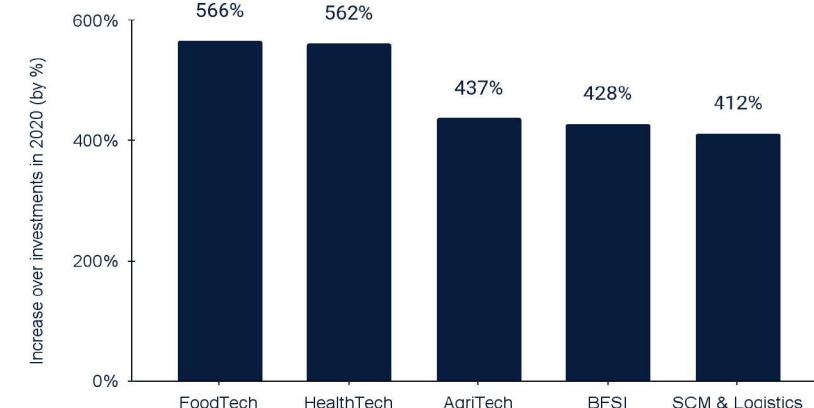
>50% of the funding went to four sectors - BFSI, EdTech, Ecommerce / RetailTech and FoodTech

All of these sectors benefited from COVID tailwinds and saw a fair number of startups entering the unicorn / decacorn territory.

Investment Distribution by Sector



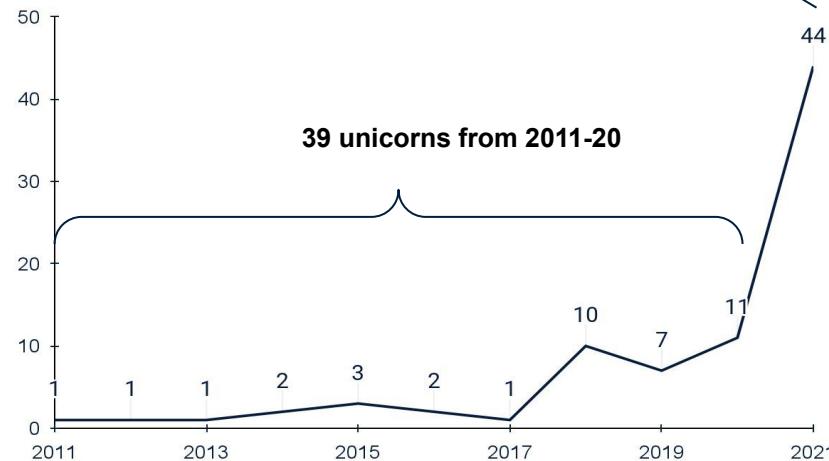
Highest Increase in Investments (by sector)



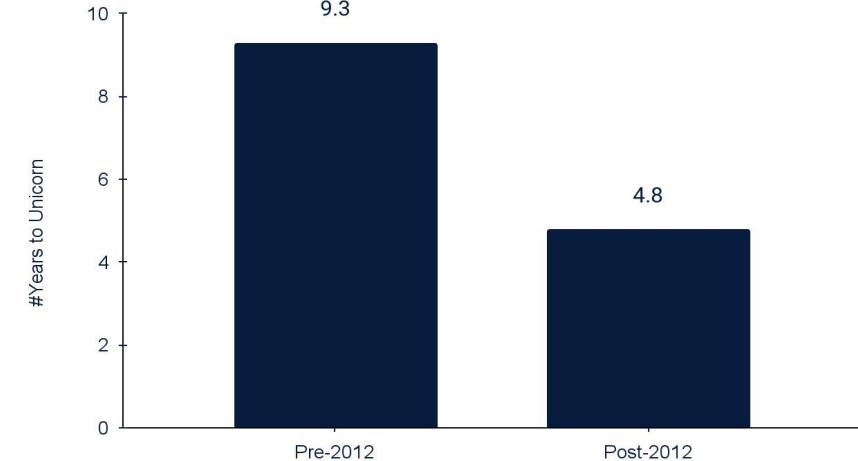
# India birthed more unicorns in '21 than all previous years together

The pace has continued in '22 as well (12 by 7-March-2022)

Companies achieving Unicorn Status



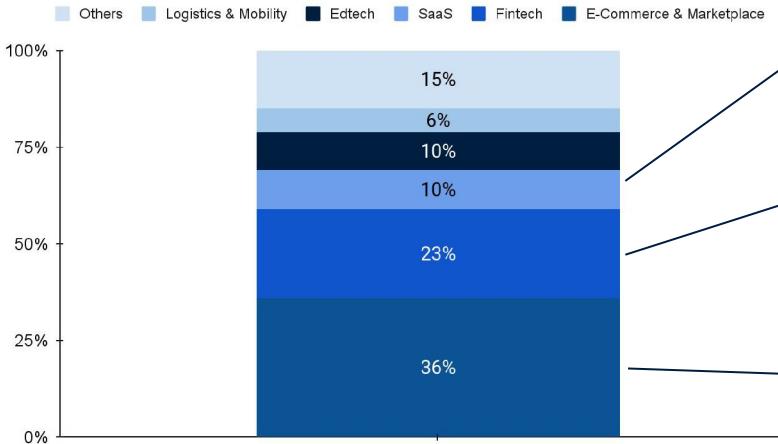
Average time to unicorn



# X-raying the Unicorns

Barring five global SaaS plays, the rest of the Unicorns all ride on the Indian consumption story.

Split of Unicorns based on Valuation



The oldest of lot; founded in 2011 and bootstrapped till '18. One of the global SaaS success stories from India.



India's first lending unicorn; rather surprising for the credit-starved nation we are. Also the biggest jump in valuation; its last priced round was <\$100m.

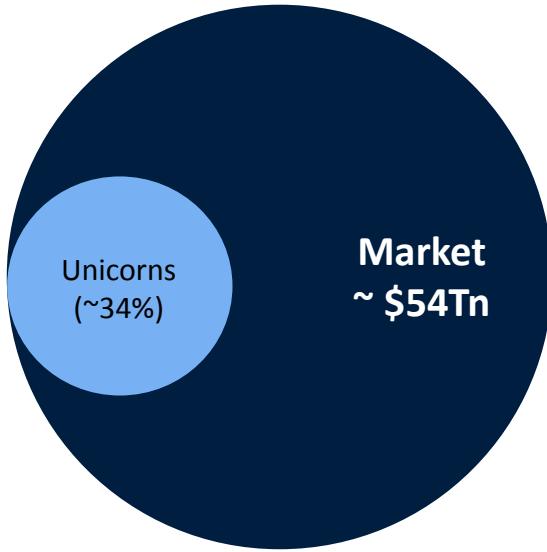


India's fastest unicorn to date (~7 months); helped by its unique structure as a house of brands / Thrasio model play.

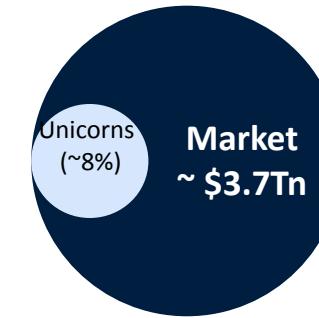
# Still some way to go

For all the noise, all of the unicorn valuations are an insignificant share of the overall market capitalisation.

USA



India



# Exit signs

Tech IPOs, from Zomato, Nykaa, PayTM, created buzz and excitement in a booming IPO market

2021 saw the emergence of the Tech IPO; SEBI (India's SEC) relaxed rules allowing loss-making companies to list.



# Post-IPO Blues

Barring bootstrapped play EaseMyTrip, all of the tech stocks have seen drops in their market cap since listing.

Name	Last Private Valuation (`Cr)	Listing Market Cap (`Cr)	Present Market Cap (as of March '22) (`Cr)	IPO Subscription (x)
EaseMyTrip.com	Bootstrapped	4,611	6,125	159
Nazara™	2,909	6,491	5,656	175
<b>zomato</b>	41,011	91,314	60,299	38
CarTrade.com	7,245	7,443	2,584	20
NYKAA	15,244	97,364	67,446	81
policybazaar.com <small>Compare. Buy. Save.</small>	11,433	51,692	30,979	16
paytm	126,000	126,786	38,418	1
RateGain	1,478	3,914	3,089	17
MapmyIndia™	1,950	8,417	7,800	154

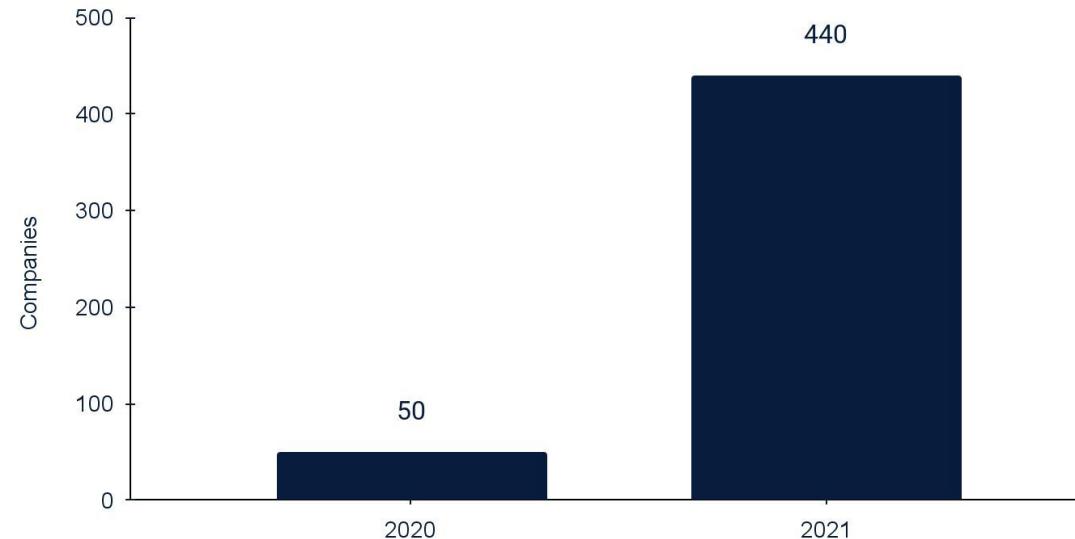
# ESOPs not fables

Startups have weaponized stock options to attract and retain talent

A 9x spike in ESOP buybacks in 2021 (over 2020) saw \$440m (~₹3k crs) paid to startup employees. A large component of this will recirculate as angel investments in startups!

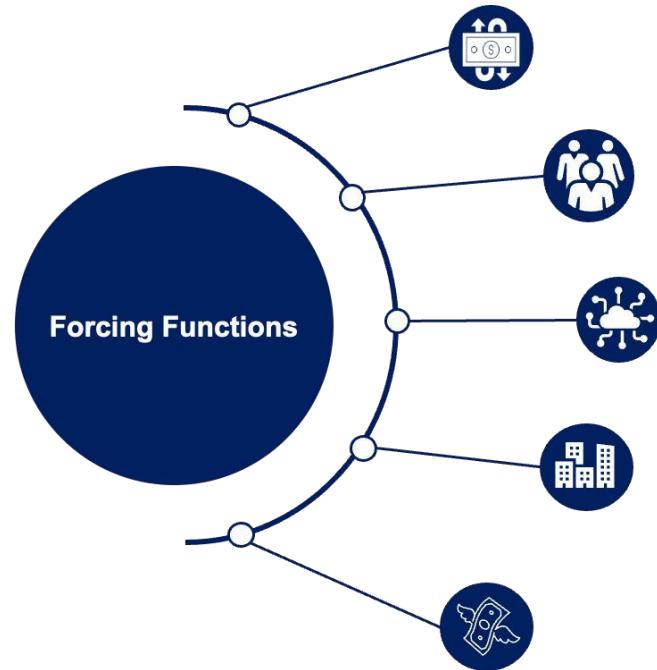
## ESOP Buyback in India

In \$Mn



# The ‘Forcing Functions’ shaping Indus Valley’s landscape

These ‘Forcing Functions’ have been instrumental in shaping the evolution of the startup ecosystem in India.



**A low per capita income economy, with a small but evolved consuming class** - A small (~10% of India's population), but sizeable (~100 Mn) cohort with per capita income of \$~13k, thus accounting for a ~\$1.3tn economy.

**A two-track consumer market** - A relatively affluent westernized India1 market, and the emerging wallet-thin vernacular India2, each calling for distinct business models to meet their needs.

**A sizeable high quality tech workforce, comfortable in English and who wouldn't be out of place in Silicon Valley firms** - The percentage of such talent as a percentage of the population is not large, but the base makes it sizeable still.

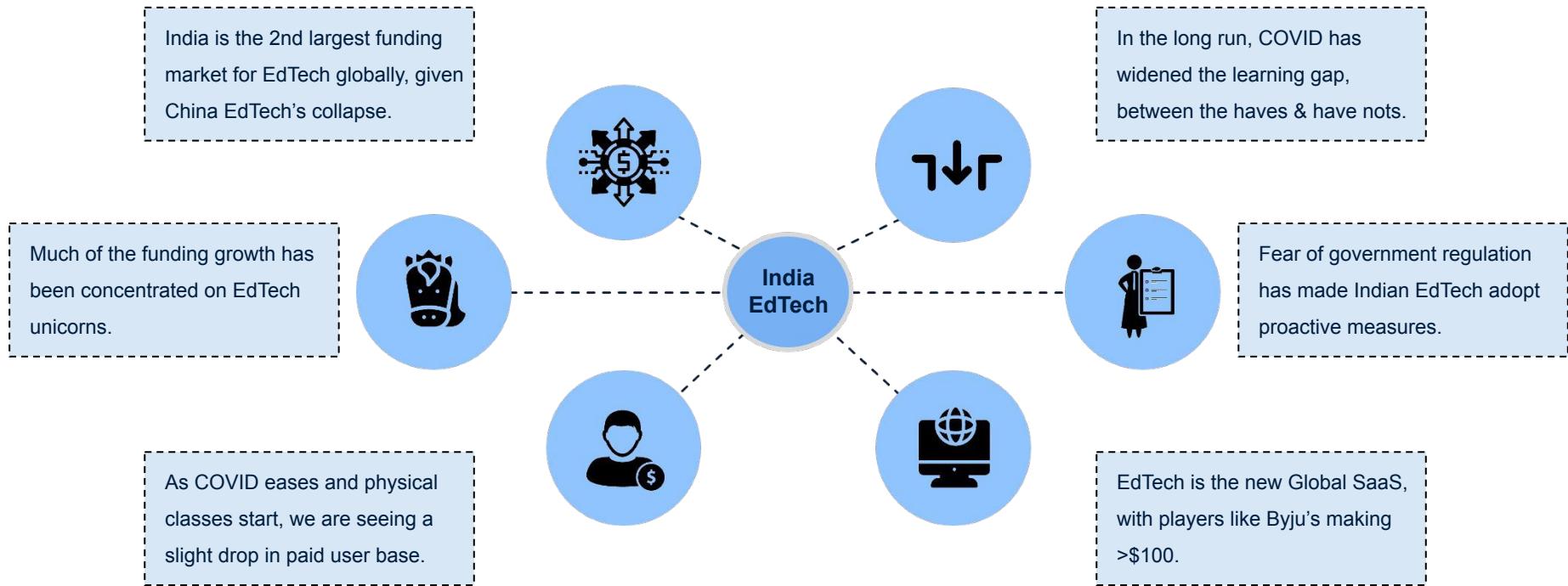
**An undersized & underformalized enterprise space** - 60m+ enterprises in India, of whom 70% do not have hired labour (single person stalls). India has only ~20k firms with paid up capital > ₹10cr (\$1.3m); thus, a relatively small, underformalized and undercapitalized enterprise landscape, albeit growing up.

**An overdeveloped venture + startup ecosystem** (relative to the low per capita income and spending capacity) - Diaspora's strong concentration in US tech sector, success demonstrated by Flipkart, Freshdesk, etc., and the ever-standing promise of India as the next China lead to this.

In addition, COVID acted as an unlikely forcing function in the last couple of years, speeding up digital transformation by as many as 3-5 years in industries like EdTech.

# A closer look at EdTech

EdTech was the hero sector of 2020 with a huge COVID bump; How did this sector do in 2021?

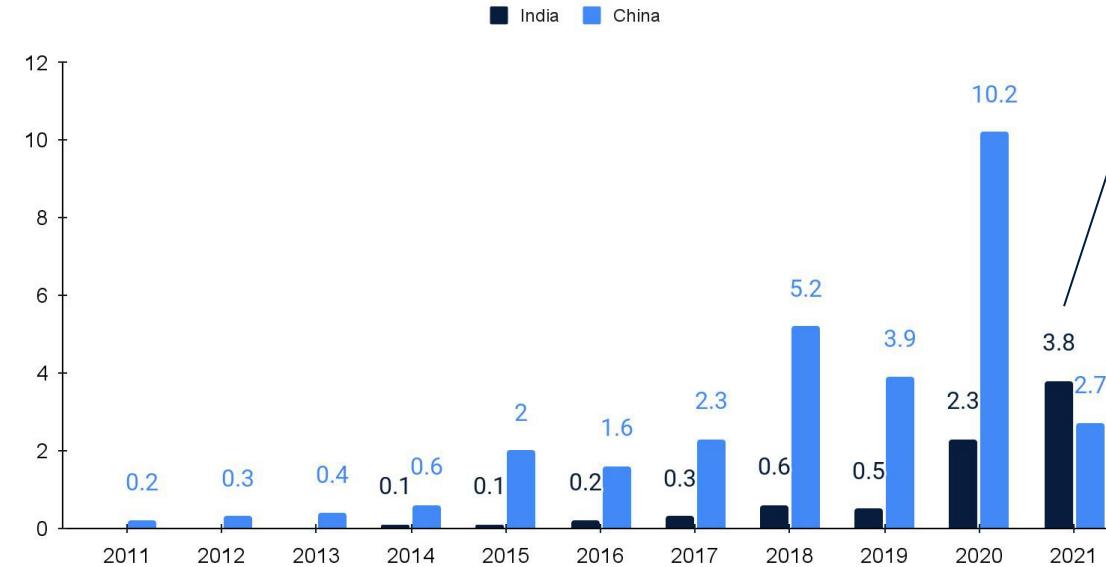


# In 2021, India became the hero market for EdTech

The government-led crackdown eviscerated the Chinese EdTech Market leaving India as the hot new growth market.

India vs China - Funding Over The Years

In \$Mn



~67% of this went to the Byju's, Unacademy, Eruditus, & Upgrad

# Building in the shadow of giants

EdTech biggies, loaded on capital, are chasing inorganic growth through M&A

It has never been easier to start an edtech company. It has never been harder to scale without getting an acquisition offer from Byju's or Unacademy!



ERUDITUS  
EXECUTIVE EDUCATION



iD Tech  
Camps, Academies & Online

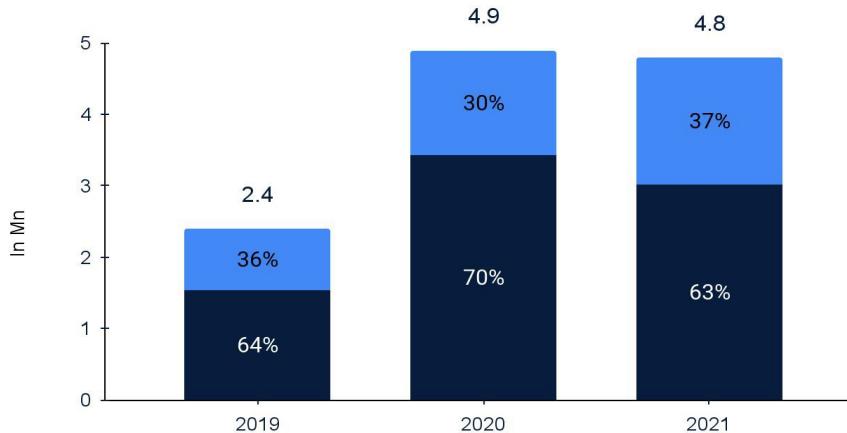
# Thanks to COVID, twice the users, thrice the revenues

Mild drop in the paid user base as schools reopen, but much of this new paid base will stick.

## Paid Userbase

EdTech

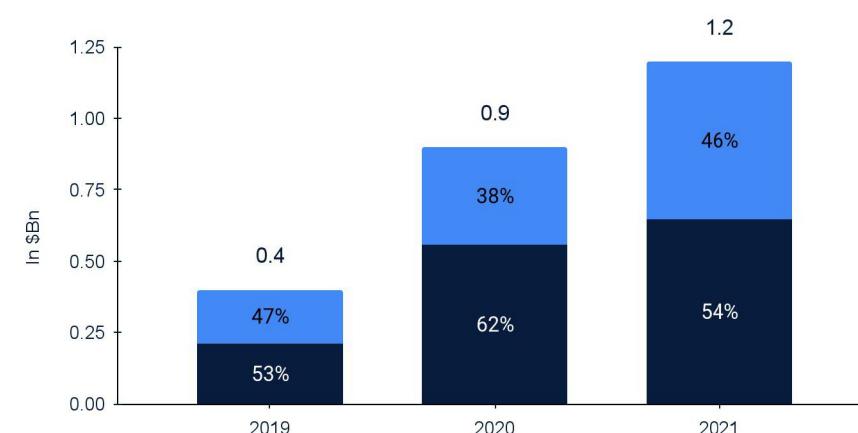
Post K12    K12



## Market Size

EdTech

Post K12    K12



# Zoom School: India1 v India2

India2 has struggled to keep up with digital education



Via **Kaushik Deka** (from his story in India Today)

Malhar Mazumdar, a Class 9 student at the Mother's International School in New Delhi, attending an online class at home in Saket (an upper middle class neighbourhood in South Delhi).



Via **Chitra Pandit** (leads fundraising at Akanksha, a leading nonprofit)

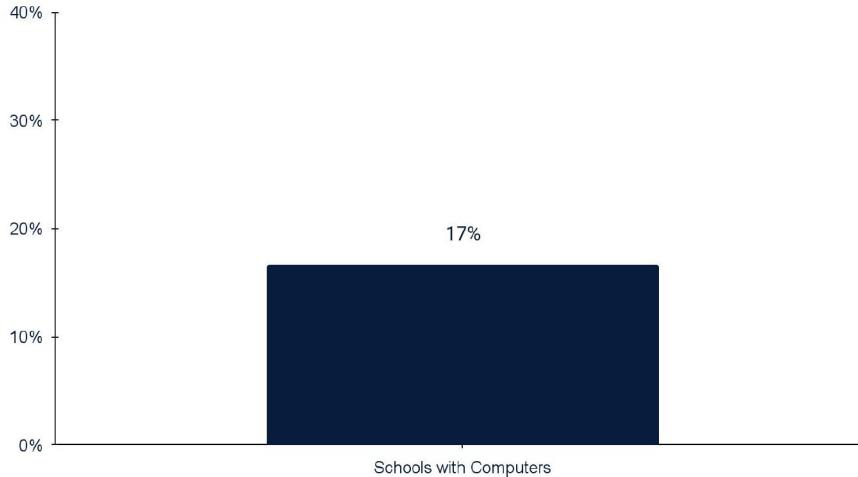
"I had the opportunity to visit the home of a child who is enrolled in Junior Kindergarten in an Akanksha School. The child has never seen the inside of a school building. In just under 6 months, with the help of online classes with an Akanksha teacher and his mother, he has been able to write the English alphabet. His mother sits with him for every online class and diligently follows the teachers instructions."

# COVID accentuated the digital divide

PreCOVID, barely a sixth of Indian schools, mostly private ones, had working computers. Still, Indian schools adapted.

## PreCOVID

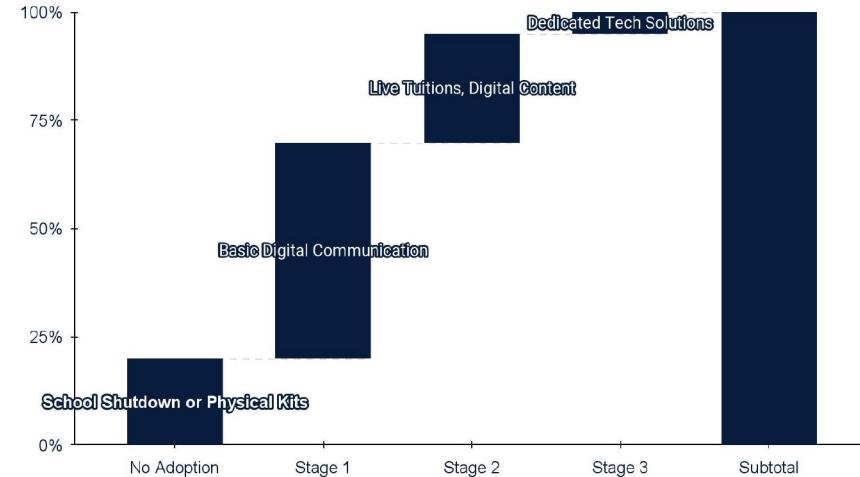
### Schools with Working Computers



India has 1.5m schools, approximately 250k had working computers. Only 10% of govt schools had computers (vs 27% of private schools.)

## PostCOVID

### Adoption of Tech in Schools



From a survey of schools; about 20% shut down during COVID. 50% of them moved to using whatsapp + smartphone (no live classes though) mode. Indian schools adapted by and large.

# The digital divide is accentuating the learning divide

Data from a survey done in government / public schools reveals learning loss.

92% of children on an average have lost at least one specific language ability from the previous year across all classes.

82% of children on an average have lost at least one specific mathematical ability from the previous year across all classes.

**Class 3**

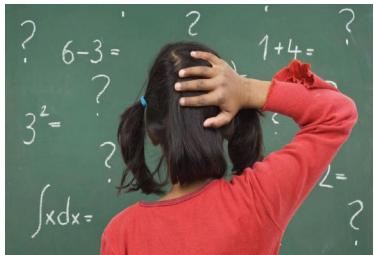


**46%** of children lost the ability to express views about a given picture in written form.

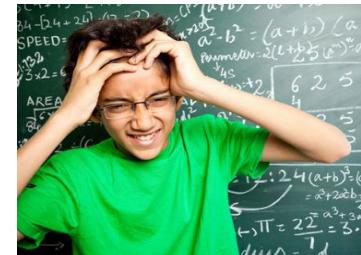
**Class 6**



**45%** of the children lost the ability to orally express views on simple topics like home and school.



**48%** of children lost the ability to solve problems using subtraction operations in daily life operations.

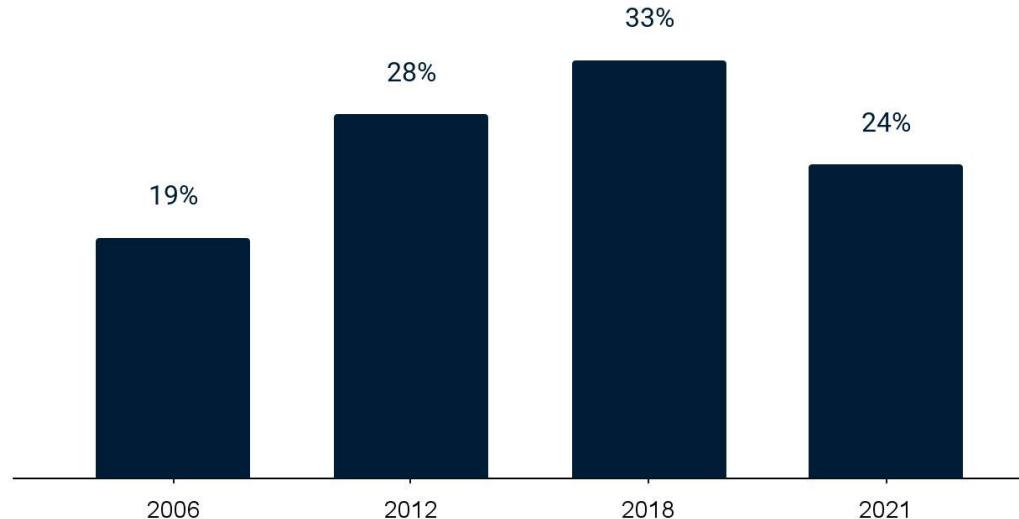


**40%** of the children lost the ability to perform division of four-digit numbers by a single-digit number.

# A sharp shift away from private schools

Despite poor facilities at government schools, we saw a sharp jump in enrollment, spurred by COVID's impact on incomes.

Private School Enrollment: 6-14 YOs from Rural Areas



# EdTech is the new global SaaS

Indian EdTech startups are expanding to global markets, or launching global products from the get go!



Launched in India & expanded abroad

1

Byju's: Likely to close FY22 (Apr21-Mar22) with \$400 Mn from outside India (~25% of its overall revenue).

2

Eruditus: 80% of \$175 Mn bookings for FY21 originated outside India.

3

CueMath: >50% of revenue comes from non-India markets.



Global from the get go!

1

Quizizz: Huge adoption in US (>80% schools have at least 1 teacher using it); ~65M MAUs (>95% outside India).

2

PlayShifu: E-toy brand that pivoted to focus on global markets given higher price points; sells in 30+ countries.

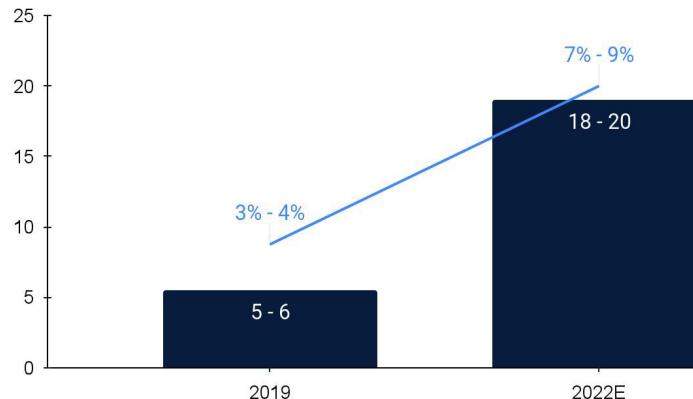
# EdTech is not the only sector going global

SaaS leads the charge, but it is not the only sector to have startups with a large non-India revenue base

## India SaaS revenue

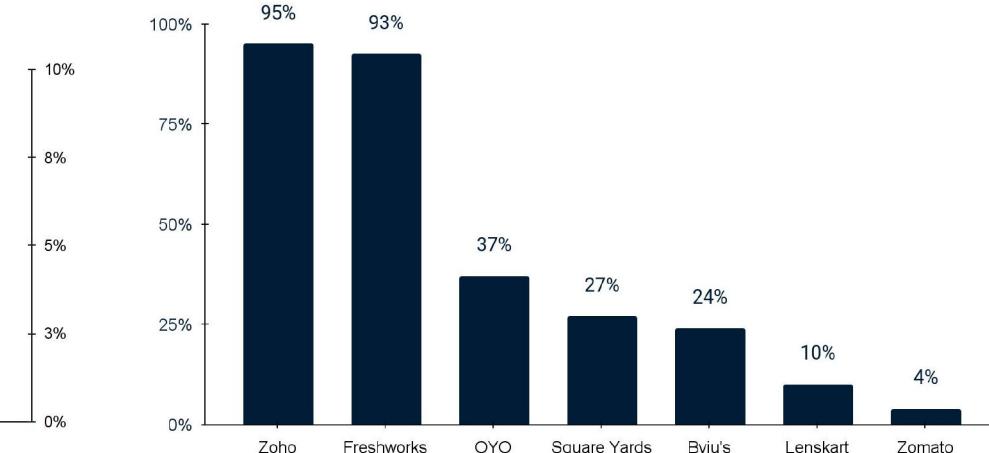
in \$Bn

■ India SaaS revenues    — as % of global market



## International Revenue

as % of Total Revenue



# The two waves of global SaaS

If Zoho, Freshworks led the first wave of top down SaaS, then Postman, Browserstack lead the PLG wave



# Two broad approaches to monetise Bharat SaaS

Marketplaces or Lending



**Khatabook**

Free bookkeeping SaaS;  
launching lending



SaaS for Teachers / Creators  
to offer classes online;  
Marketplace to help creators  
and educators sell content to  
students

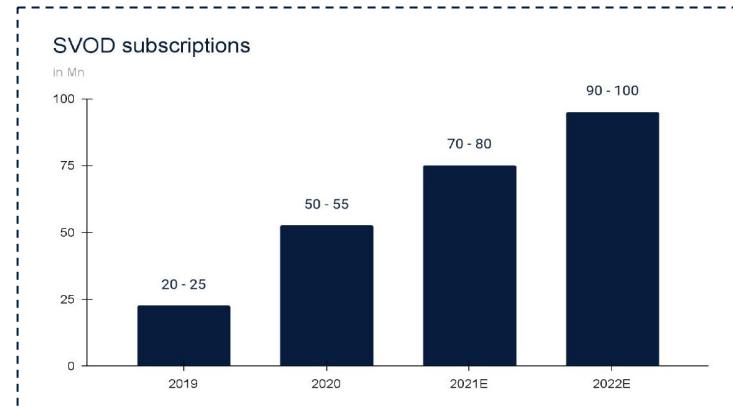
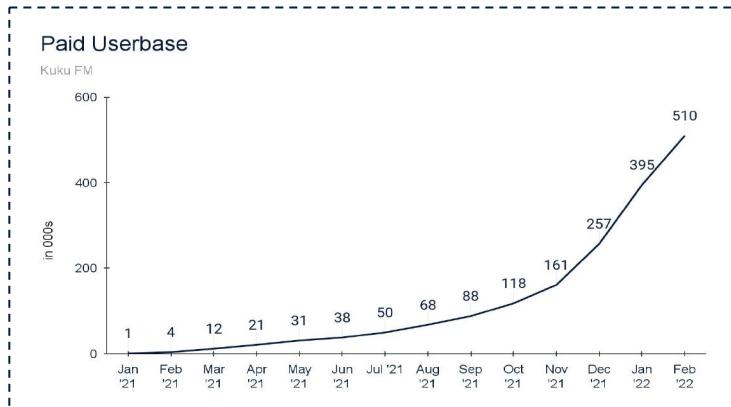


SaaS for Doctors;  
Marketplace to help them sell  
services to patients

Domestech SaaS is typically aimed at SMBs but not always. Because paying capacity is usually limited (SaaS TAM is constrained), hence most DomesTech plays have an endstate revenue from marketplaces and financing.

# Indians beginning to pay for content

From KukuFm in audio, to Stage, a regional dialect OTT video brand, we are seeing a greater willingness to pay.



Vinay Singhal (@stage.in)  
@vinaykrsinghal

We have crossed 60,000 paying subscribers on  
**@STAGEDotin** - grew 6x in 6 months and adding 1000+ new  
subscribers daily - all from Haryana alone.

Here is our story

Vinay Singhal (@stage.in) @vinaykrsinghal · Jul 7, 2021

We just hit 10000 paying subscribers at @STAGEDotin 😊

Here what our team has learnt from this (the hard way) 🙏 [twitter.com/vinaykrsinghal...](https://twitter.com/vinaykrsinghal...)  
[Show this thread](#)

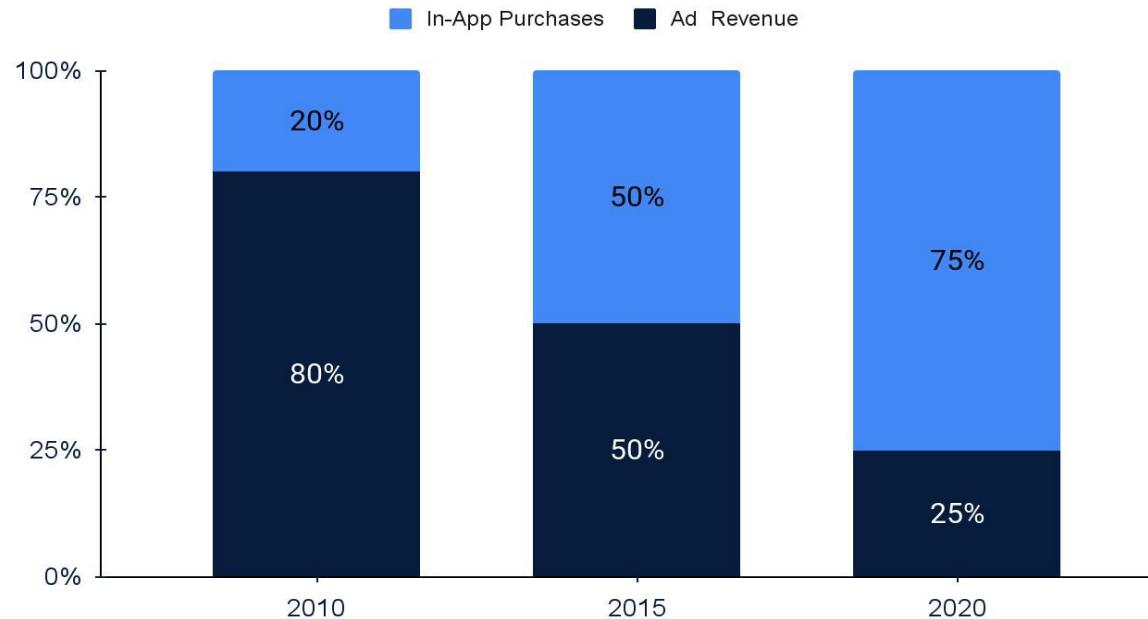
3:37 PM · Jan 6, 2022 · chirr.app



# P(I)aying games

Gaming is one area where we have seen a big shift in willingness to pay

## Pivot from Ad Revenue to Microtransactions



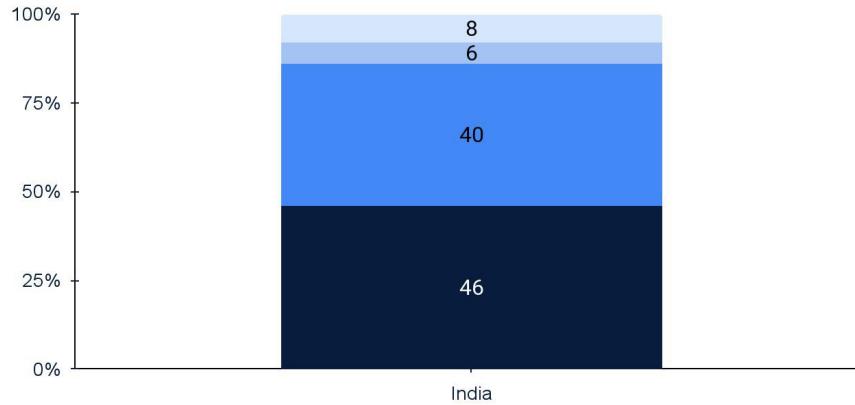
# It is not 'ad'-ing up.

The time spent v ad spend chart shows that Print enjoys a disproportionate ad share (Digital punches below its time weight)

## Time Spent

USA vs India

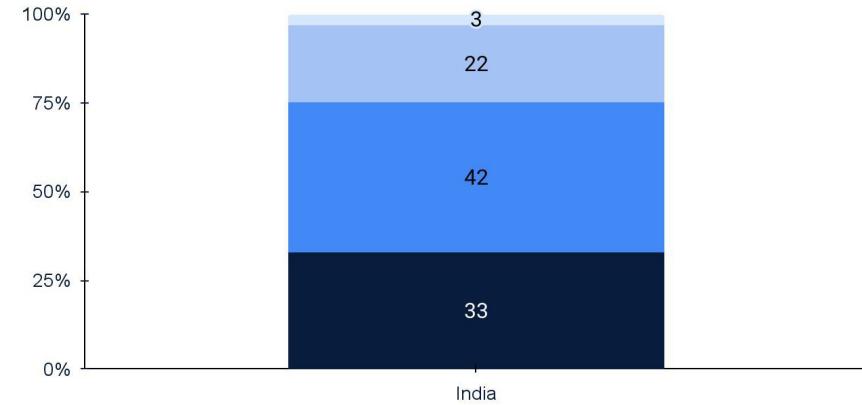
Radio    Print    TV    Digital



## Ad Spend

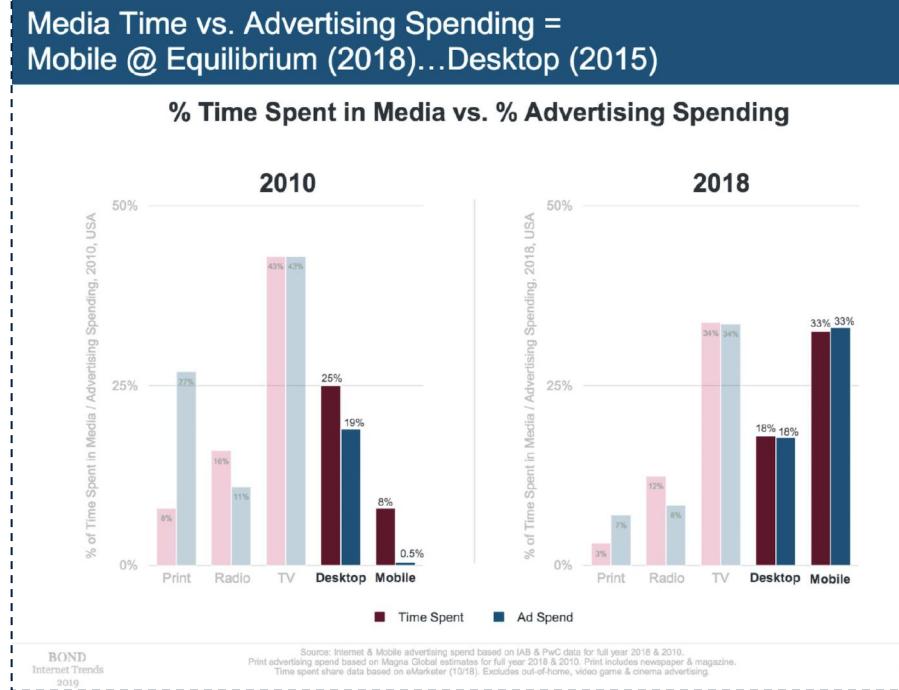
USA vs India

Radio    Print    TV    Digital



# Read the fine print

The US saw a 1900 bips shift away from print towards digital from 2010 to 2018. We will see a similar shift in India too.



# India's #3 and #4 digital ad platforms aren't media brands, really

Amazon, Flipkart emerge as the fastest growing digital ad platforms. Amazon sells more ads than Times of India print edition.



\$1.85b / ₹13,887 crs



\$1.25b / ₹9,326 crs



\$340m / ₹2,554 crs



\$185m / ₹1,386 crs



\$240m / ~₹1,800 crs

# All classifieds transform to become marketplaces

# All marketplaces expand to become full stack businesses

The need for higher margins drive them to own the entire transaction end to end

**US:** High volumes lead to a large listings site, hence they make up for the marketplace's thinner margins.

**India:** Stunted volumes mean finite limits on how much a classifieds or marketplace biz can grow.

Tendency of Indian startups to get into transactions, and own it end to end, to derive better margins.



Operates its own hotels.



Manufactures own beauty products.



Only classifieds to owning transactions.

# Full Stack Zomato

Zomato started as a restaurant discovery service focused on ad revenue, and gradually transformed into a food delivery service.

**2014**

Restaurant Discovery Service

## Restaurant Discovery Service Zomato Raises Further \$60M

Steve O'Hear @scheer | 8:00 AM GMT+5:30 • November 19, 2014



Zomato, the restaurant search and discovery service, has closed a further \$60 million in funding, giving the company a post-money valuation of \$660 million. Investment comes from India's Vy Capital, and existing backers Info Edge, and Sequoia Capital. It takes total funding to over \$113 million.

TechCrunch

Steve O'Hear

November 19, 2014

8:00 AM GMT+5:30

Comment



**2018**

Restaurant Discovery and Food Delivery Service

## Zomato Raises \$200 million from Ant Financial

Ivanan, ET Bureau • Last Updated: Feb 01, 2018, 09:48 PM IST

SHARE

ETPrime



Ant Financial's interest in Zomato comes as parent Alibaba is aggressively expanding its presence across the world, especially in markets like Southeast Asia.

**Synopsis**  
Zomato which earns a lion's share of its revenues from its advertising business, is also locked in a battle for market leadership in the food delivery space, which is more capital intensive.

MUMBAI: India's [food delivery market](#) is steaming up as investors flock to the space and [Zomato](#) is taking pole position this time around. The online restaurant discovery and food delivery firm has raised \$200 million from [Ant Financial](#), the payments affiliate of Chinese e-commerce giant [Alibaba](#). The deal values Zomato at \$1.1 billion with a pre-money valuation of \$945 million according to two sources,

finally earning it the elusive unicorn tag.

**2020**

Food Delivery Startup

## India's Zomato valued at \$5.4 billion in new \$250 million investment

Manish Singh @mish / 3:19 AM GMT+5:30 • February 23, 2020

Comment



Image Credit: Naor Kacivco / NurPhoto / Getty Images

Zomato has raised \$250 million, two months after closing a \$660 million Series J financing round, as the Indian food delivery startup builds a war-chest ahead of its IPO later this year.



# Shifting gears

The dominant model in the used car market is the full stack transaction model pioneered by Spinny et al..

Full Stack Model - Spinny!



1

Nature of car buying - infrequent, high involvement, and high value - and the need for 'fewer independent entities that can make or break a customer experience', full stack models lend themselves well to online car sales.

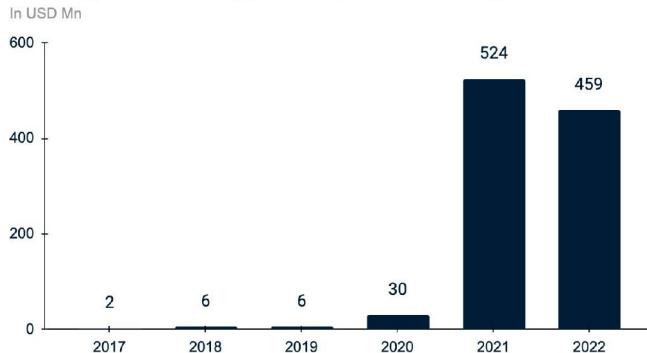
2

Players like CarDekho, OLX who started with the Classifieds model are shifting to the transaction model.

# Regulating the unregulatable

Mixed signals from the India government + favourable Dubai tax / crypto regime push Indian founders to Dubai. Meanwhile Indian retail and financial investors can't tire of Crypto.

Funding in Indian Crypto, Blockchain startups



**Business Insider India** @BIndia

Taxing #cryptocurrencies does not give them legal status, clarifies India's finance minister

[businessinsider.in/cryptocurrency...](http://businessinsider.in/cryptocurrency...)

By @pabsgill

7:00 PM · Feb 12, 2022 · Twitter Web App

Reserve Bank of India governor chief delivered a stark warning against investing in cryptocurrencies, saying they lacked the underlying value of even a tulip - in a reference to a speculative bubble that gripped the Netherlands in the 17th Century.

**ish.eth** #hiring @ishgoel

There are 36 Indian crypto entrepreneurs (I know of) who are in Dubai this week.

Just mind boggling how crazy of an Indian ecosystem has been created around crypto.

It's all happening.

9:40 AM · Oct 14, 2021 · Twitter for iPhone

## Why Crypto Cos are On a Flight to Dubai

An RBI circular barring banks from dealing with crypto assets and regulatory ambiguity had earlier forced many cryptocurrency firms to shift base to Dubai and Singapore. Now, a restrictive tax regime and policy flip-flops may make others follow suit. **Vihod Mahanta** analyses the trend

# Everyone is a VC

Easy access to capital in the landscape has led to multiple components of the ecosystem becoming operators - investors

## Unicorns as Quasi - Funds

## Startups Setting Up Formal Funds

## Startups as Roll-Up-Funds

## Founders as Angel Investors

**What?**

Dedicated M&A teams in unicorn startups, on the lookout for acquiring startups/ teams that are complementary / adjacent to their core business.

Dedicated funds set up by startups, which invest in synergistic startups and help them innovate, launch, and scale. It also helps startups quickly validate their products.

Roll-up ecommerce or aggregators have raised millions to acquire digitally native brands and sellers. They offer digital hand-holding and sales know-how to these brands.

Founders of unicorn startups have started to deploy capital in multiple startups. They thus guide new founders basis their own rich operating experience.

**Who?**



**Examples?**



# Understanding Quick Commerce

Indian startups reacting to Zepto, have realigned their existing models to fit QCommerce. Here is why it matters.



**Sajith Pai**

@sajithpai

...

Huge excitement around QCommerce / 10min delivery - GoPuff, Rappi, Gorillas, Jokr, Dunzo, Zepto etc - because the model of dark stores / limited SKUs / defined 2x2 sq km area etc has been cracked. PMF is now much easier with this model.

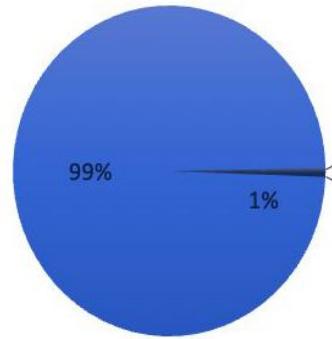
Grocery's native model is QCommerce.

9:31 AM · Dec 26, 2021 · Twitter Web App

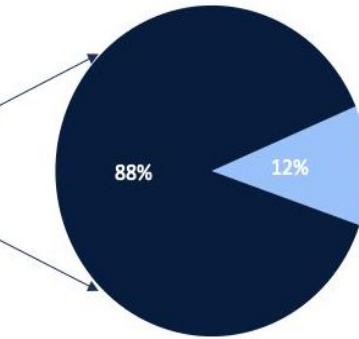
# Quick commerce: can it deliver?

Quick commerce was one of the most talked about sectors this year, can it spread to other sectors from grocery?

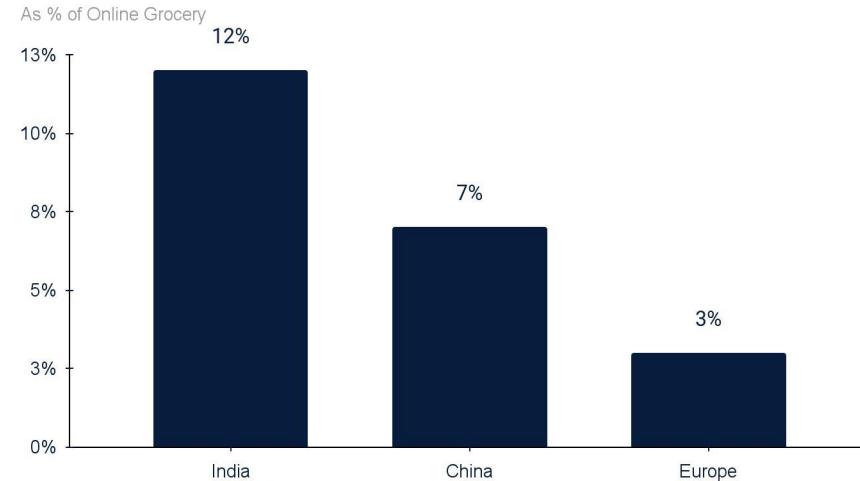
Overall Grocery Market



Online Grocery Market



Penetration of Quick Commerce



Given the stunted online grocery sector, QCommerce made quick inroads, thus changing customer behavior and expectations. This is expected to lead to quick commerce spreading in other sectors as well.



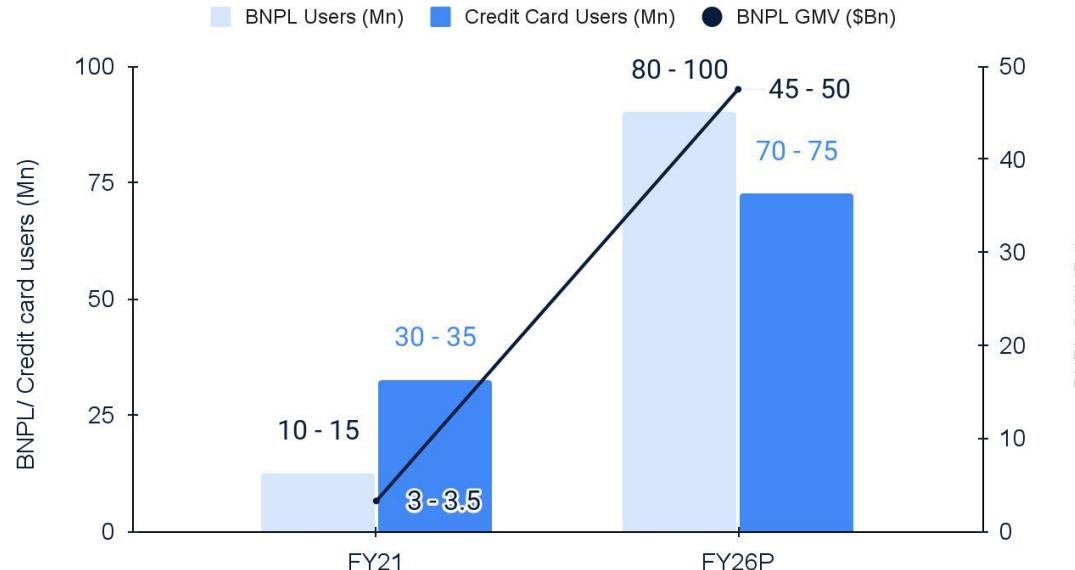
**Deepinder Goyal** @deepigoyal · Mar 21  
Announcement: 10 minute food delivery is coming soon on Zomato.

# Leapfrogging - example #1: BNPL vs Credit Cards

Credit cards will grow, but BNPL may just grow faster.

While the credit card industry has been growing at an impressive 15% CAGR, the overall low credit card penetration, stellar growth of UPI, India's traditional comfort with credit and convenience, has left a substantial whitespace for BNPL to prosper. Here is a projection by Redseer on BNPL overtaking Credit Cards.

BNPL vs Credit Cards in India

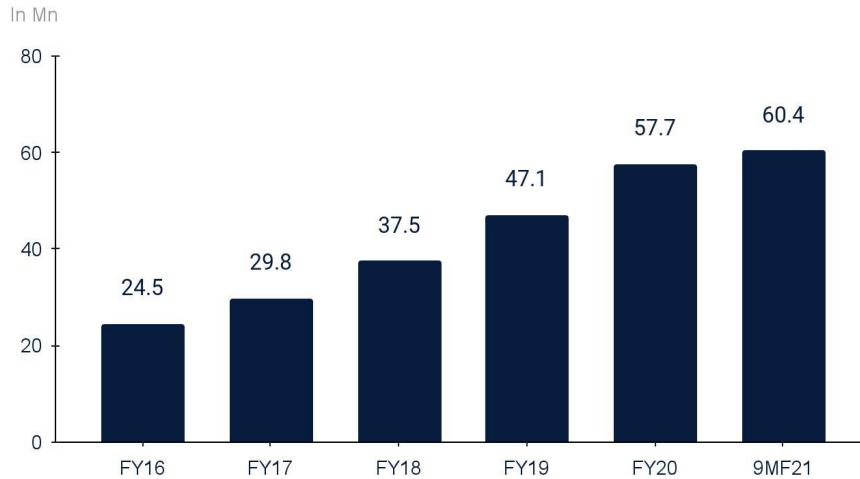


# Credit Cards have remained a stunted market in India

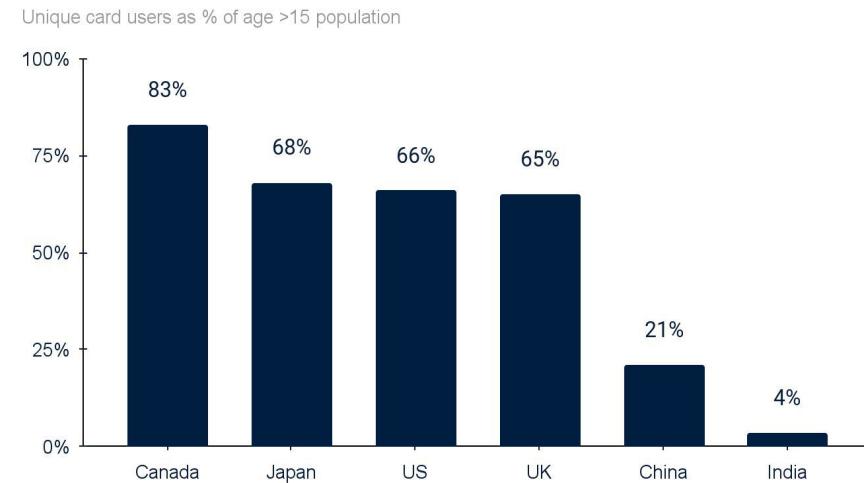
The nature of estimating credit risk forces it to be confined to the permanent formal employee class of ~50m or so.

Hence the paradox of credit cards in India. There has been an impressive 15% CAGR over the last 9 years, but credit card penetration is still very low as compared to other countries.

#Credit Cards in India



Credit Card penetration

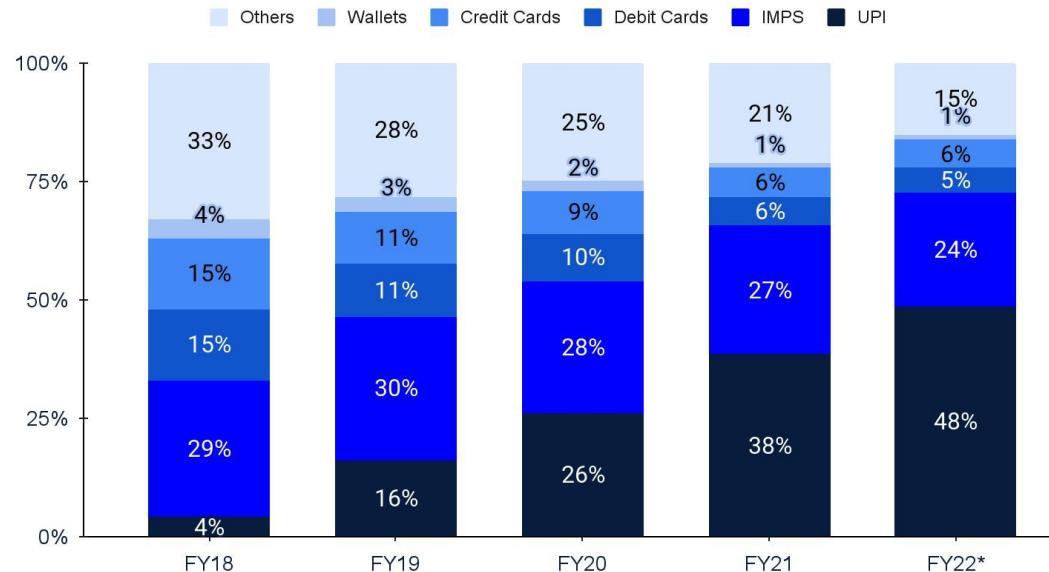


# UPI's Pay to Merchant (P2M) route making huge gains

Credit Cards faces challenges from UPI too given that merchants do not pay commission (which they do on credit cards)

UPI is gaining widespread adoption by retailers given both ease of payments as well as the zero commission, given the 'Zero MDR' regime. Credit Cards are thus pinned from either ends - BNPL as well as UPI P2M route.

Share of Retail Transactions

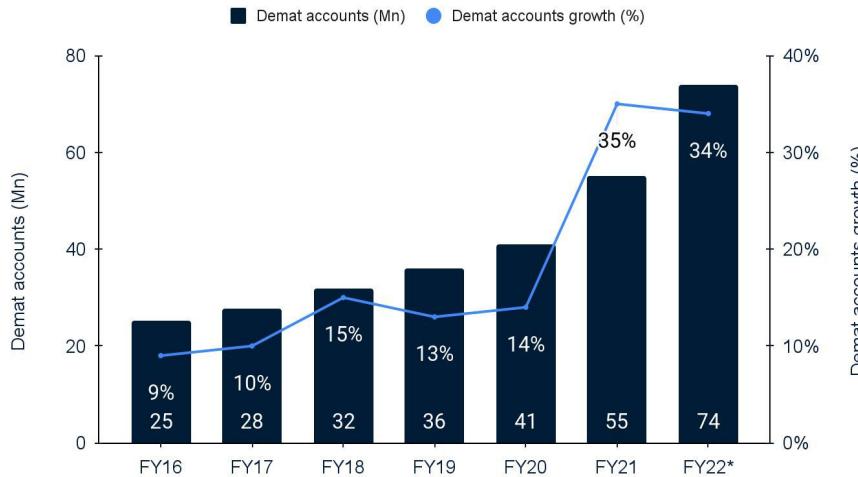


# Leapfrogging - example #2: Crypto v Demat

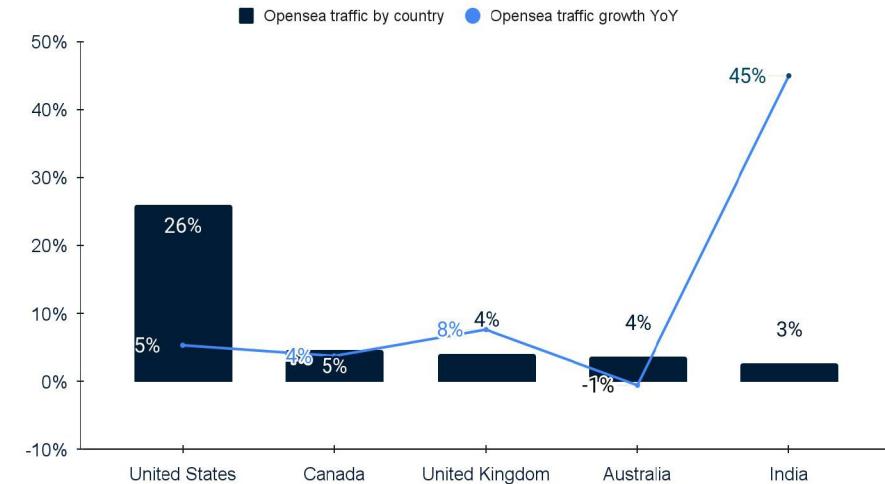
Crypto is fast emerging as a preferred asset class for millennial, first time investors.

There are ~20m crypto users in India, as compared to a total of ~80m demat accounts in India. Thanks to 2021's bull markets and the IPO craze, there has been a corresponding bump up in growth of public market investor base. Crypto has also reached a fourth of the public market investor base in less than three years of effective operation.

Demat accounts growth in India



Crypto traffic across countries

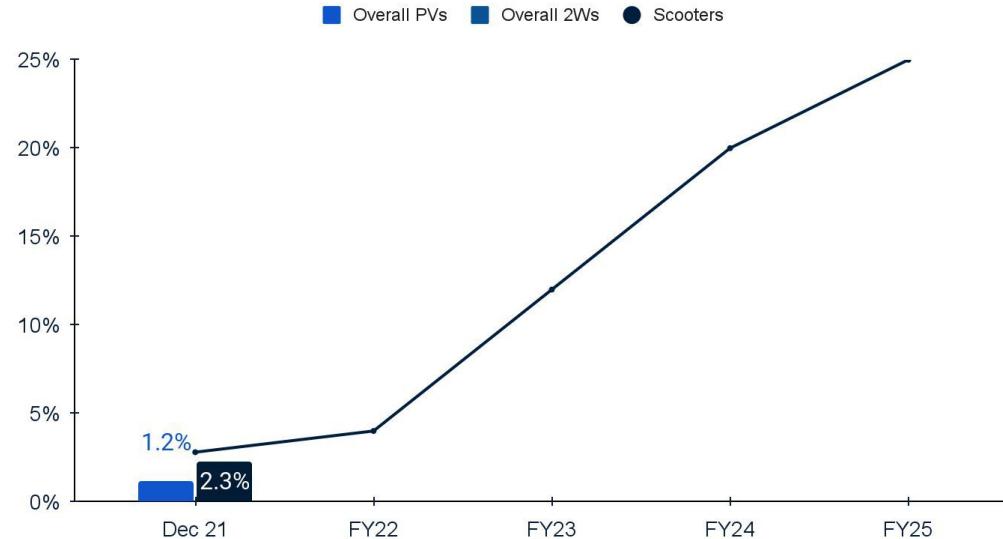


# Leapfrogging - example #3: EVs vs ICE

EVs are well-poised to overtake ICE models thanks to fuel economics and government incentives.

India sees ~85% of vehicles sold as 2W/ 3Ws. Given that smaller and simpler batteries suffice for them, as well as the desire for fuel savings from these less affluent riders / operators, and finally government incentives have all become forcing functions driving faster growth of EVs over ICE in this category. Here is a projection by Jefferies on how EV penetration is likely to happen.

EV penetration in Indian market



Notes: 1) PVs - Passenger Vehicles; 2) ICEs - Internal Combustion Engines; 3) EVs - Electric Vehicles; Source: Gol, Jefferies;

# Six Impossible Things

Blume takes a bold bet on life and Indus Valley possibilities in 2030.



## EVs ruling the road

>75% of new registrations are EVs and there are <10 petrol pumps in Mumbai.



## Gov leads eComm charge

Like the role of UPI in transforming payments, ecommerce led by ONDC leads to a wave of backend light startups leveraging public APIs.



## SpaceTech

India becomes the centre for low cost space launches, with multiple Indian space private companies dominating the world.



## Kitchenless Homes

The first wave of kitchenless homes come on sale, which are designed for Gen-Zs who live on food delivery.



## Homo Ex Data

CGMs and implants become the new wellness bands, and the data generated is used by insurance companies to price policies differentially.



## Global Indus Valley

Countries compete to attract Indian talent by following the Dubai model.

# Appendix



# Resources to help you better understand today's India

The following books are extremely useful to understand India and Indians today

- *Poor Economics - Abhijit Banerjee and Esther Duflo*
- *Desperately Seeking Shah Rukh - Shreyana Bhattacharya*
- *Truck de India! A Hitchhiker's guide to Hindustan - Rajat Ubhayakar*
- *Whole Numbers and Half Truths - Rukmini S*
- *Dreamers - Snigdha Poonam*
- *A Feast of Vultures - Josy Joseph*

The following books are helpful to understand how the Indian economy and society evolved

- *India Unbound - Gurcharan Das*
- *India after Gandhi - Ramachandra Guha*
- Two novels: *A Suitable Boy* by Vikram Seth and *A Fine Balance* by Rohinton Mistry

The following podcasts help make sense of India today

- *The Seen & The Unseen - Amit Varma*
- *Ideas of India - Shruti Rajagopalan*

## Acknowledgements

As with all reports, this too rests on the labour of several analysts, researchers and writers who have preceded us. As always, we stand on the shoulders of giants. We have acknowledged the sources and their contributions on each of the pages; a special shout out to Redseer and Bain in particular, and to their leaders Anil Kumar and Arpan Sheth, for enabling greater access to data and enhancing understanding of the Indian startup ecosystem.

We would also like to thank Arnuv Joshi and the wider Blume team for their inputs.

- Sajith and Amal

## About Blume Ventures

Blume Ventures is an early stage venture firm based in Mumbai, Bangalore, Delhi that provides ‘conviction capital’ to founders across India consumer internet as well as software & enterprise technology.

We add value through a platform approach – over 60 specialists across CFO, legal, talent, capital, GTM, operations – who focus entirely on supporting portfolio companies, helping founders learn and greatly improving their chances of success. Our value-add approach has helped us retain board representation in 34 of our top 36 companies, collectively valued at \$12.2B (all invested at seed stage).

You can read more about us at [blume.vc](http://blume.vc)