

PRODUCT OPPORTUNITIES DRIVING A USD 10 TRILLION ECONOMY

WHO ARE THE NEXT SET OF UNICORNS?

NASSCOM®



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digital natives at work

FOREWORD

- In the current economic scenario which is witnessing a predominance of “digital,” India is exceptionally well-poised to fill up the white spaces and leapfrog towards a 10 Trillion dollar economy by 2030.
- Internet & smartphone penetration and mobile data usage – their sheer expanse and volume – have given India an identity which has few parallels worldwide. With 500 million Internet users, India is the fastest growing Internet market today. When coupled with 370 million smartphone users and mobile data traffic growing @ 144% (over 2017) clearly this is a major driver of transformational change.
- In this context, this report introduces the INSIS Framework which serves will serve as a guide if the nation is to grow at 10% over the next two decades. The INSIS framework stands for: Innovation, No Friction, Specialization, Infrastructure and Skills.
- The “As-a-Service” economy is now almost an imperative. In India, SaaS has become ubiquitous with over \$2BN worth of investments seen in the last 5 years. Nearly 40% of leading Indian B2B product forms are focused in the mid-market segment. The “India first, Asia Next, US last” expansionary mindset continues to resonate, and of course, the availability of talent plays a key role in this dynamic. The ecosystem partners (including NASSCOM FutureSkills) are obsessively focused towards churning out 1.5 – 2 million digitally trained people with niche capabilities in emerging technologies in the next 3 – 4 years.

FOREWORD

- The 10 trillion dollar economy may well be within reach in the time frame mentioned or even earlier, but it has to be built like a pyramid. The base on which it stands obviously has to be robust enough to include strong economic foundations (transport, connectivity, education, healthcare, etc.). The middle layer or the core, will be about building digitally native companies across various industries, and help them expand to other geographies to build scale. Finally, the topmost layer will be defined by leadership in emerging tech to catalyze non-linear growth. Here the government's role is critical. Policies will have to be ecosystem-friendly to propagate deep-tech like AI, Blockchain, Advanced Analytics and the like.
- I hope you enjoy reading the report.



Sangeeta Gupta
**Sr Vice President &
Chief Strategy Officer,
NASSCOM**

EXECUTIVE SUMMARY

- India has historically been a leading economy of the world for the bulk of human economic history. Its serious decline started during colonial times, and it took the economic reforms of 1991, to put the country back on growth trajectory. India historically has demonstrated significant capabilities around “deep tech” as it is called today and was a global leader in several product categories.
- In this report we study the growth trajectories and causal factors of other emerging economies and come up with the INSIS (Innovation, No friction, Specialization, Infrastructure, Skills) framework to help drive India towards a 10 Trillion Dollar economy by 2030. We also cover some landmark public sector and private initiatives that are powering the INSIS flywheel and providing the tailwind in this journey.
- We’re living in interesting times, where change in all sectors is happening at an unprecedented pace and is being driven by ubiquitous computing & connectivity coupled with new digital technologies. Digital is a new territory for almost all major nations, and this presents a great opportunity for India to leapfrog into a pole position in multiple sectors. We discuss the challenges of most of the important verticals that make up the Indian economy and postulate opportunities that can create digital native vertical companies that can quickly spread across multiple global regions.
- The next few years are going to see over a billion mobile Internet users, as bandwidth prices have dropped to a record low. This would mean we would need to have new technology focused on the vernacular and natural input & output technologies, as well as for collaboration and empowerment across these users. This presents an outstanding opportunity to power up the base of this economy.

EXECUTIVE SUMMARY

- With its natural strengths around technological skills and scale, low cost structure etc., India can be a software product leader in a short span of time. We explore the various models to create many SAAS unicorns out of India.
- To summarise, we present over 30 categories in which unicorns can be created across verticals like Finance, Insurance, Healthcare, Agriculture etc. This is expected to provide greater visibility into the “problems worth solving” space to the Indian startup community. 1 Trillion digital and a 10 Trillion economy: This is the clear clarion call for the new set of entrepreneurs.
- May a 100 unicorns bloom! Hope you have as much fun reading this report as we had making it.



Bharat Lingam
Chief Executive Officer,
[x]cube LABS

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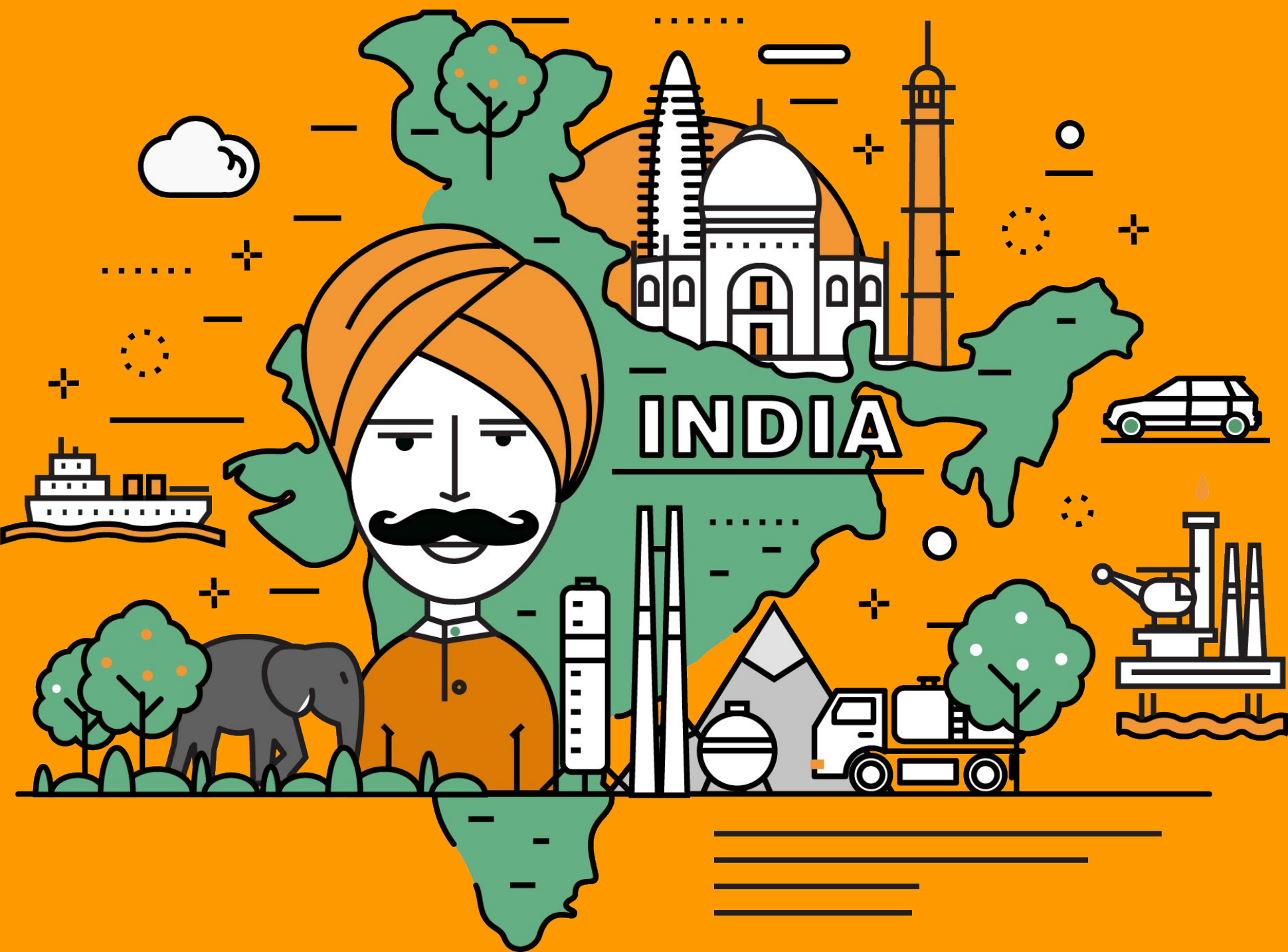
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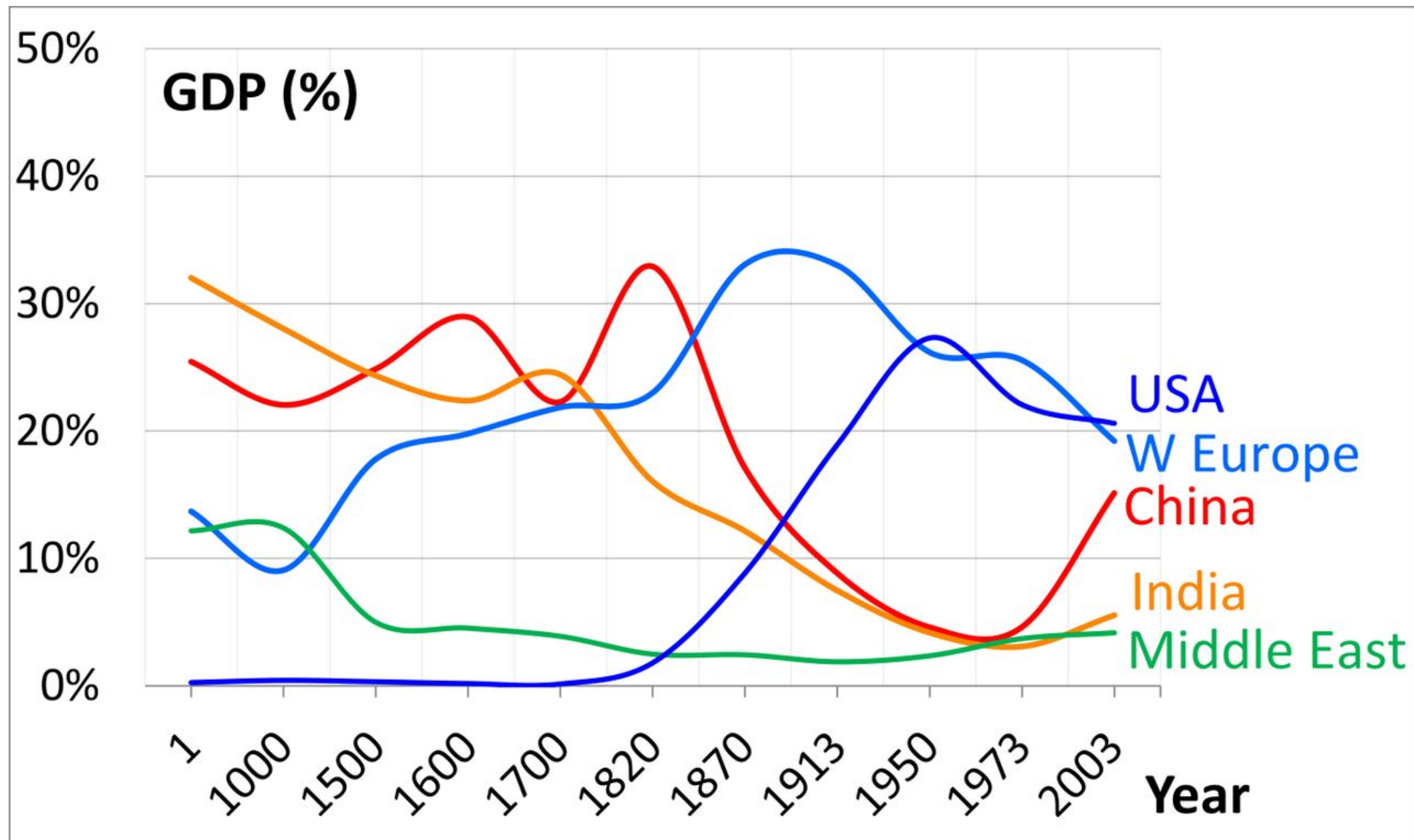
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MACRO ECONOMIC FACTORS OVERVIEW

INDIA – A MAJOR GLOBAL ECONOMIC PLAYER THROUGHOUT HISTORY



- India was among the top three largest economies in the world for most part of the last 2000 years
- Was the largest economy in the world in the 17th century
- Its decline as an economic power has been fairly recent and was initiated under colonial administration

Source: The World Economy: Historical Statistics by Angus Maddison

INDIA HAS BEEN A “DEEP TECH” AND PRODUCT LEADER FOR LONG

Products & Sectors in which India Strongly Contributed to Global Science & Economy Historically



Luxury Goods

Muslin & Calico

During the 17th & 18th centuries, Muslin – a cotton fabric of plain weave, was made in Bengal and exported to Europe and Middle East. Muslin dresses were considered the ultimate in luxury. The popular Calico cloth originated in India & was exported worldwide.

Diamonds

The earliest diamonds were found in India in 4th century BCE. India was the source of nearly all the world's known diamonds until the discovery of diamonds in Brazil in 1726. India was the source of many legendary gems, including the Koh-i-noor, Nizam, etc.



Metallurgy

Wootz Steel

Wootz Steel is a high carbon steel alloy that originated in India. It was exported to Europe and the Arab world.

Iron Smelting

In the 5th century BCE, the Greek historian Herodotus observed that "Indian and the Persian army used arrows tipped with iron." Ancient Romans used armour and cutlery made of Indian iron. Zinc was first smelted in India.



Science

Mathematics

Numerous concepts by ancient Indian mathematicians like Zero, the decimal system, Integers, Trigonometry were transmitted to medieval Arabia, Europe, China.

Medicine

Documents on Ayurveda exist from 6th century BC, describing treatments for diseases and surgery practices – plastic surgery, lithotomy, tonsillectomy, cesareans, etc. Sushruta was widely regarded as the 'father of surgery.'

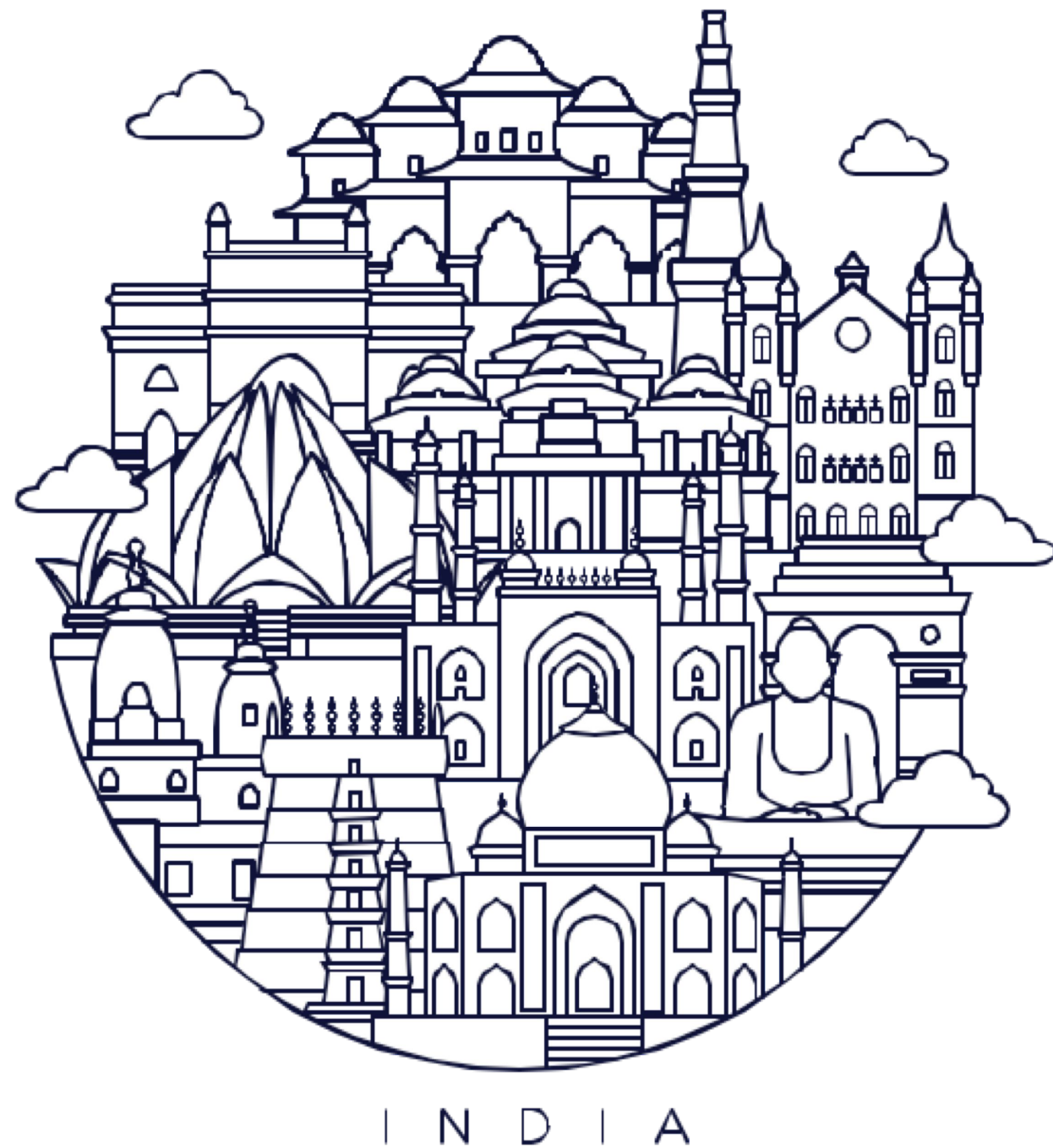


Science

Astronomy

Indian's were the first in the world to calculate the earth's orbit with high degree of accuracy. Indian astronomy flowered in the 5th-6th century, with Aryabhata, whose Aryabhatiya represented the pinnacle of astronomical knowledge at the time.

INDIA – ECONOMIC SNAPSHOT



GDP
\$2.6TN

GDP Per Capita
\$1,940

GDP Growth Rate
7.4% (2018)

Population
1.3 billion

Urban Population
439 million

Rural Population
885 million

Consumption Expenditures
\$1.4TN

Internet Users
500 million

Smartphone Users
337 million

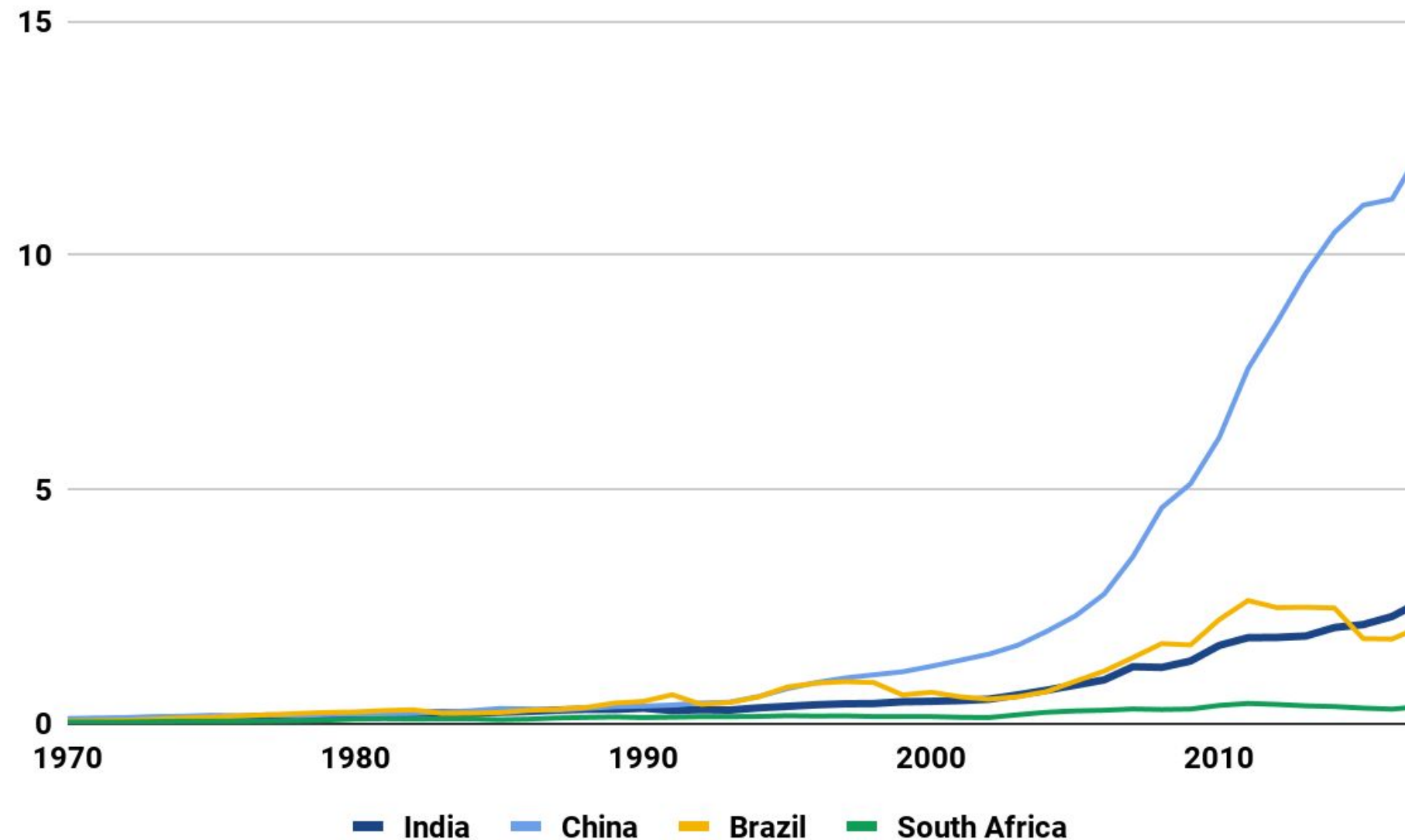
Strong Leadership in
IT Services, Gem Production, Pharmaceuticals, and Agriculture

Projected to be among top 3 economies of the world by 2030

Source: World Bank, BCG, Index Mundi, eMarketer, IMF

COMPARATIVE GDP GROWTH – INDIA vs. EMERGING NATIONS

Comparative GDP in Value (current \$ in trillions)



- India and China were roughly at the same GDP till 1978
- China's GDP skyrocketed after that, as it has created Special Economic Zones and encouraged FDI
- India started its economic revival after economic reforms were initiated in 1993, and its GDP reached \$2.6TN in 2017, compared to \$276BN in 1993

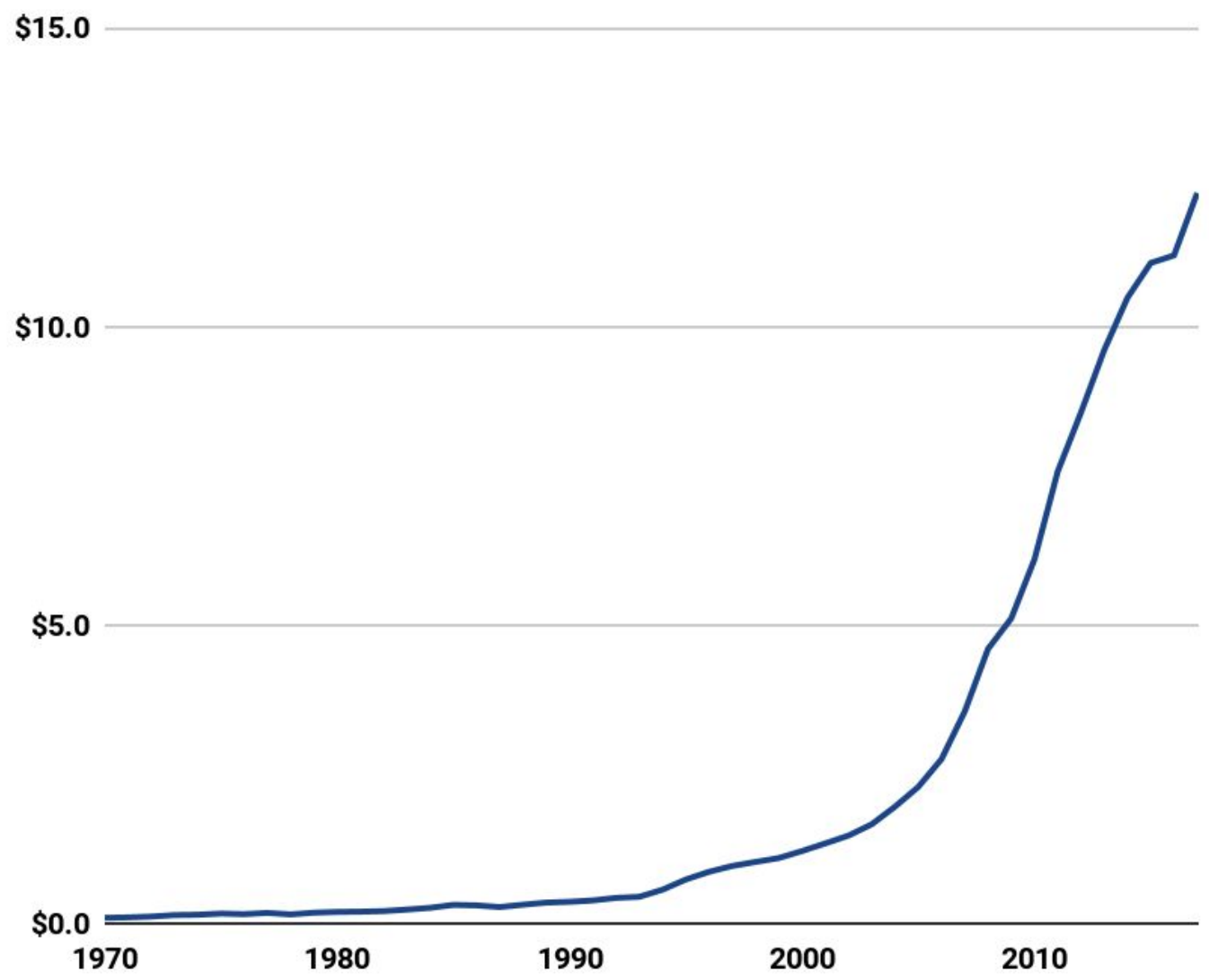
**CAGR Growth
India (1978 – 2017)**
7.87%

**CAGR Growth
China (1978 – 2017)**
11.96%

Source: World Bank

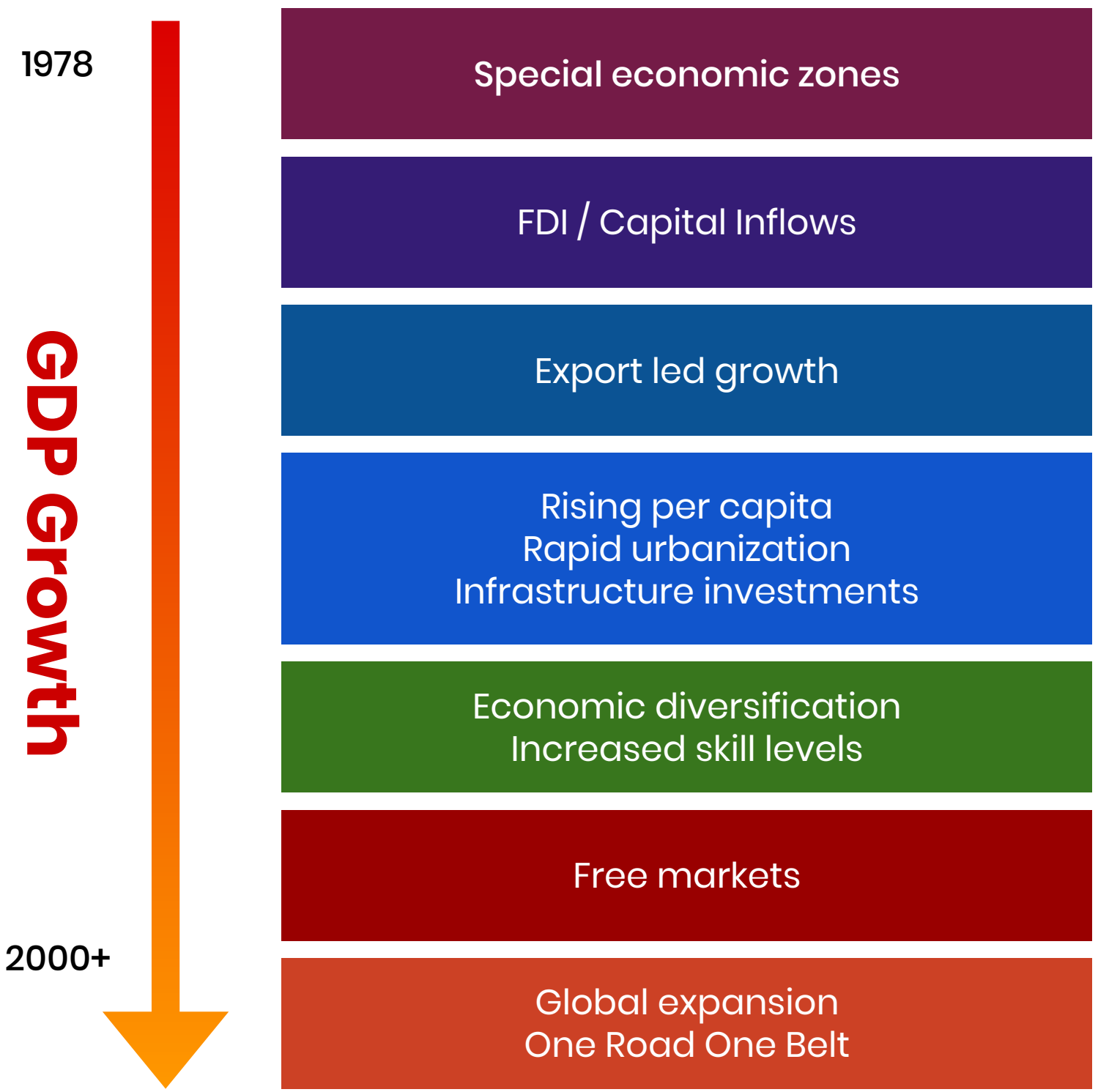
THE UNPRECEDENTED CHINESE GROWTH STORY

China GDP (\$ in trillions)



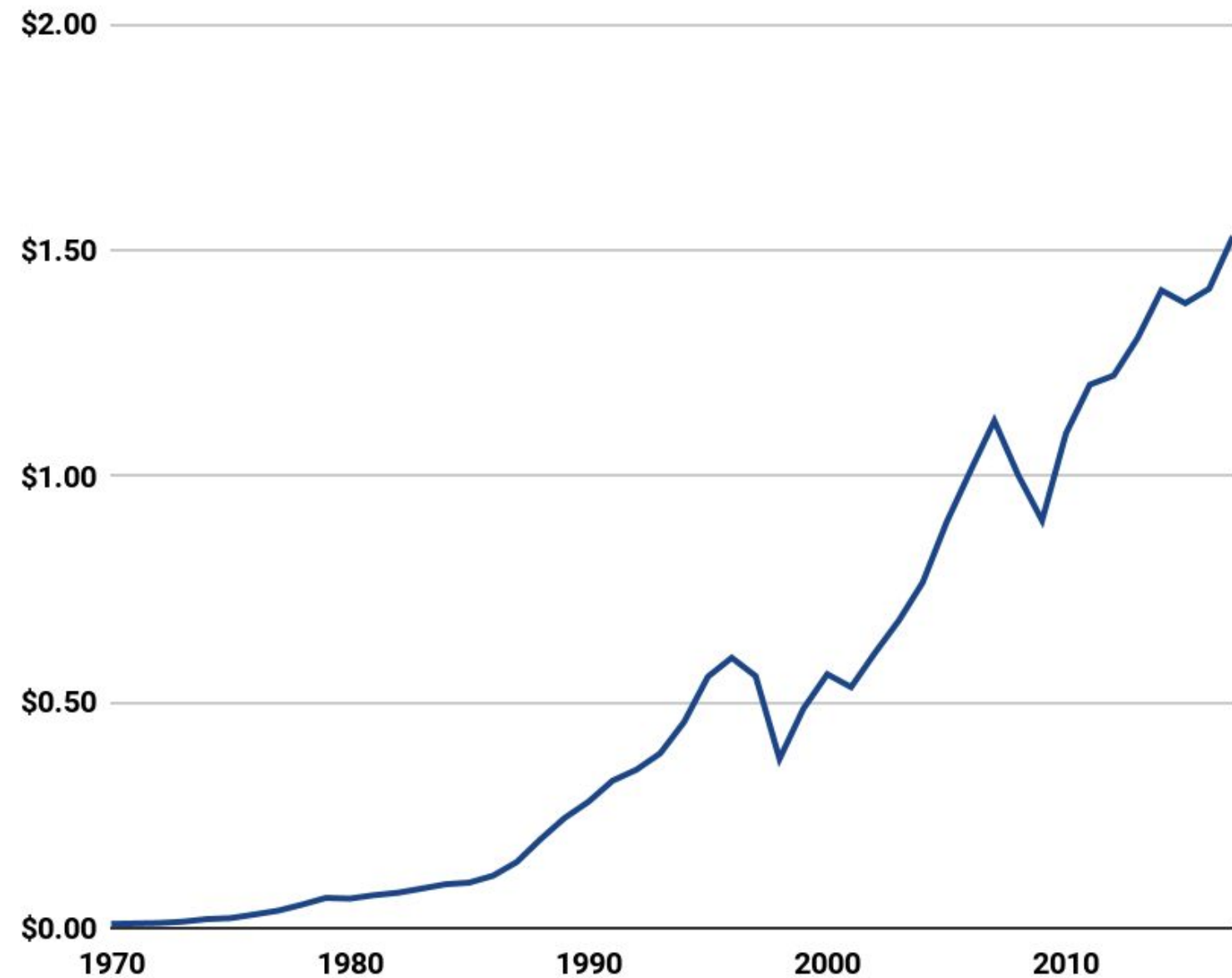
Source: World Bank

Decoding the Chinese Growth Miracle



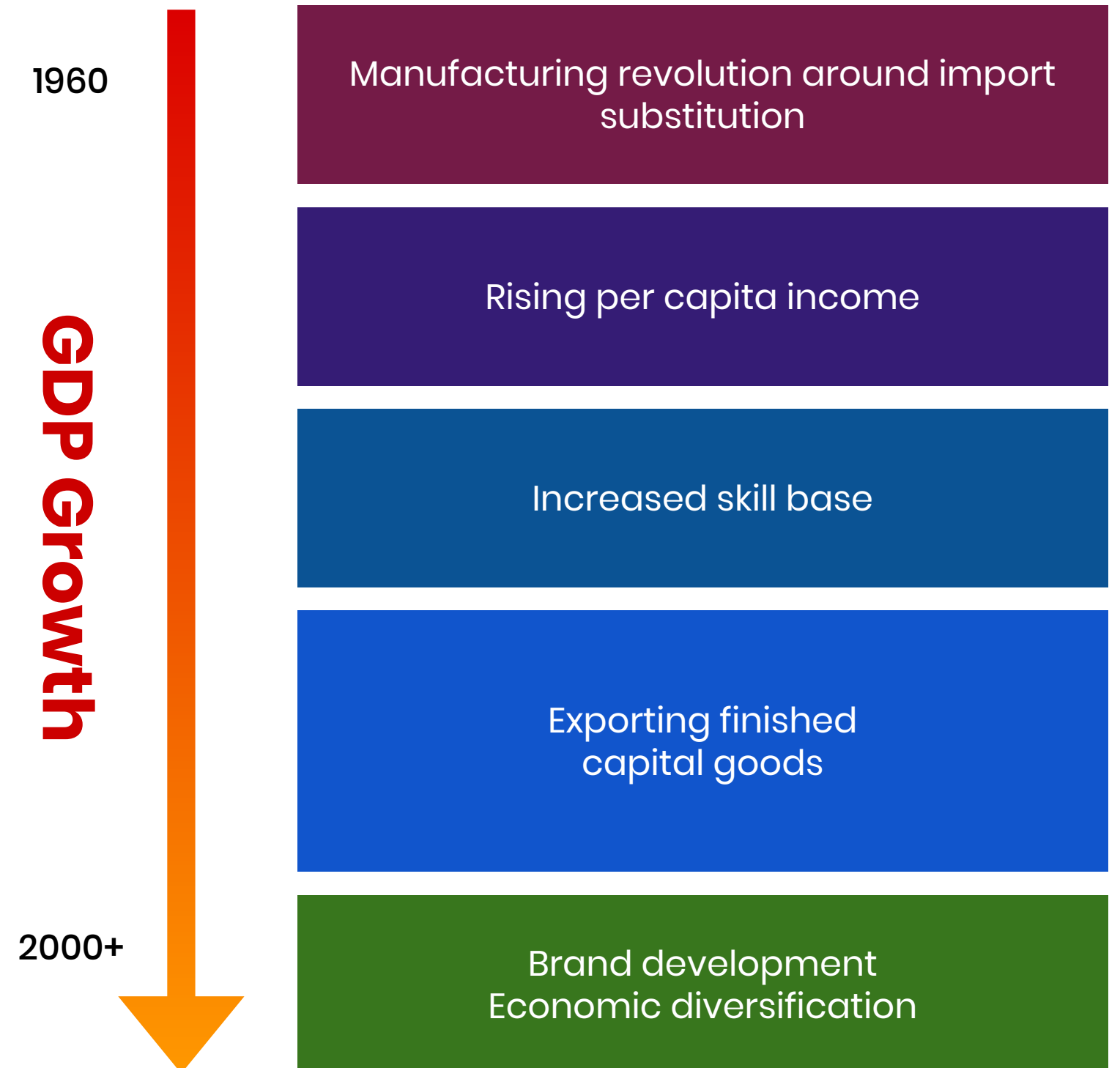
THE RISE OF THE ASIAN TIGER – SOUTH KOREA GROWTH DRIVERS

South Korea GDP (\$ in trillions)



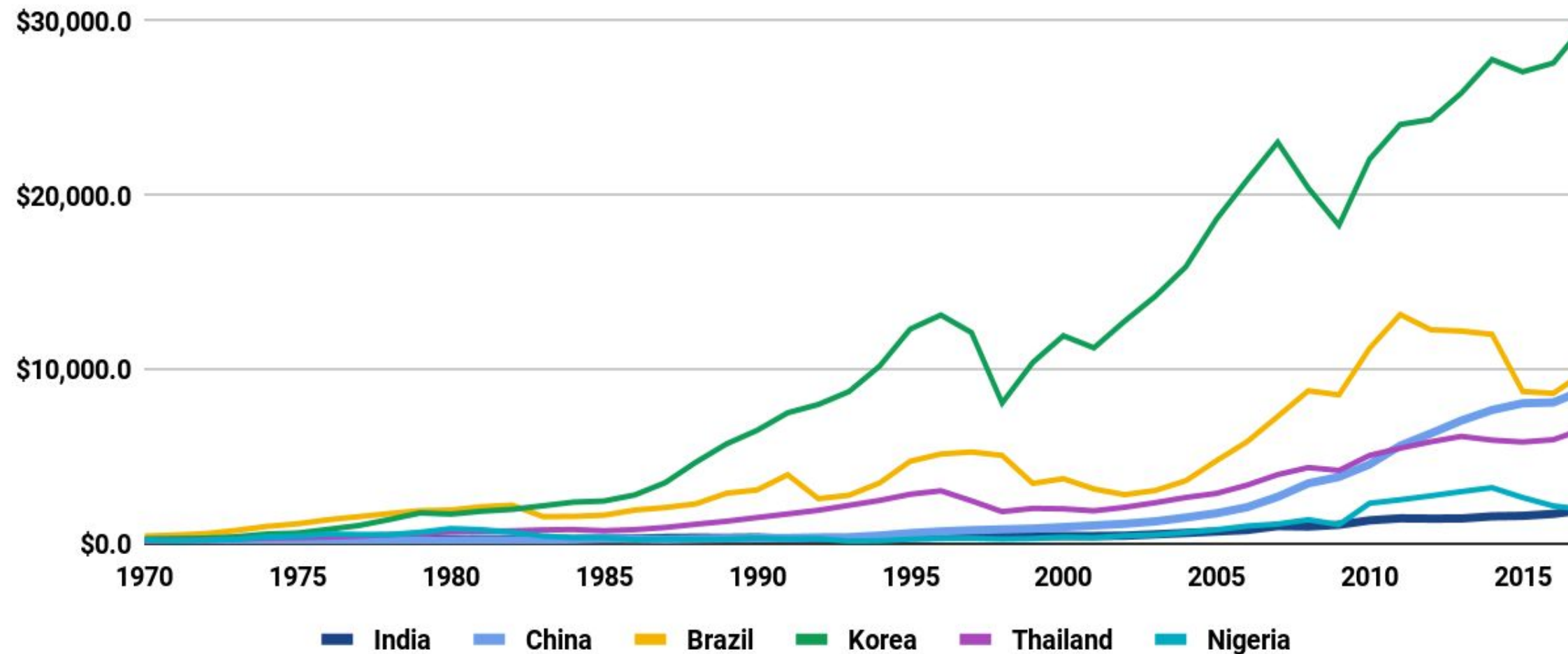
Source: World Bank

Decoding the South Korean Growth Machine



UNDERWHELMING PER CAPITA INCOME – INDIA vs. THE WORLD

Comparative GDP Per Capita (current \$)

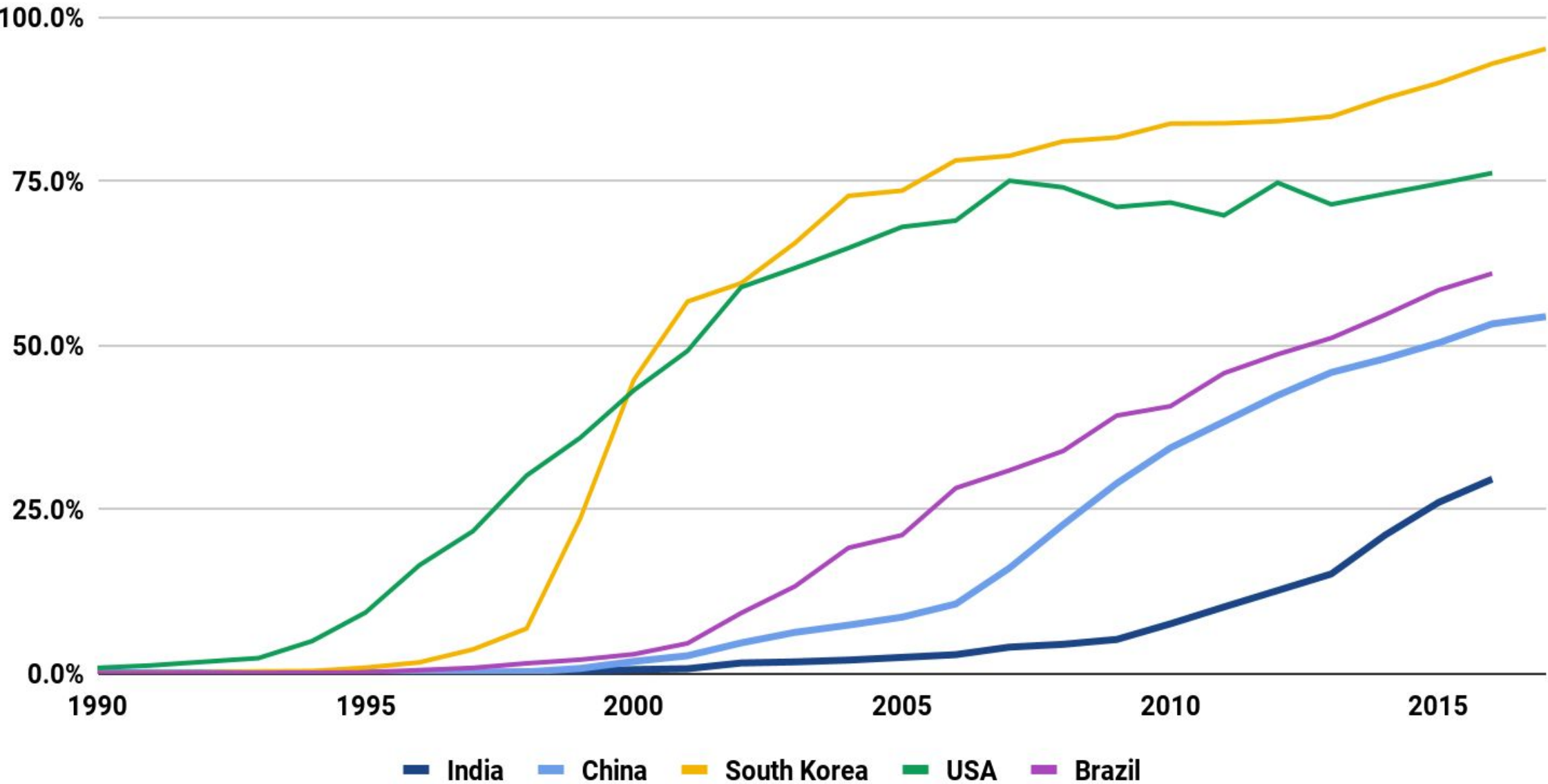


- 4.7 % per annum growth in per capita income per year till 1991
- 7.5 % per annum growth in per capita income since 1991
- Large population, high unemployment and low productivity ensures that India's per capita income is closer to Sub Saharan Africa than its neighbours in ASEAN

Source: World Bank

INTERNET PENETRATION – INDIA vs. WORLD

Internet Penetration in Selected Countries Worldwide (%)

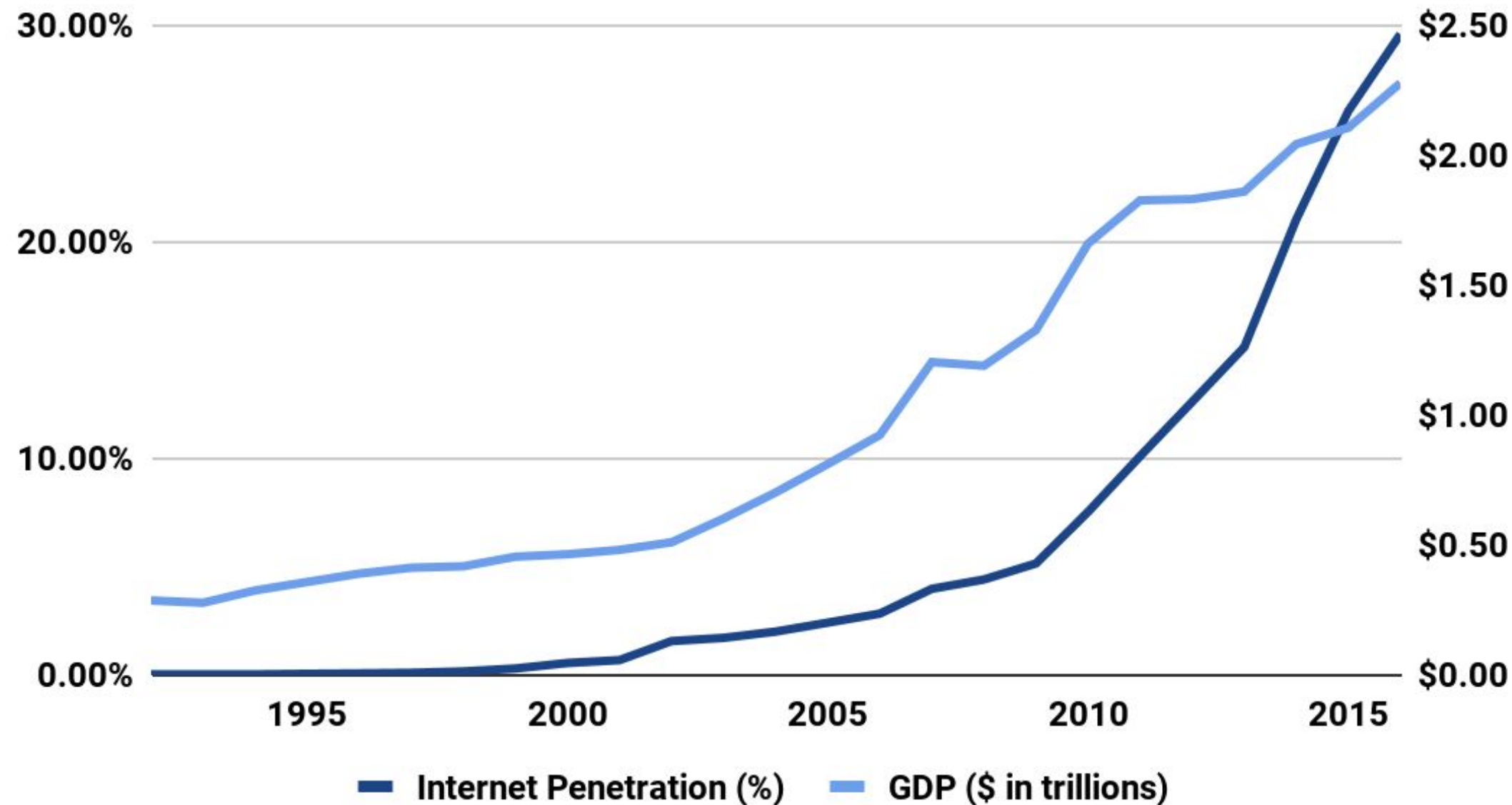


- India now has one of the fastest growing Internet penetration rates globally

Source: World Bank

GDP GROWTH VS. INTERNET PENETRATION

GDP Growth vs. Internet Penetration – India

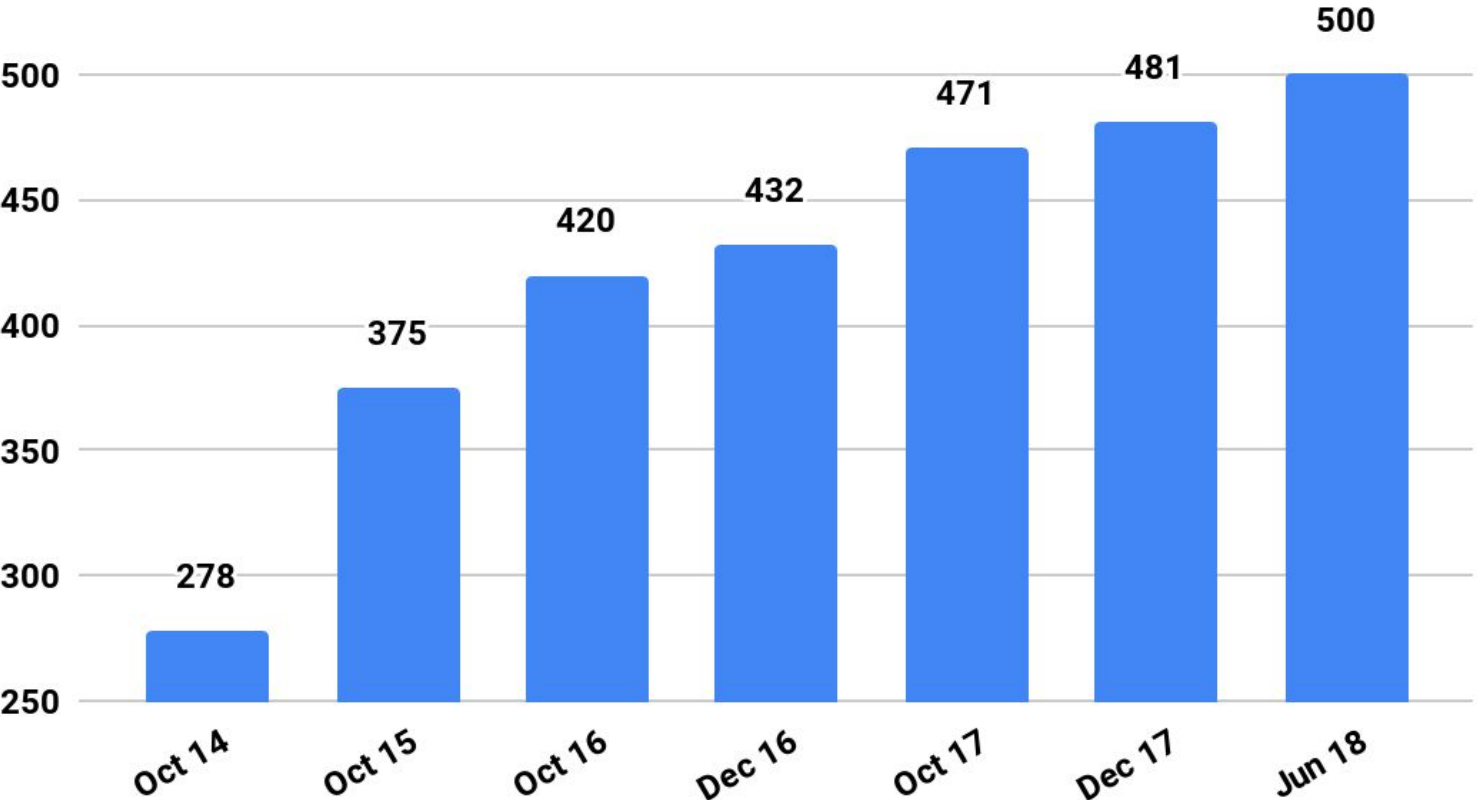


- The rate of Internet growth in India has significantly outsized the rate of economic growth
- For comparison, Indian Internet penetration growth grew at a CAGR of 28.6% during 2000 – 2016 compared to a GDP growth of 10.47% during the same period
- The recent price disruption created by the market entry of Reliance Jio has ensured that the gap is further widened
- Economic studies have shown that Internet penetration has a salutary impact on GDP growth

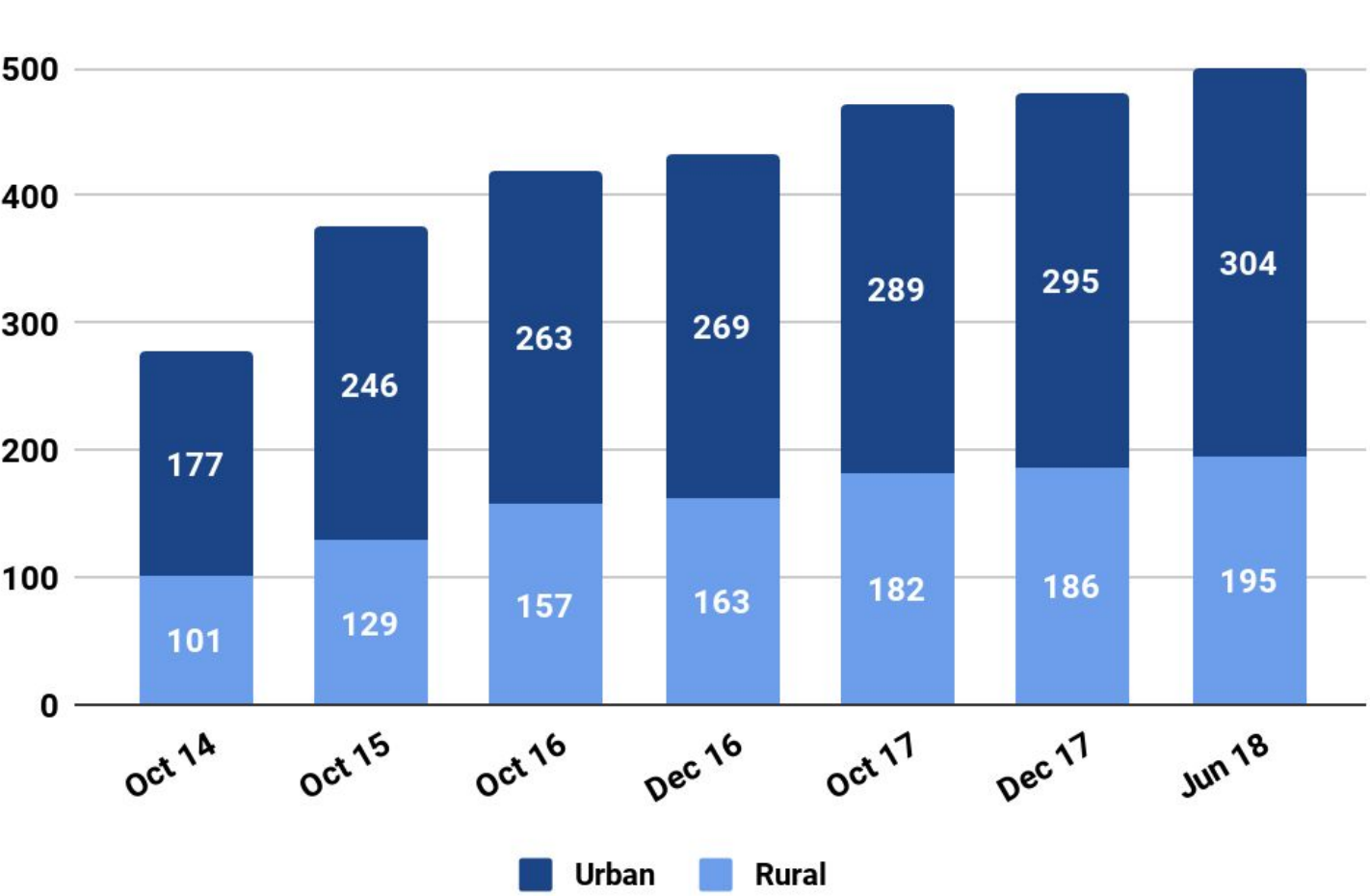
Source: World Bank

INDIAN INTERNET USERS STATISTICS

Internet Users in India (in millions)



Internet Users, Rural vs. Urban Divide (in millions)

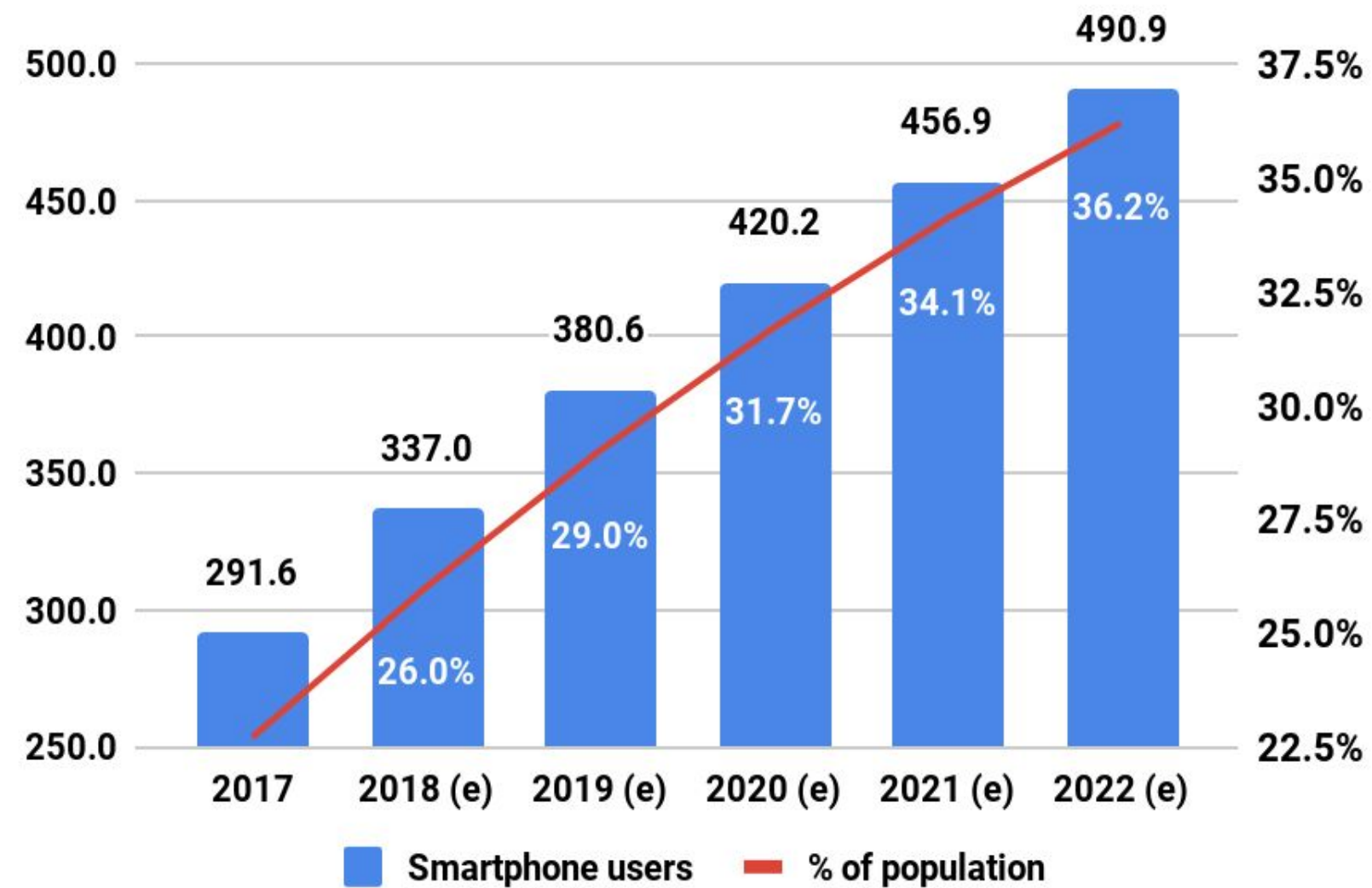


India is the fastest growing major Internet market today with over 500 million users

Source: IAMA & Kantar IMRB I - CUBE 207

SMARTPHONE USERS IN INDIA

Smartphone Users and Penetration in India (in millions)



Source: eMarketer



Indian smartphone users – **337 million**



Total US Population – **326 million**

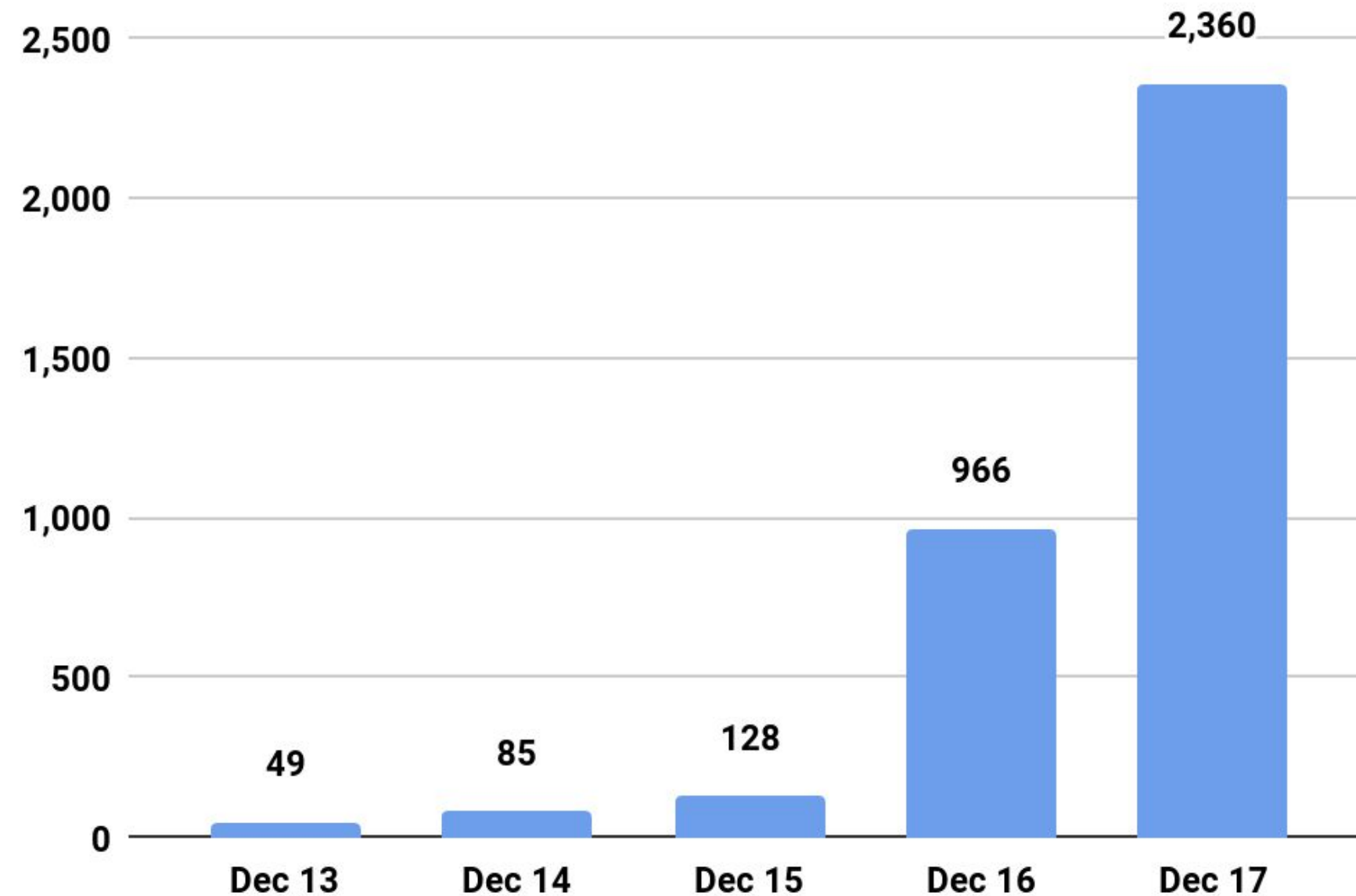
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337 million people, or more than a quarter of the population, will use a smartphone in 2018.

The number of smartphone users in India will grow by close to 16% this year (2018) — the highest growth rate of any country in the world.

INDIAN MOBILE DATA USAGE

Indian Mobile Data Usage (in Petabytes PB per month)



Overall traffic grew 144% in 2017,

4G traffic capturing 82% share of total data traffic in Dec. 2017.

With the introduction of JIO, average data rates stand at 1.3 % of per capita income leading to growth acceleration & sustained usage.

Source: Nokia



02

INDIA – AN UNPARALLELED PROMISE

INDIA: AN UNPARALLELED GROWTH OPPORTUNITY

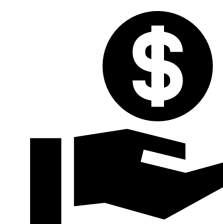
ECONOMIC



Huge Consumer Market
\$4TN by 2025



Strong GDP Growth
\$10TN by 2030



GDP Growth Rate
10% est.

SOCIAL



A Young Nation
29 Years (avg. age by 2025)



A Burgeoning Middle Class
150 million added to middle class
by 2025

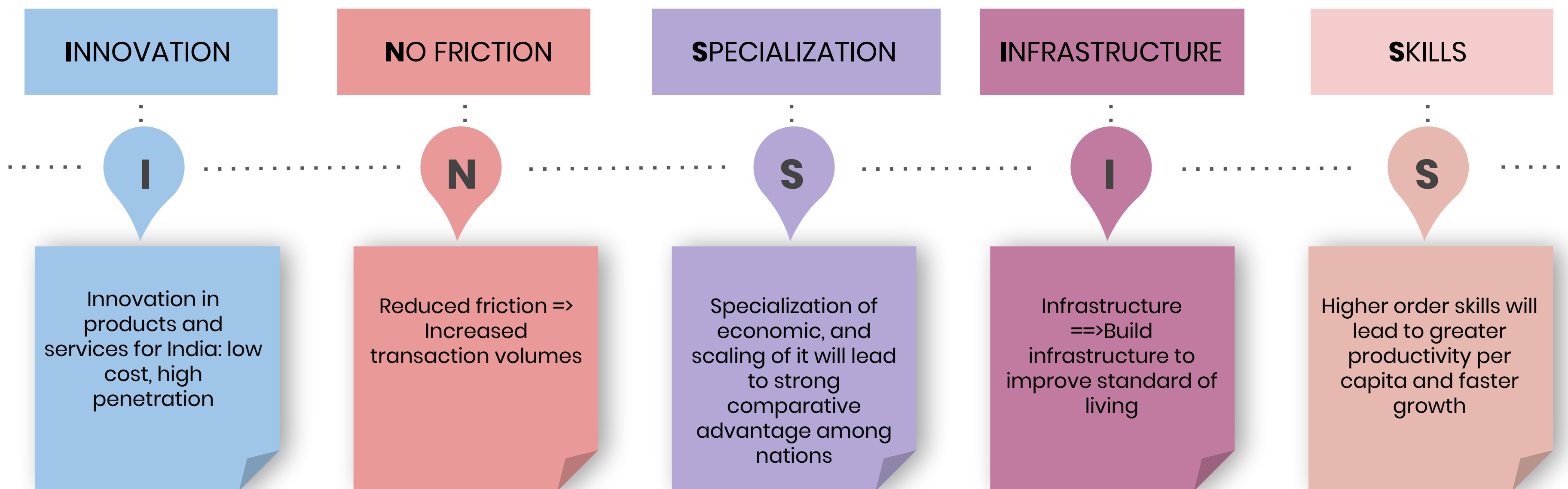


Highly Skilled Workforce
99% literacy rate
expected by 2025

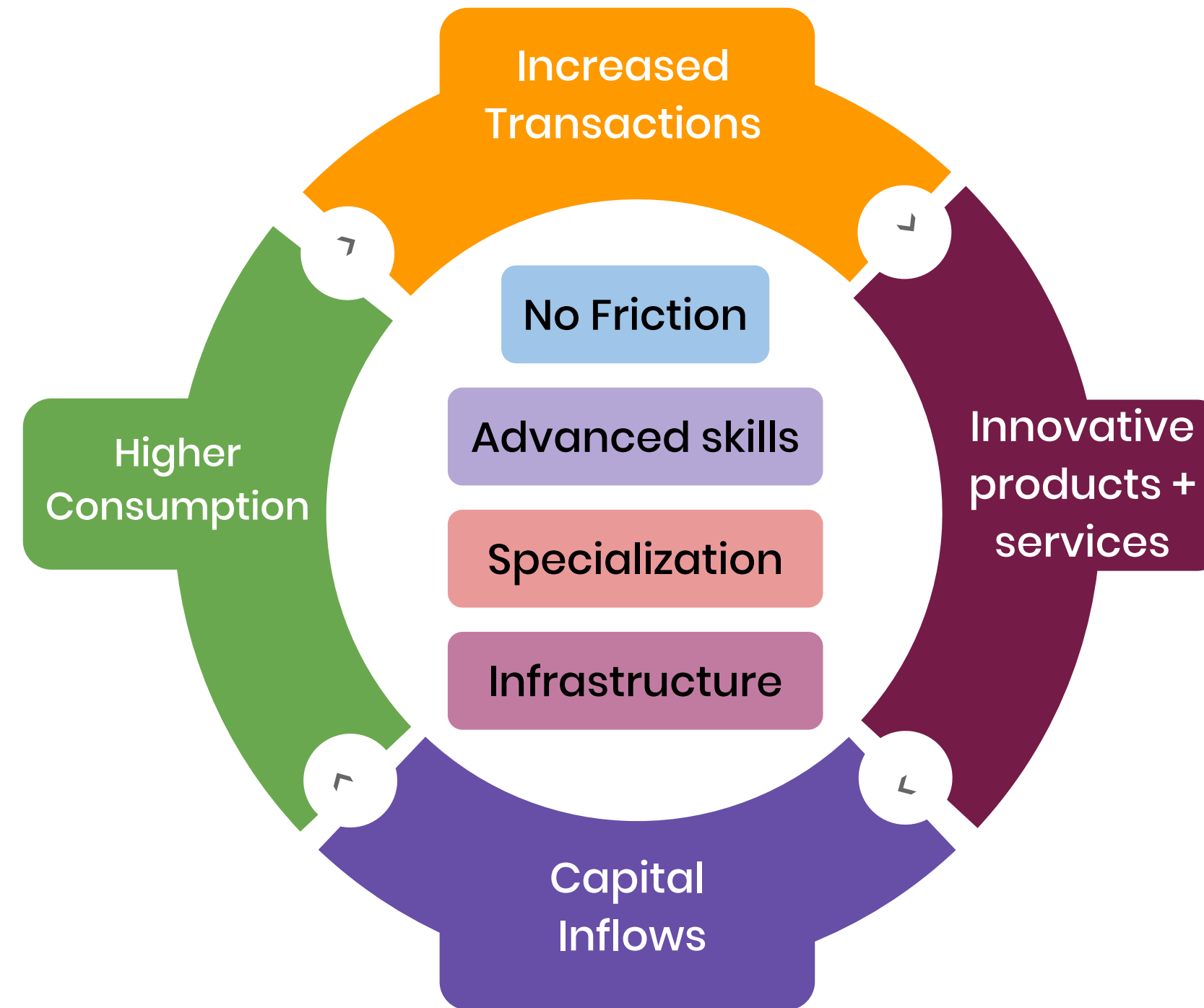
Source: DIPP, Centre for Economics Business and Research

INSIS: A GROWTH FRAMEWORK FOR DELIVERING A USD 10 TRILLION ECONOMY

In order to **grow GDP at more than 10%** over the next two decades,
India needs to follow INSIS framework



INDIA'S ECONOMIC GROWTH FRAMEWORK: THE VIRTUOUS CYCLE OF INNOVATION, INVESTMENT, & CONSUMPTION



INSIS framework will propel the economy towards growth and development

FRICTIONLESS

India's regulations, procedures and protocols dating back to the British Raj still find their presence and persistence to this date!

*For sustainable and profitable commerce to happen, friction needs to be eased.
Reducing friction in doing business can cause an immediate positive impact to the economy.*

Some Excellent Examples of Zero Friction Initiatives by the Indian Government:



UPI: DRIVING TRANSACTIONS AT A RECORD PACE



Push & Pull Payments

Payment can be initiated by payee and payer

Ubiquitous - Bank Accounts

Everyone with bank account can send money to any bank account in India



Virtual Payment Address

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

Validation & Assurance

Real time account & balance validation

Easy Immediate Payments

Real time posting, funds are not locked

Timely Notification

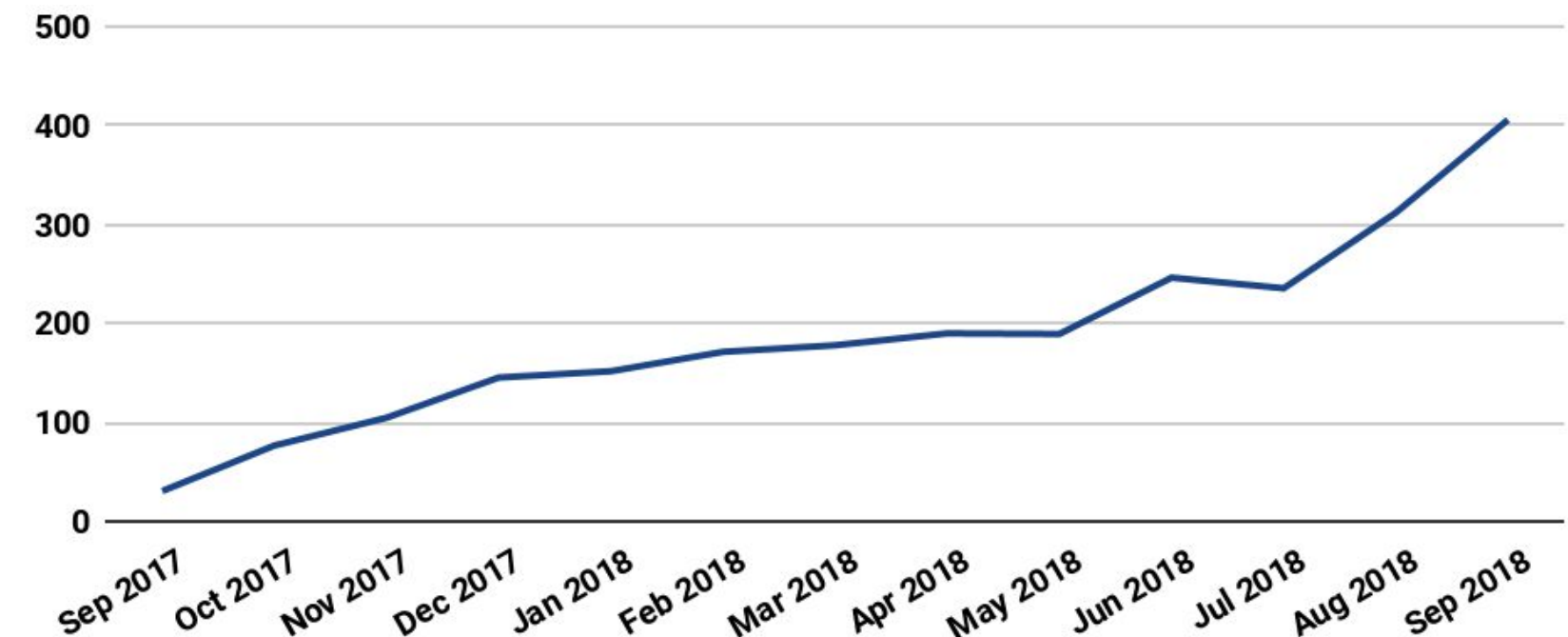
Immediate payment notifications

Minimal Issuer / Acquires Cost

Smartphone replaces card & PoS !

UPI removes the usual payment friction points such as interoperability, slow transaction times, multi factor authentication, and high transaction costs, among others.

UPI Transactions by Volume (in millions)



Unified payments interface is the APIisation of the Indian banking system enabling some of the fastest financial transactions anywhere in the world.

The number UPI transactions recorded zoomed to a staggering 405.8 million in Sep 2018, saving hours every time a transaction is initiated.

Popular Apps Driving UPI Adoption



PhonePe



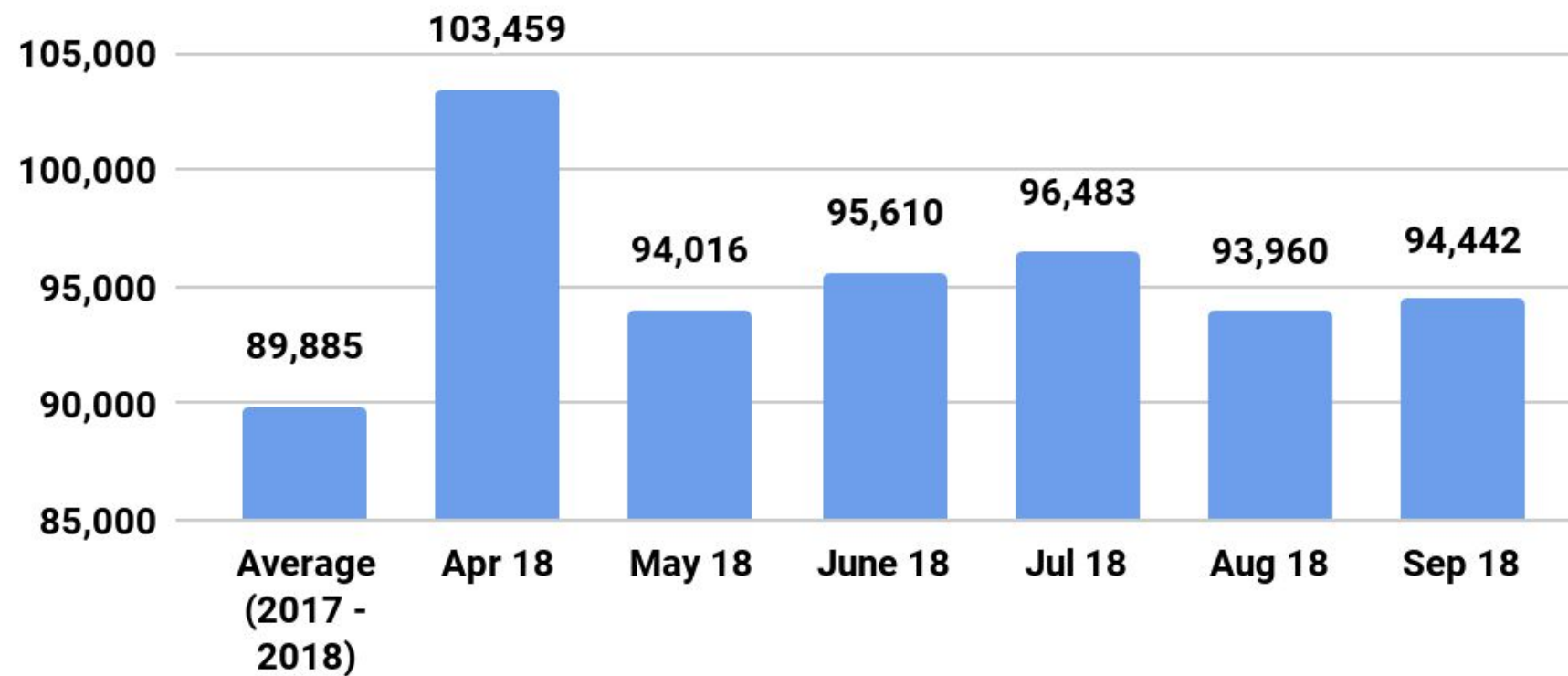
Pay



GST: SINGLE TAX REGIME



Gross GST Revenues Are Increasing (in Crores)



Expansion of Tax Base with GST – More Businesses Have Sought GST Registrations

Registration Under Old
Indirect Tax Regime
6.4 million

Registrations
Under GST
11.2 million

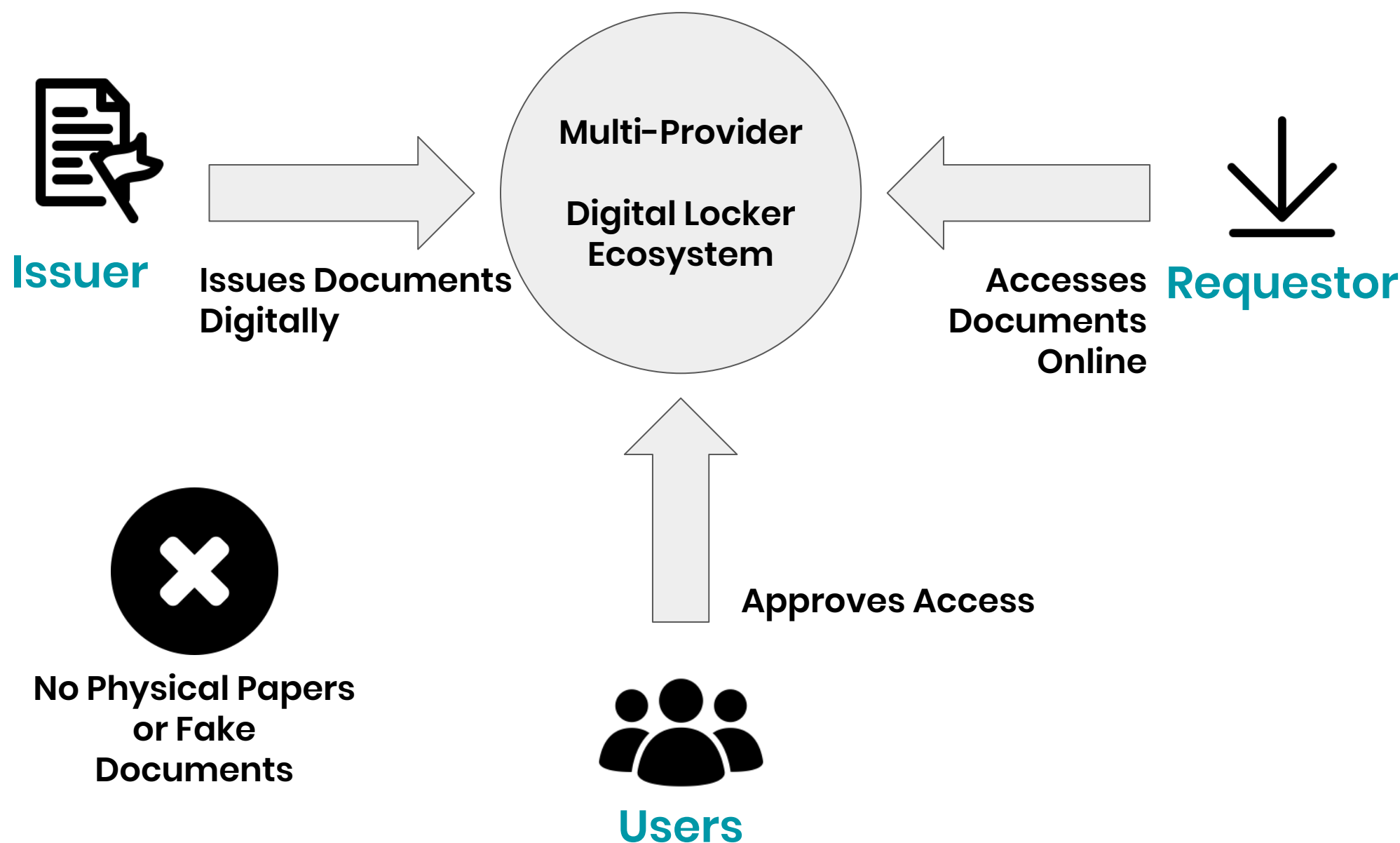
Goods and Service Tax (GST) is one indirect tax for the entire country. The act came into effect on 1st July 2017.

It was sought as a measure to reduce friction of taxation, make compliance easier, to remove complexities, to improve transparency, and improve the general ease of doing business in the country.

The GST data for each business is also a good indicator of the financial viability leading to stronger underwriting options.

Source: Press Information Bureau, Economic Times, D&B

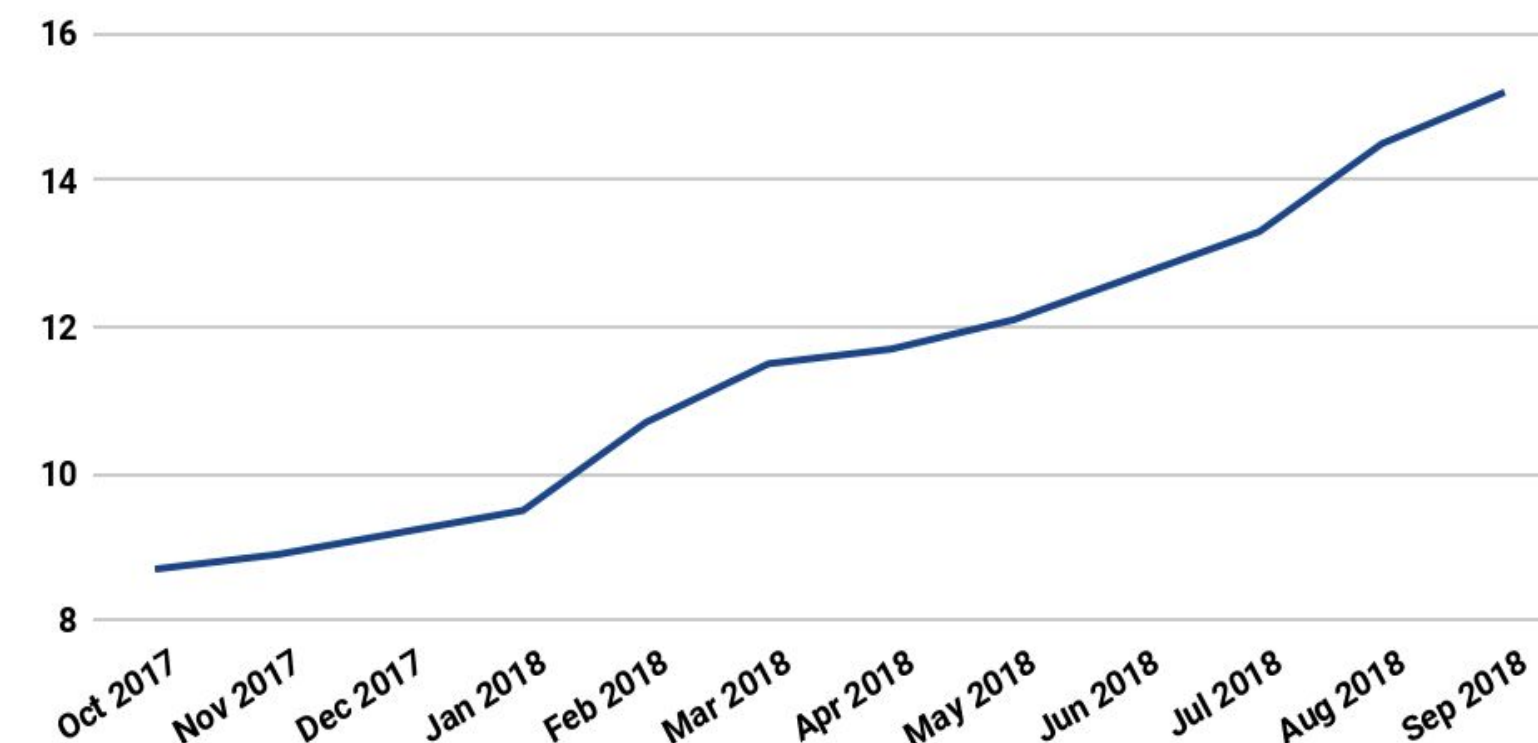
DIGILOCKER: OFFICIAL DOCUMENT RECORD KEEPER



DigiLocker is a platform for issuance and verification of documents & certificates in a digital way, thus eliminating the use of physical documents.

Verification of documents is now a breeze with all the documents pre-loaded to the trusted cloud archive.

DigiLocker Registrations (in millions)



The number of DigiLocker users increased from **8.7 million in Oct 2017** to **15.2 million by Sep 2018**, an increase of 74.7%.

Source: DigiLocker

INNOVATION & SPECIALIZATION

India is a unique economy where global products don't always work.
India is a nation that invented 30 sec billing for telecom, shampoos in sachets and the lowest ARPUs for telecom in the world.

Global Innovation Index (GII) – India Ranking

2014	2016	2018
76	67	54

Mission to be in top 10 of GI – A joint program by Niti Ayog and CII requiring participation across industry, academia, government bodies.

FRUGAL INNOVATION

All new products need to be highly robust and price sensitive to work across some of the lowest income groups in the world. Case in point, our telecom prices are the lowest in the world and that's what has been driving traction.

SPECIALIZATION

Driving scale attached to innovation will allow the creation of dominant industries, leading to capital inflows.

Some of the areas innovation has achieved scale include IT services, Pharma, Diamonds, and opportunities exist across software products, entertainment, solar power etc.

INNOVATION

India is an unique economy with heterogeneous buying power, cross-country infrastructure challenges and many more. So the bar for innovation to succeed is very high. It needs to be built right, be affordable, positioned right and then distributed well.

Global Innovation Index (GII) – India Ranking

2014	2016	2018
76	67	54

Mission to be in top 10 of GI – A joint program by Niti Ayog and CII requiring participation across industry, academia, government bodies.

UNIQUELY INDIAN

There are tremendous opportunities for building products with Indian heritage, and scaling across the globe

Examples include Haldirams, promoting traditional Indian snacks and OYO taking a built-for India hotel network global

AFFORDABILITY

Making products that Indians across the spectrum can afford is key. Some amazing pricing examples include Chik (sachetizing shampoos), Uninor (Making per sec billing the norm in telecom), and lately Jio (Driving prices down by building massive scale)

ACCESS

Apart from product innovation access innovation is an additional challenge with India

Some examples of innovation here include Freecharge (digitizing phone recharges), Micromax (Upcountry handset distribution network), Flipkart (Driving cash on delivery models)

SPECIALIZATION & SCALE

Specialization coupled with scale, produces a strong economic advantage among competing nations. Scale will generate its own momentum and helps build a very successful ecosystem. The challenges that India poses like disparate income levels, languages, culture, geography etc are its strengths, for outside North America most countries in South East Asia, South America, Africa, Europe face some or more of these challenges. There's a great opportunity for Indian companies to build something that works well here and take it to the world.

DIGITAL INFRASTRUCTURE

The digital governance Infrastructure and the industry initiatives like Aadhaar, Financial Inclusion, UPI, digital health etc can be easily transported to other emerging economies globally.

DIGITAL NATIVE PLATFORMS

The digital native platforms that're being built in the country can be scaled out to other economies easily.

This tech could range from personal transportation, food delivery, logistics, supply chain optimization, so on and so forth.

Any service digital platform delivering results in India should be able to be successful in the rest of the world..

FOOD, ENTERTAINMENT, APPAREL

Indian food, entertainment and apparel have heritage dating back to more than a 1000 years and have wide acceptance. There is an opportunity to build global brands around these verticals and enable global expansion.

EDUCATION, HEALTH, BFSI

Health and education are key challenges in India, with new solutions emerging to solve these.

Any health insurance model that is built to serve the bottom half of the country should be easily able to scale across all emerging nations. The same goes of banking and education.

INFRASTRUCTURE

A combination of public & private initiatives is catapulting India into the next industrial orbit

PUBLIC

**Transportation,
Health, Education,
Policy**

**Payment networks,
Agriculture**

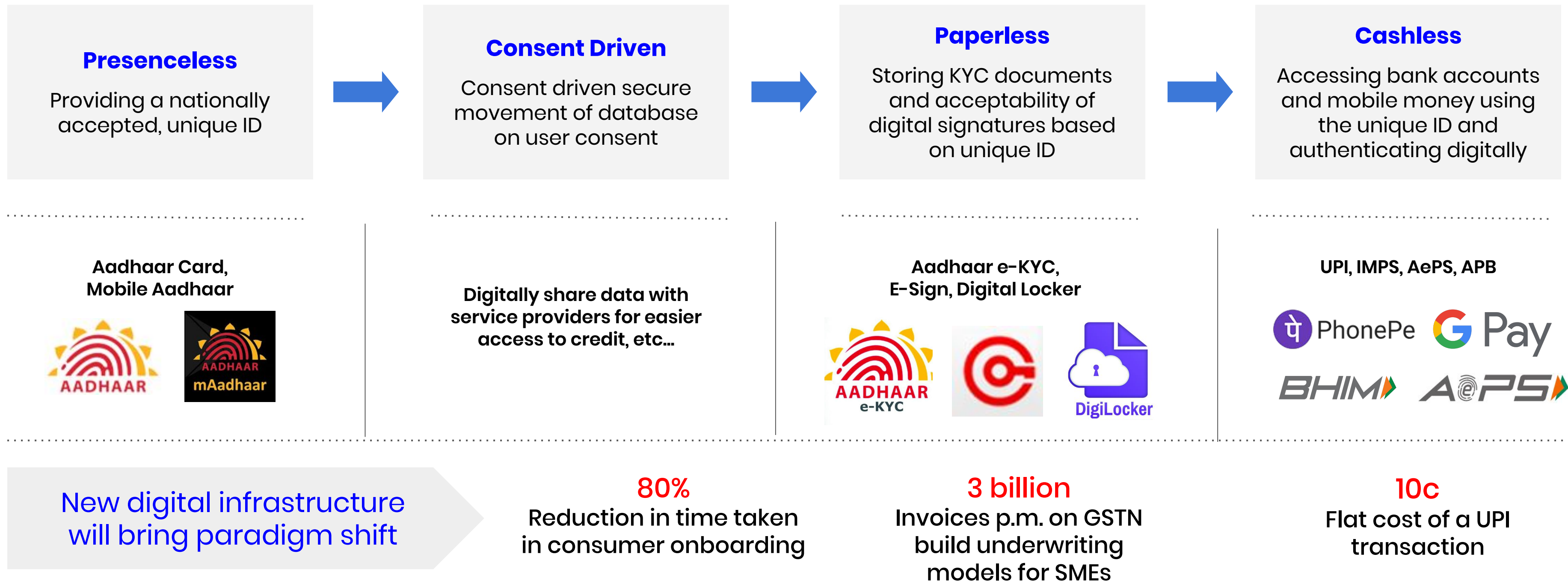
PRIVATE/HYBRID

TELECOM/JIO

**Entertainment,
Collaboration**

INDIA STACK

India Stack is a publicly available Application Programming Interface (API) that enables the development of products and services that could open up many opportunities in the financial services, healthcare and education sectors of the Indian economy.

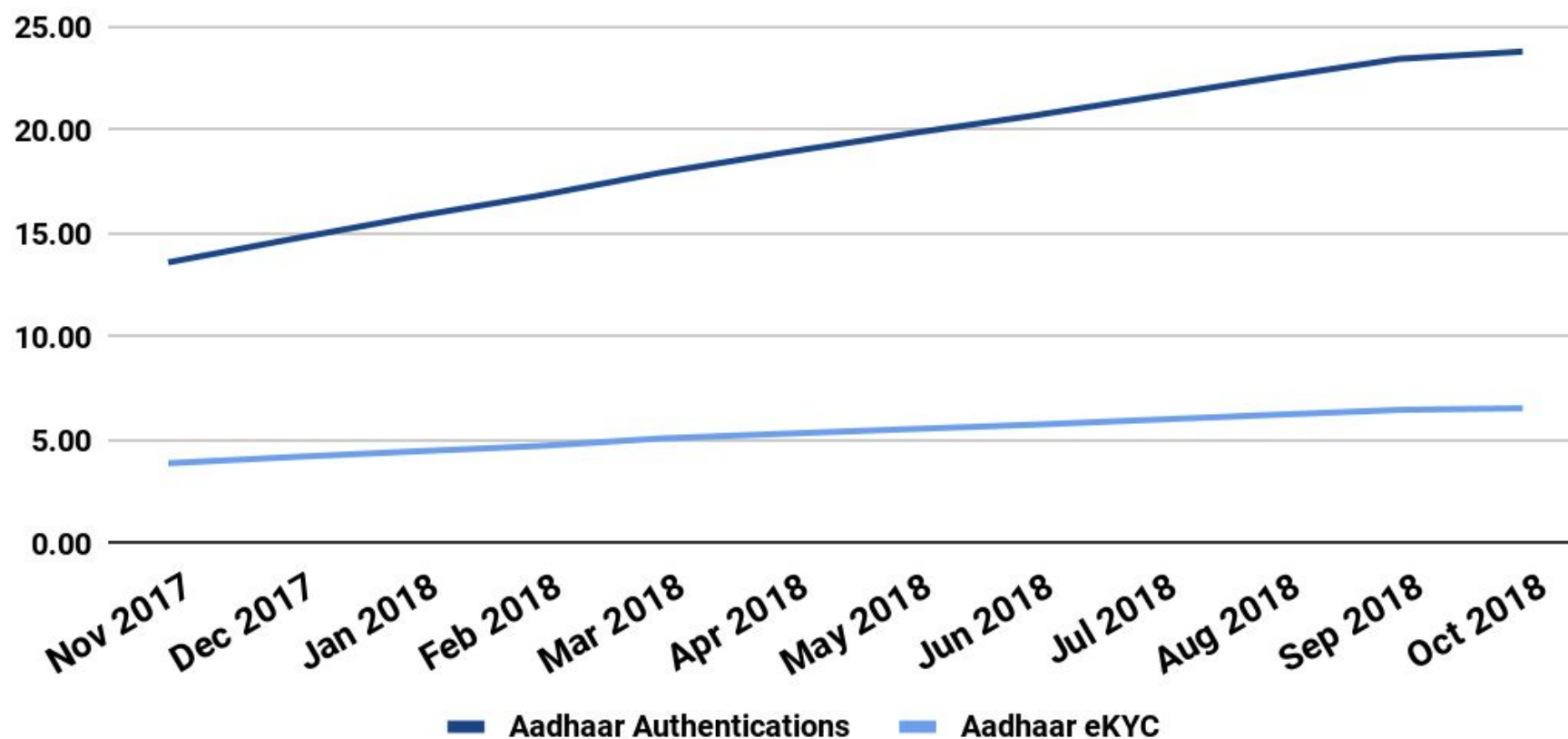


AADHAAR



- Over **1.2 billion** Indian citizens have been enrolled
- **200 million** of India's poor now have bank accounts
- **93 million** have health insurance linked to Aadhar
- An estimated **\$2BN** has been saved on the mishandling of subsidies for cooking gas alone by linking to Aadhar

Aadhaar Authentication and eKYC Statistics (in billions)



The Aadhaar Ecosystem

Applications / Systems



Devices

Biometric Sensors
Tablets Mobiles
Micro ATMs
Attendance Devices

Under the **DBT scheme**, subsidies are directly transferred into the Aadhaar-linked bank accounts of the beneficiaries.

Using **Aadhaar eKYC**, Jio transformed its SIM verification process from a highly friction filled pain point to a seamless, friction-free experience.

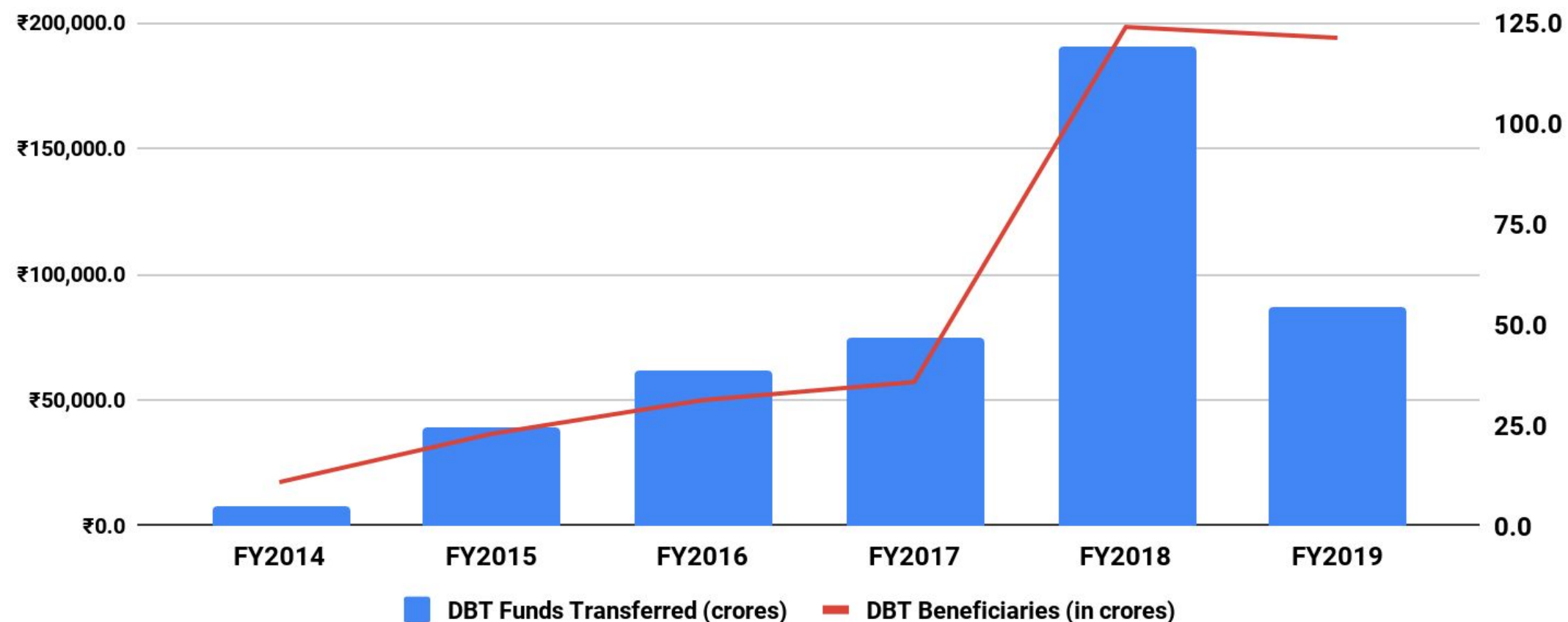
Using **Aadhaar and GSTN APIs**, lenders can tap into the database of customers' credit / financial history and can underwrite the risks better.

DIRECT BENEFIT TRANSFER (DBT)

Direct Benefit Transfer or DBT is an attempt to reduce the friction in disbursement of subsidies provided by the Indian Government. The program aims to transfer subsidies directly to people through their bank accounts.

Government savings from direct benefit transfer schemes are pegged at **Rs 83,000 crore.**

DBT Funds Transferred and Beneficiaries, India



Source: DBT Bharat

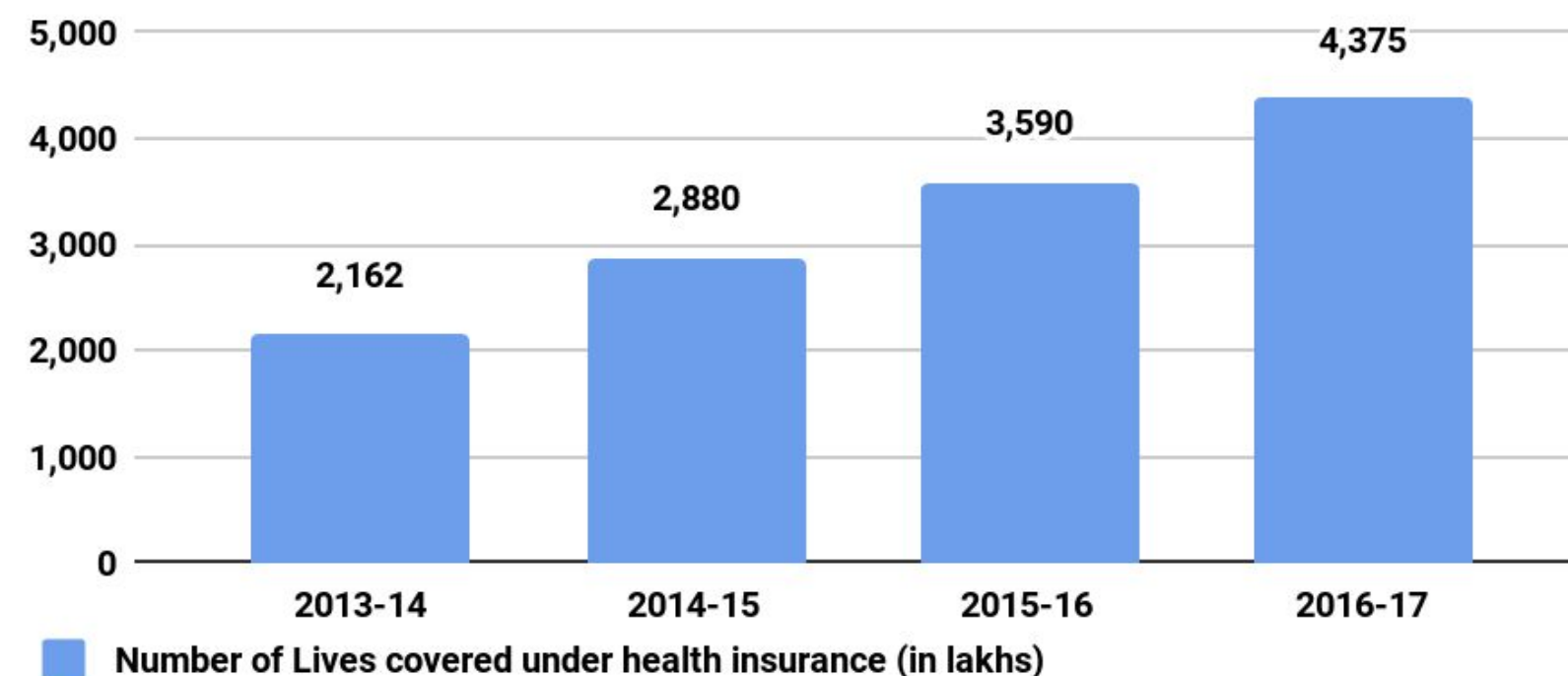
Reducing friction in disbursements

118.3 crore citizens accounts linked to DBT scheme. Almost every Indian is getting subsidies paid out through DBT

Weeded out 3.85 crore fake accounts of fake / non-existent cooking gas customers

Deleted 2.75 crore fake accounts of fake / non-existent ration card customers

Health Insurance in India



Despite the increase in annual growth, more than 80% of the population still does not have any significant health insurance coverage.

Source: National Health Agency, PwC

Ayushman which means long life, Bharat which is India.

The government of India has conceived the Ayushman Bharat program to provide healthcare services to poor, deprived rural families and identified occupational category of urban workers' families.

Key Highlights

- Targeted to cover over 10 crore poor and vulnerable families
- Expected to provide health protection for around 50 crore people
- Provide a cover of 5 lakh per family
- Service through both public and private hospitals
- Cashless benefits available across India
- All pre-existing diseases covered
- Funded 60:40 by Centre and state

INSOLVENCY & BANKRUPTCY CODE

- The new insolvency and bankruptcy code (IBC) replaced a web of archaic laws and [helped India jump 30 points to make it to the top 100 countries in World Bank's ease of doing business rankings](#)
- The new law promises to deal swiftly with failing companies, removing the owners and blocking them from trying to buy back the businesses out of bankruptcy
- IBC sets a nine-month time limit for the entire process — making it on paper one of the world's fastest bankruptcy regimes



[Objective](#) was to bring debt-laden companies back on their feet and help banks free up \$210BN of stressed assets for lending.



After the introduction of IBC, companies facing bankruptcy petitions have reportedly [cleared dues of as much as Rs 83,000 crore \(\\$12BN\) with creditors.](#)

Source: FT, Economic Times, E&Y

SAGAR MALA & BHARAT MALA



SAGAR MALA: PORT-LED GROWTH MODEL

- Projected **investment over \$54BN**
- Estimated to create **over 1.5 lakh new jobs**
- Reduce cost of transportation significantly



BHARAT MALA: FOCUSES ON HIGHWAYS

- Total investment **\$101BN** for constructing roads
- 50 New National corridors
- Connecting 550 Districts in the country
- Connectivity with neighboring countries:
Bangladesh – Bhutan – Nepal and
Myanmar – Thailand

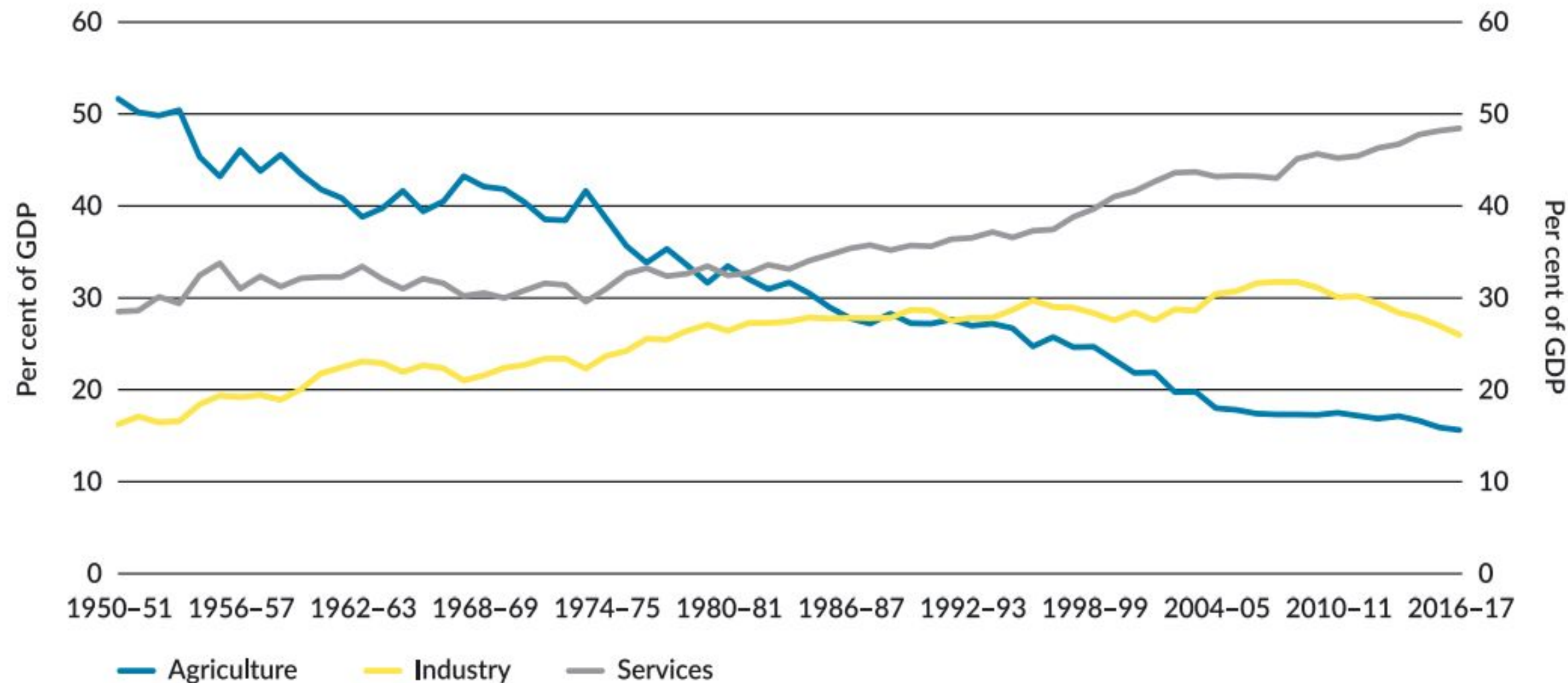
The Sagar Mala and Bharat Mala initiatives help improve the country's logistics infrastructure and enhance the transportation sector efficiency



03

INNOVATION OPPORTUNITIES ACROSS VERTICALS

SECTOR WISE CONTRIBUTION TO INDIA'S ECONOMY

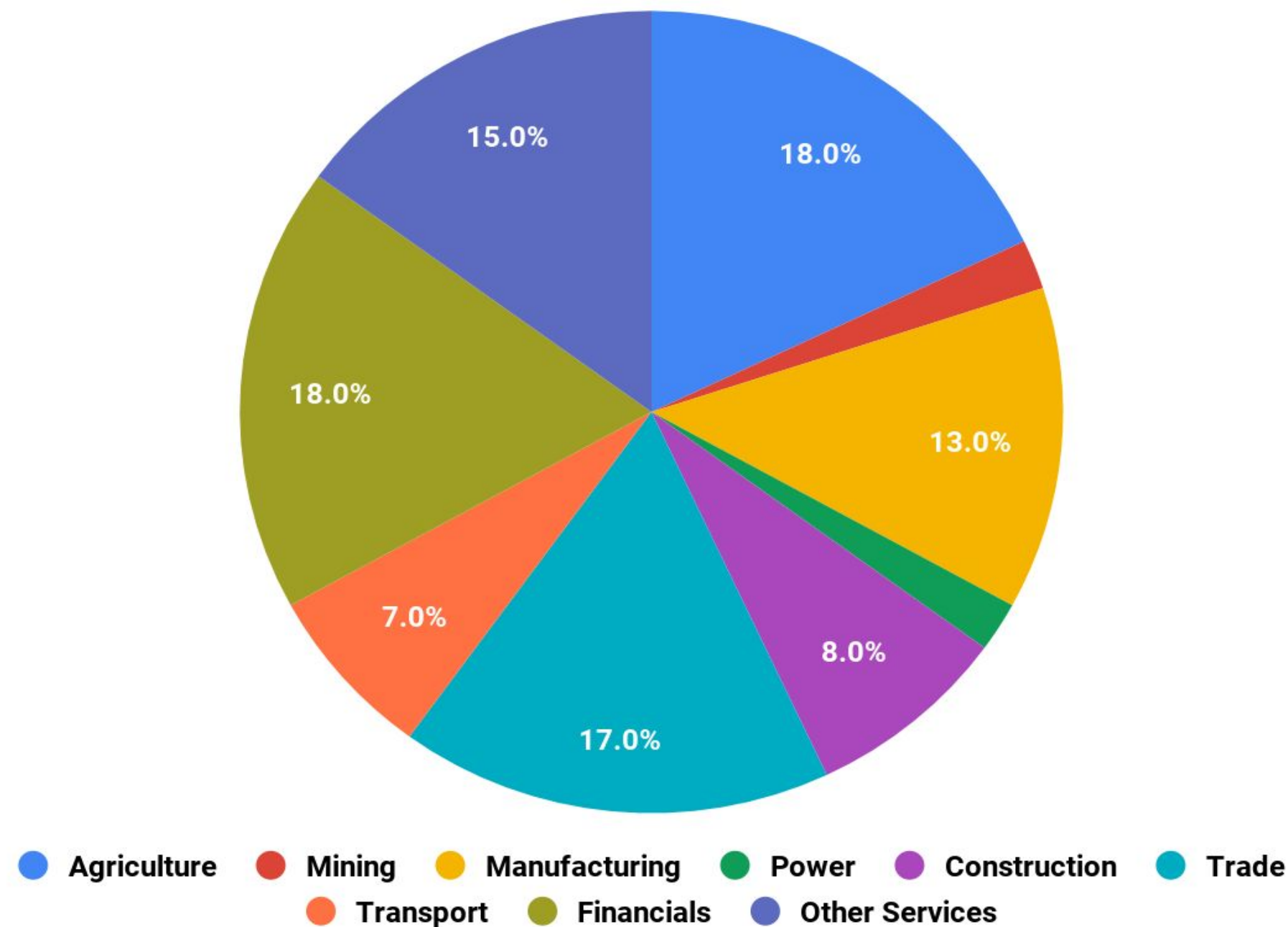


- With a share of 55.2% in India's Gross Value Added (GVA), the services sector is a key driver of India's economic growth
- Services contributed almost 72.5% of GVA growth in 2017-18 and generated significant employment and exports
- The ongoing digitalization of all aspects of the Indian economy is expected to further boost services economy

Source: Dept. of Foreign Affairs and Trade, AU govt.

SECTOR WISE CONTRIBUTION TO INDIA'S ECONOMY

Sector Wise Contribution Towards Indian GDP (%)



- Indian economy is well distributed across several verticals leading to strong insulation against risk factors
- One of the challenges though is the lopsided productivity per employee across several verticals, leading to per capita imbalance

Source: Capitalmind



AGRICULTURE



AGRICULTURE: SNAPSHOT

18%

Contribution
to GDP

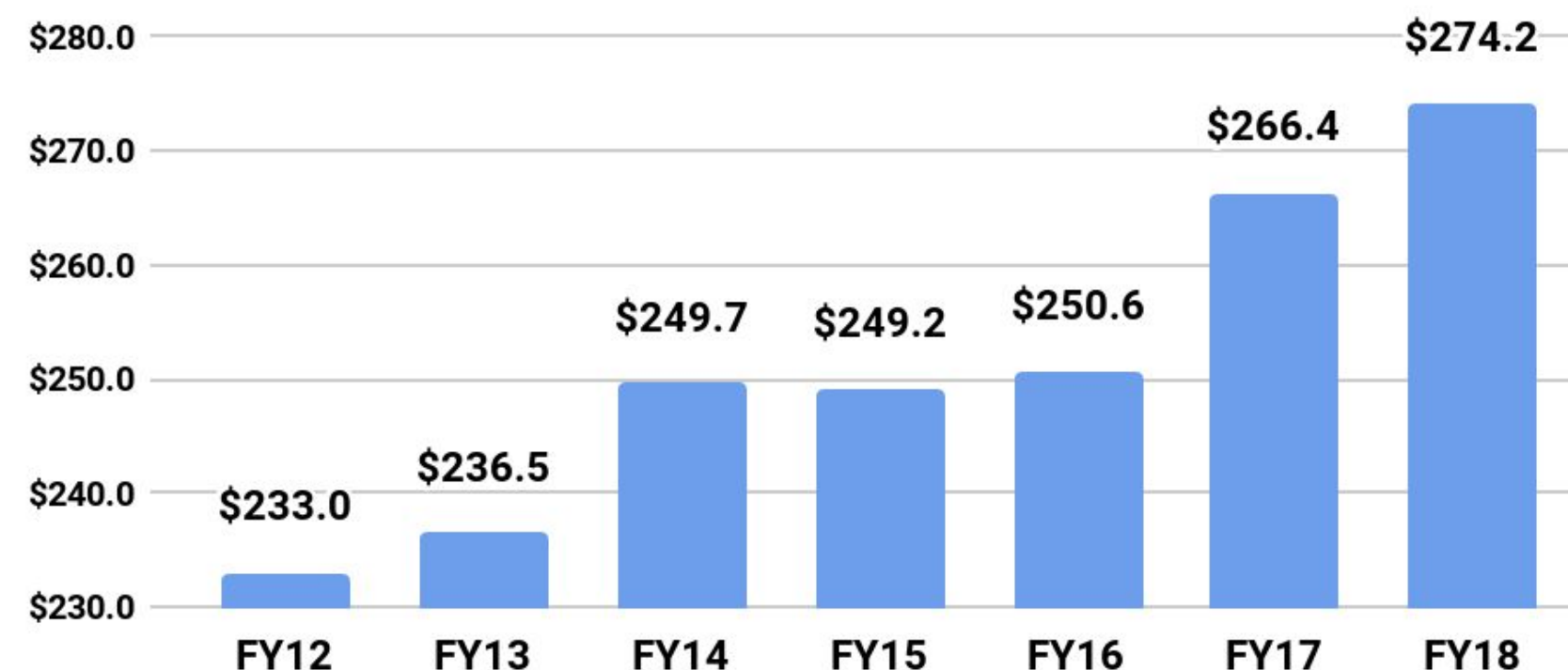
58%

Of the population is
depends on agriculture
as the primary source
of livelihood

16.5%

agricultural exports CAGR growth
FY2010 – FY2018

Gross Value Added by Agriculture & Allied Sectors (\$ in billions, constant 2011-12 prices)



DRIVERS

Newer investment
models

Global Health
Consciousness

Crop Insurance etc

Precision Farming,
Hydroponics

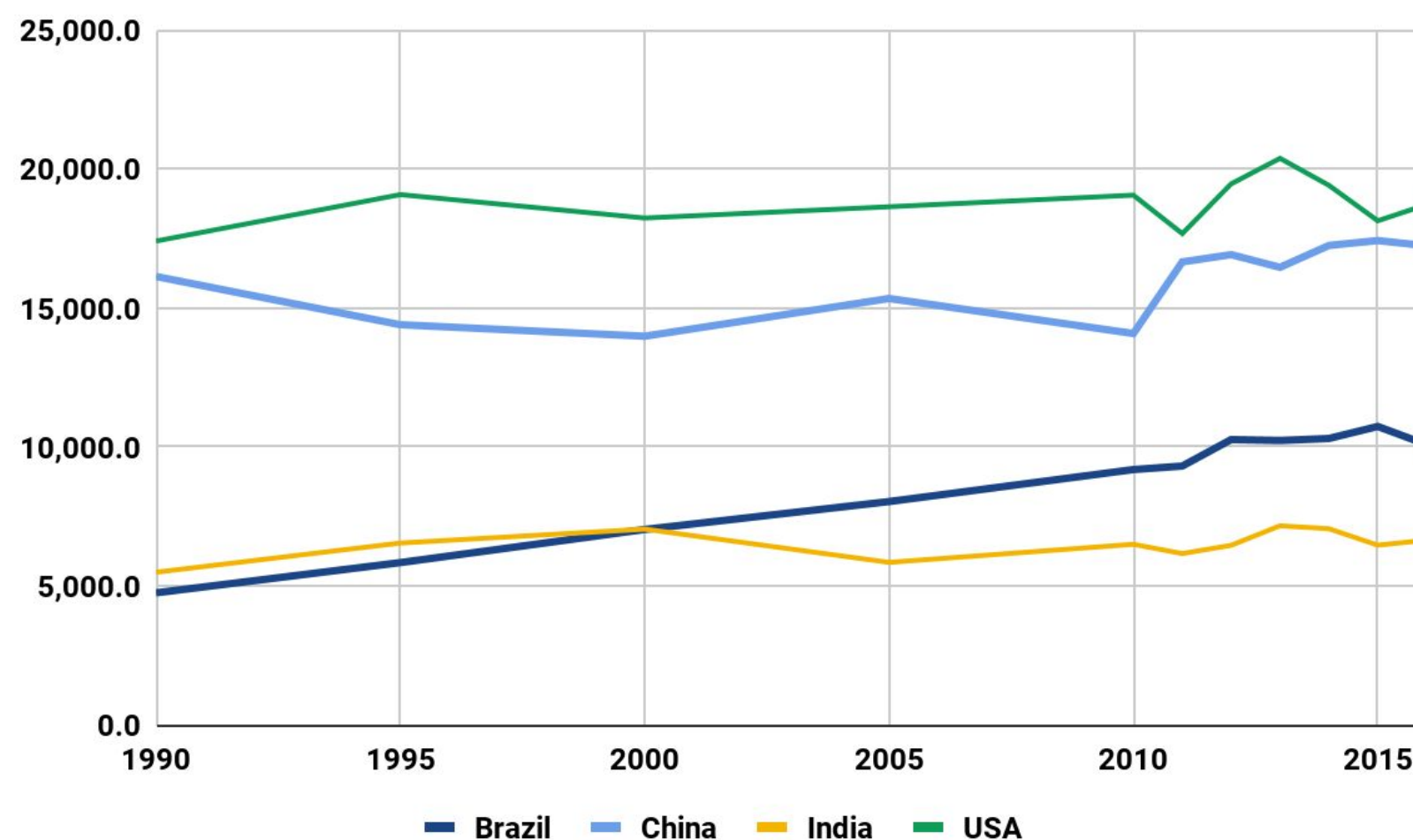
Increased
availability of seeds,
implements

Source: World Bank

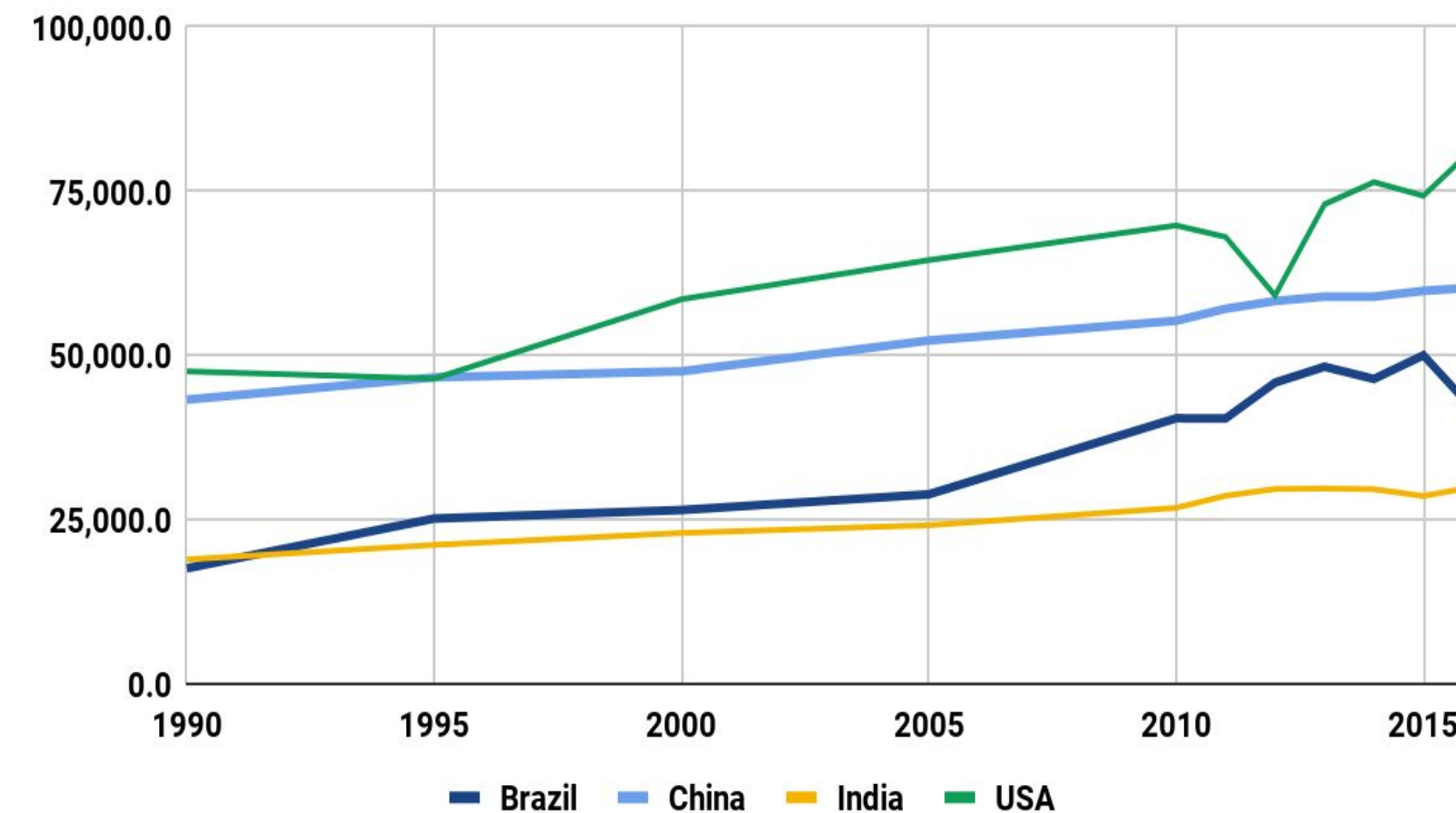


AGRICULTURE: YIELD COMPARISON

Pulses Yield, Selected Countries (hectogramme/ hectare)



Cereals Yield, Selected Countries (hectogramme/ hectare)



Crop yields remain low in India compared to countries such as China, Brazil and USA. However, the situation is slowly changing. The availability of high quality seeds and use of technology in farming is expected to result in better crop yields in the near future.

Source: World Bank



AGRICULTURE: CHALLENGES & OPPORTUNITIES

CHALLENGES

- Smaller land holdings difficult to mechanize
- High climate Dependency
- Inaccurate assessment on what to grow
- No risk capital or reliable insurance
- Govt driven, not market driven
- Too many layers between Farm to Fork
- Poor storage capability

OPPORTUNITIES

- Innovative Farm investment companies
- Direct to Customer marketplace
- Precision Agriculture
- Digital Farmer collaboration
- Farm machinery as a service
- Analytics + IoT driven farm management
- Supply chain modernization



AGRICULTURE: PROMINENT STARTUPS



Founded in 2011

Stellapps is focussed on creating varied connected products that optimise the agricultural supply chain, right from the production of milk to its procurement, besides looking at cold-chain storage.

Total funding - \$14MN



Founded in 2008

Agrostar is a m-commerce start-up selling agricultural inputs to farmers. It is India's leading direct-to-farmer digital platform where farmers can procure quality agri inputs at fair price.

Total funding - \$14MN



Founded in 2015

Ninjacart is India's Largest agri marketing platform, solving one of the toughest supply chain problems through technology. It helps retailers to source fresh vegetables at competitive prices directly from farmers.

Total funding - \$14.7MN



Founded in 2015

FarmTaza is a fresh produce supply management company. Is a wholly owned subsidiary of Gram Suchana Solutions Pvt Ltd. and is a B2B (Business to Business) entity.

Total funding - \$8MN



Founded in 2013

EM3 Agri Services offers on-demand farming services and machinery. EM3 is a new, first of its kind initiative in the business of delivering farm mechanization and cutting edge technology services to the Indian farmer.

Total funding - \$13.3MN



Founded in 2016

Gramcover is an insurance marketplace for the rural sector. Gramcover is on the path of bringing innovative approach for insurance distribution in rural India with effective use of technology.

Total funding - \$1MN



HEALTHCARE



HEALTHCARE: SNAPSHOT

\$372BN

Indian healthcare market by 2022

3.9%

healthcare expenditure as % of GDP (including the private sector)

\$27.9BN

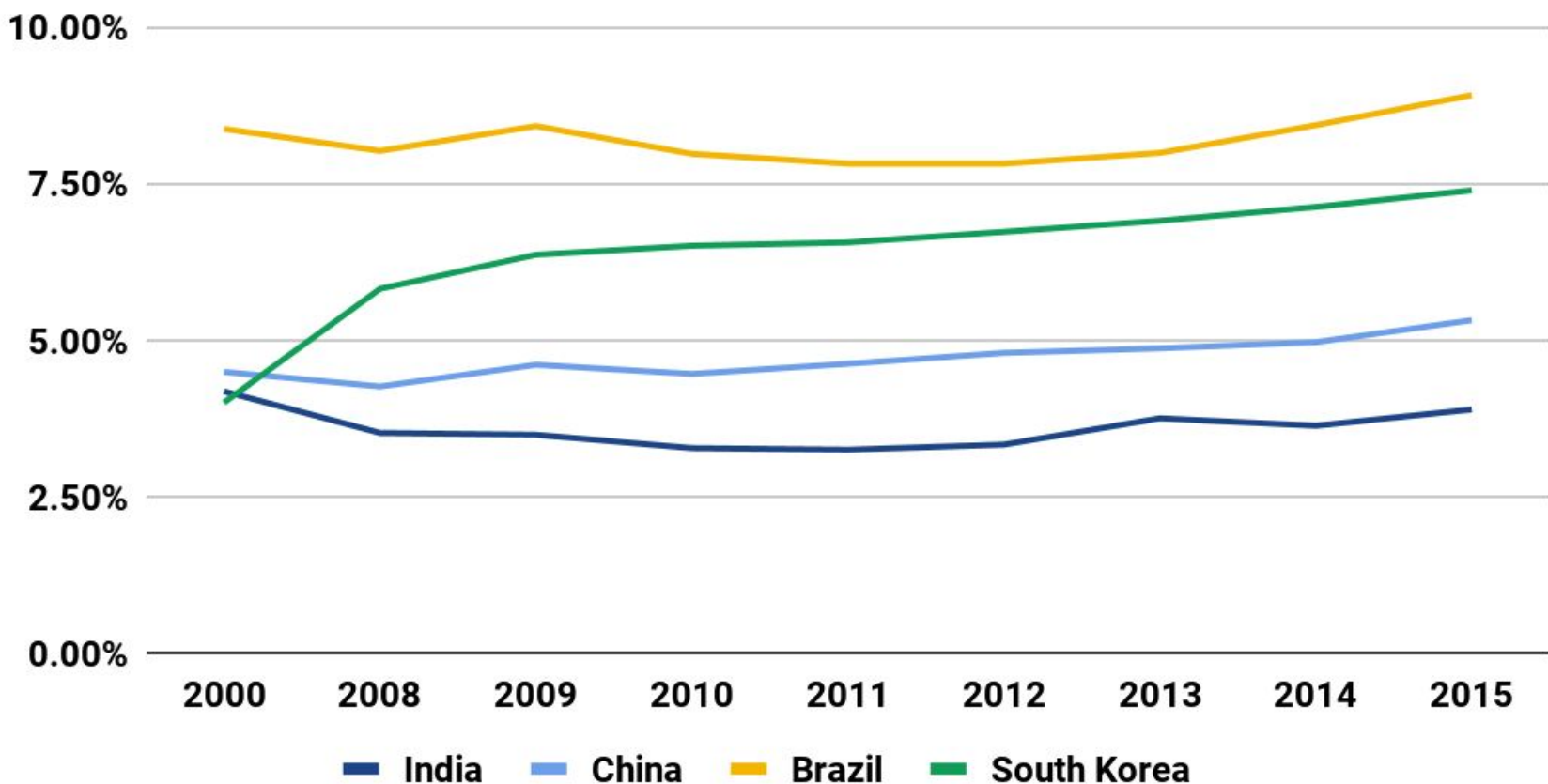
Expected domestic generic drug market by 2022

\$132.8BN

Indian hospital industry forecast by 2022

Health Expenditures as % of GDP

(%)



DRIVERS

Govt initiatives
(Ayushman Bharat)

Lowered cost of
remote healthcare

FDI, Private Sector
Investments

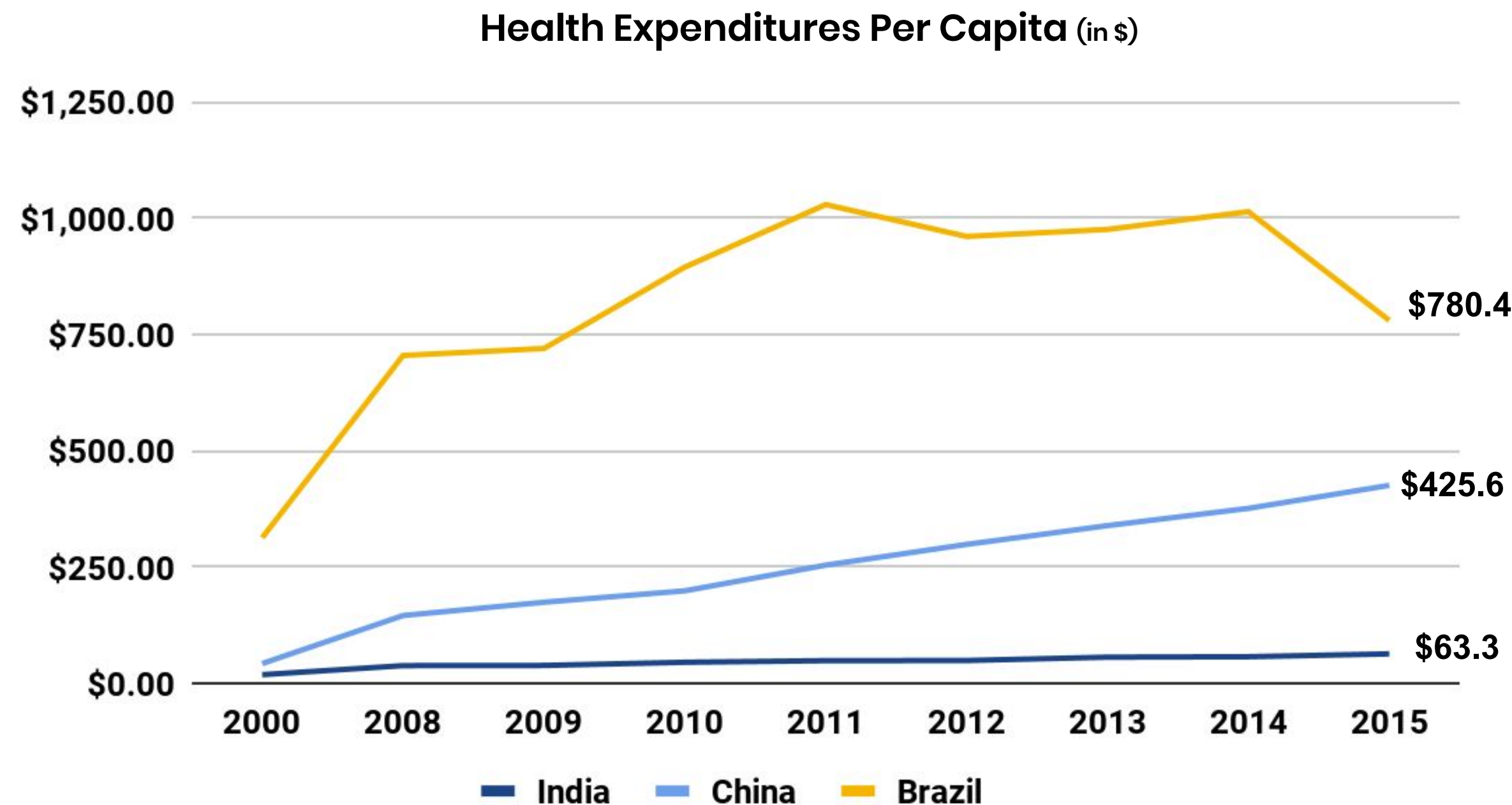
Population health
platforms

Precision medicine
& innovations

Source: Assocham, RNCOS, World Bank



HEALTHCARE: PER CAPITA HEALTH EXPENDITURES COMPARISON



At \$63.6, India has one of the lowest healthcare per capita expenditures globally.

Source: World Bank



HEALTHCARE: CHALLENGES & OPPORTUNITIES

CHALLENGES

- Low public spending on healthcare
- Physician shortage in rural areas
- Low insurance penetration
- High costs relative to per capita income
- Poor adherence & education levels
- Poor health infrastructure

OPPORTUNITIES

- Technology driven, low cost primary health centres
- Scaling up tertiary care through technology
- Medical devices at India costs & remote health management
- Strong infrastructure for digital health records
- Wellness & Preventive healthcare initiatives
- Predictive population health management
- Digital Pharma platforms
- Sophisticated health marketplaces



HEALTHCARE: PROMINENT STARTUPS



Founded in 2008

A healthcare startup which functions as a one-stop shop for medical appointments, consultations, health records, insurance, and online medicine delivery.

Total Funding - \$234MN



Founded in 2014

A health and fitness startup around gyms, health food, yoga and meditation centres. Provides innovative combination of engagement, coaching and delivery through a combination of online and offline channels.

Total funding - \$174MN



Founded in 2010

Netmeds.com is an online pharmacy. It offers both prescription drugs and over-the-counter medications as well as other health products.

Total funding - \$99MN



Founded in 2012

1mg is an online pharmacy network and generic medicine engine. It enables users to find information about medicines prescribed by doctors and also buy them.

Total funding - \$83.1MN



Founded in 2014

Portea Medical is India's home healthcare pioneer and the largest and fastest growing provider of in-home medical care in India today with a 24-city network.

Total funding - \$72.5MN



Founded in 2013

Lybrate enables patients to find doctors near their location. Patients can search by specialty, and location and book appointments.

Total funding - \$14.4MN



EDUCATION



EDUCATION: SNAPSHOT

\$180BN

Indian education industry by 2020

2.7%

Govt. expenditure on education in 2018, as % of GDP

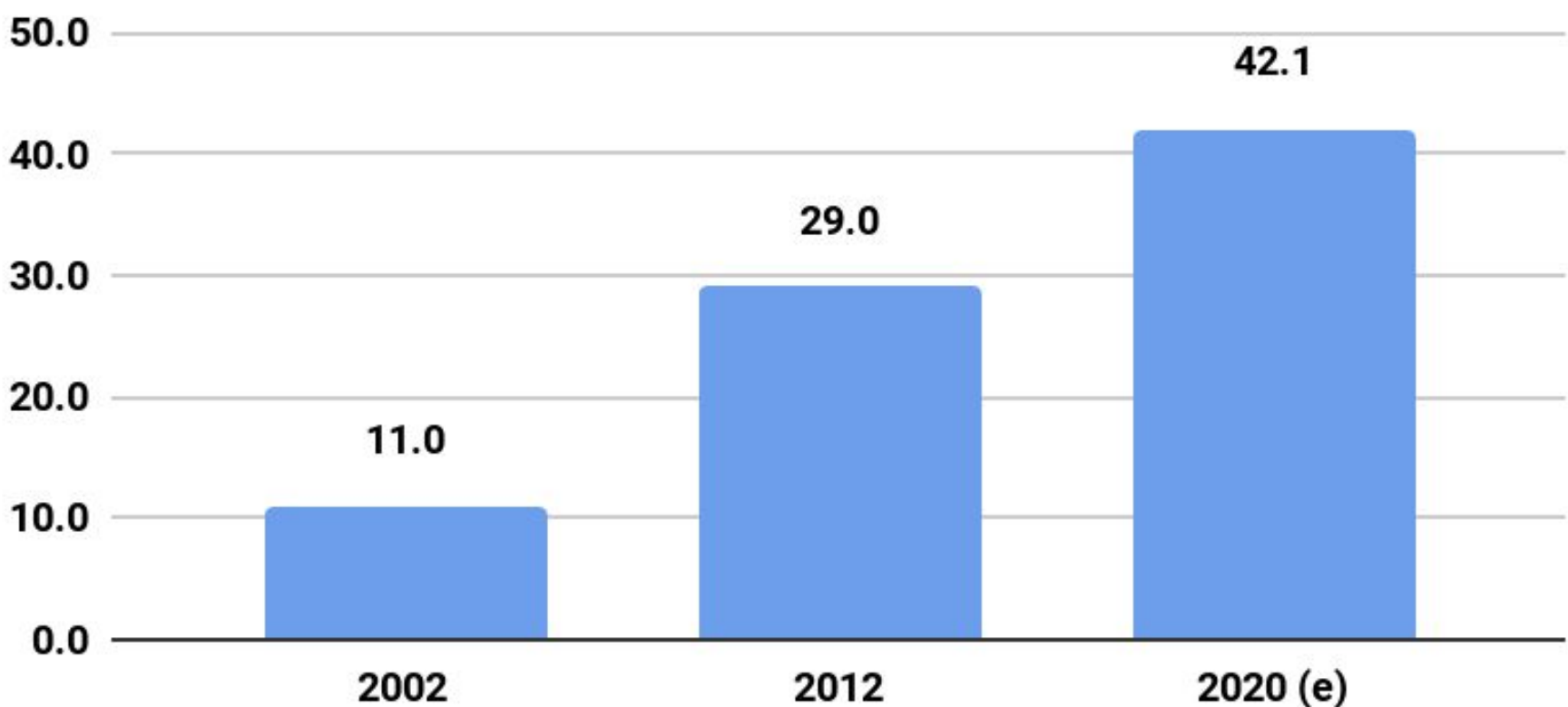
\$1.96BN

Expected Indian e-learning market by 2021

\$140BN

Expected annual R&D spending by 2030

Higher Education Enrollments in India
(in millions)



DRIVERS

Increased FDI

Aspirational Society

Rapidly growing Online education market

Government Initiatives, policy and spending

Vernacular based learnings

Source: Technopak, Bloomberg, KPMG, FICCI, EY



EDUCATION: CHALLENGES & OPPORTUNITIES

CHALLENGES

- Insufficient expenditure on education
- Unemployability of graduates
- Mismatch between expectations & available jobs
- Low interest in vocational careers
- Inefficient Public Private Partnership models
- Limited Infrastructure

OPPORTUNITIES

- Strong test prep platforms for job exams
- Platforms to reduce friction between opportunities and the right candidates
- Bridge learning programs for re-skilling and post university
- Platforms for driving internship opportunities across age groups
- Vernacular based learning platform for vocation
- Hybrid higher ed platforms
- Standardized and quality certification engines
- Knowledge sharing platforms in vernacular



EDUCATION: PROMINENT STARTUPS



Founded in 2008

BYJU's is reinventing how students learn through its learning app. It offers learning programs that are effective and engaging for students in class 6-12, and for various competitive exams.

Total funding - \$344MN



Founded in 2015

Toppr is an online preparation platform for entrance & competitive exams in India. Its first product for IIT JEE Mains is the most comprehensive test and practice package with instant feedback reports.

Total funding - \$23.5MN



Founded in 2015

Unacademy is an online education platform that has over 50,000 lessons online, and over a million registered users. The platform's educators include influencers like Kiran Bedi.

Total funding - \$38.5MN



Founded in 2011

Vedantu is a live online tutoring platform that enables personalized learning. Vedantu uses technology to bring together teachers and students on a single platform to enable live learning between them.

Total funding - \$10.6MN



Founded in 2009

An online education portal with the aim of simplifying the learning for working professionals. The website offers more than 400 courses in vivid areas including IT, digital marketing etc.

Total funding - \$31.1MN



Founded in 2015

CultureAlley, which works offline, is based on a free English course designed exclusively to learn the English language. It not only focuses on reading/writing but it also focuses on developing a vocabulary.

Total funding - \$6.8MN



RETAIL



RETAIL: SNAPSHOT

10%

Contribution
to GDP

10%

CAGR Growth
2016 – 2026

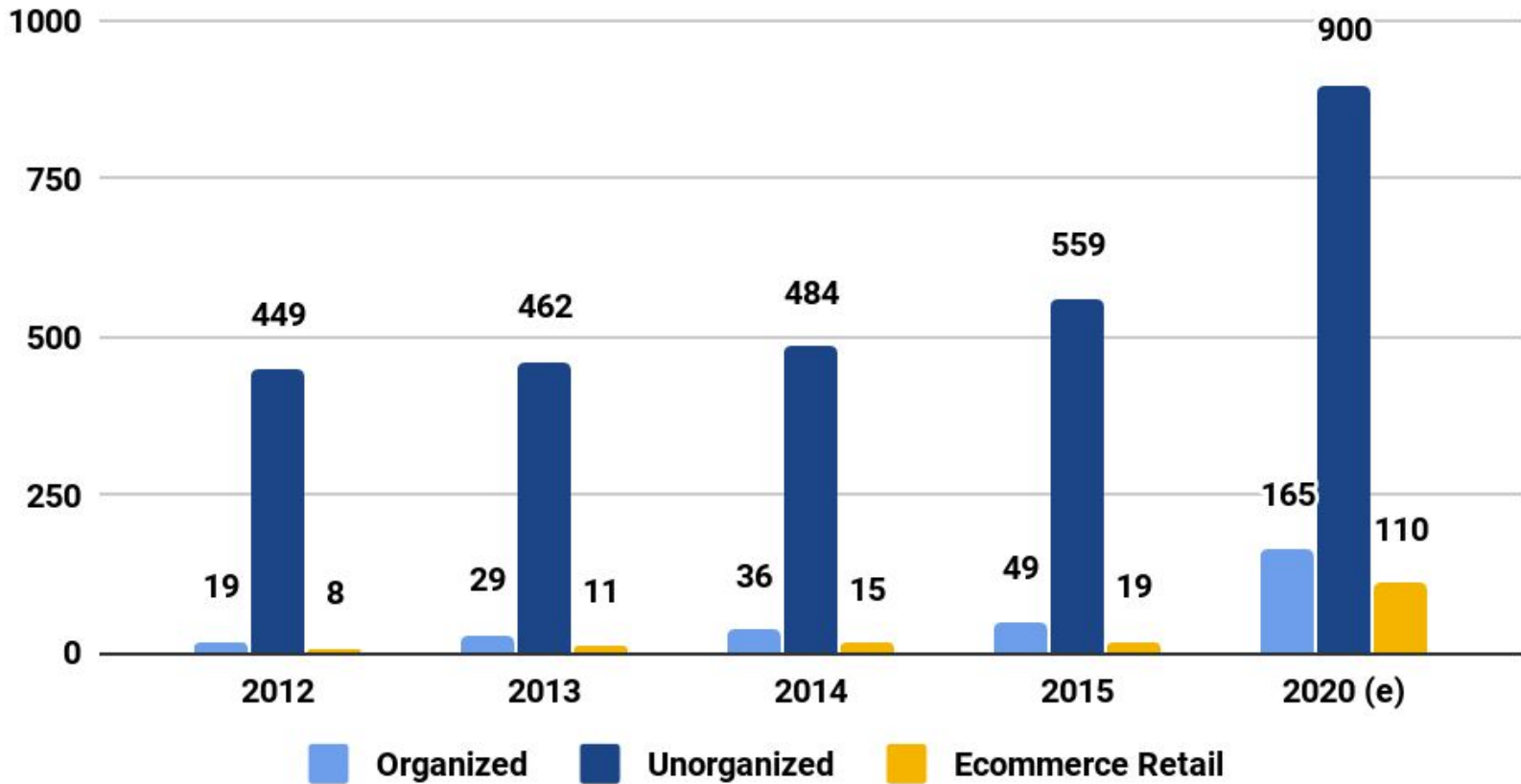
18%

Share of Organized
Segment in Retail
Sector (2021)

30%

Ecommerce CAGR
Growth
2016 – 2021

Retail Industry Market Size, India
(\$ in billions)



DRIVERS

Smartphone &
internet penetration
across the country

Rise in variety
around CPG

Consumer and SME
financial innovation

Supply chain
efficiencies

Technology
innovations around
engagement &
personalization

Source: Trak.in, Intelligence node, FICCI, PwC



RETAIL: CHALLENGES & OPPORTUNITIES

CHALLENGES

- Very high real estate costs
- Poor logistics infrastructure
- Too many layers of distribution between producer & consumer
- Challenges around building scale driven efficiencies in distribution
- Little ability to understand specific customer buying patterns
- Digital Payment challenges for e-commerce at bottom of the pyramid
- Threat of non-traditional players like Telecom
- High cost of inventory for unorganized sector

OPPORTUNITIES

- Technology driven operations for the smaller stores
- Digital aggregation opportunities around specific sub verticals in Retail
- Novel models of e-commerce like social commerce, subscriptions, etc.
- Newer multi-channel commerce models
- Newer B2B models in Retail
- Evolving retail layers around other high engagement verticals like media & entertainment
- Opportunities for personalization and engagement using technologies such as AI , block chain etc.
- Opportunities around supply chain disintermediation



RETAIL: PROMINENT STARTUPS



Founded in 2012

The online furniture company provides a curated destination for home solutions, to help the Urban Indian build well-furnished, beautiful homes.

Total funding - \$112.8MN



Founded in 2012

Nykaa.com is a premier online beauty and wellness destination offering beauty and wellness products for men and women.

Total funding - \$93.5MN



Founded in 2007

Flipkart owns and operates an online shopping marketplace in India with a registered customer base of over 100 million. In 2018 the company was acquired by Walmart.

Total funding - \$7.3BN



Founded in 2012

Limeroad is an online shopping platform helping individuals to make their personal looks and collections and share creations with friends to get that second opinion, to inspire or be inspired.

Total funding - \$50MN



Founded in 2012

Pepperfry.com is an online home and lifestyle shopping store in India selling products with cash on delivery facilities.

Total funding - \$197.5MN



Founded in 2016

Udaan is a network centric B2B trade platform, designed specifically for small & medium businesses in India. It brings traders, wholesalers, retailers and manufacturers in India on to a single platform.

Total Funding - \$284.9MN



FOOD



FOOD: SNAPSHOT

2.15%

Contribution of F&B sector to Indian GDP

\$543BN

Food Processing industry by 2020

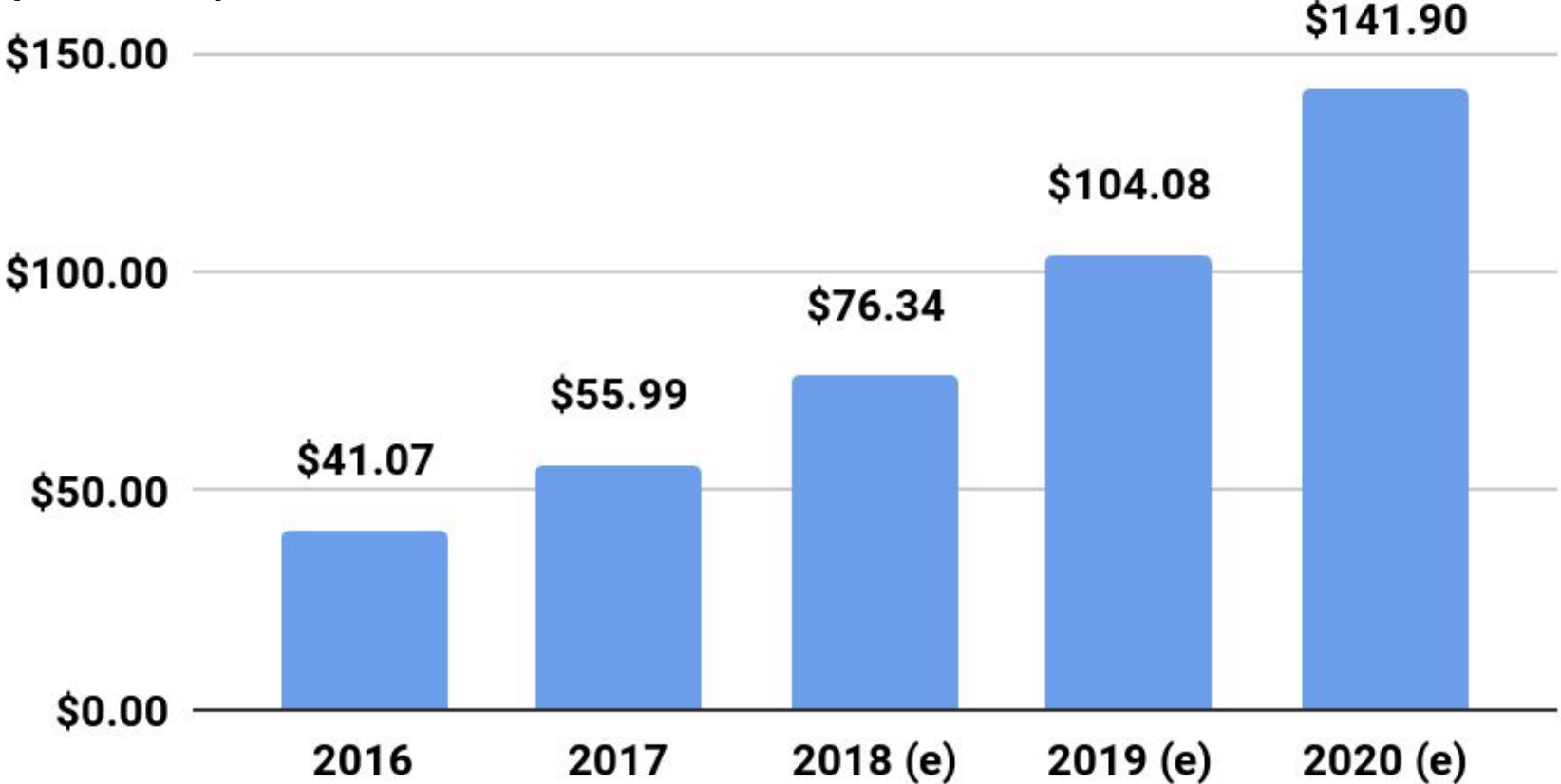
36.34%

F&B sector CAGR growth (2015 – 2020)

\$311.5

Per Capita expenditure on Food (USA – \$2,408.1; China \$4,422.7)

Food & Beverage Industry Market Size, India (\$ in billions)



DRIVERS

Increased Urbanisation

Increasing disposable income levels

Large share of young population

Improved standard of living

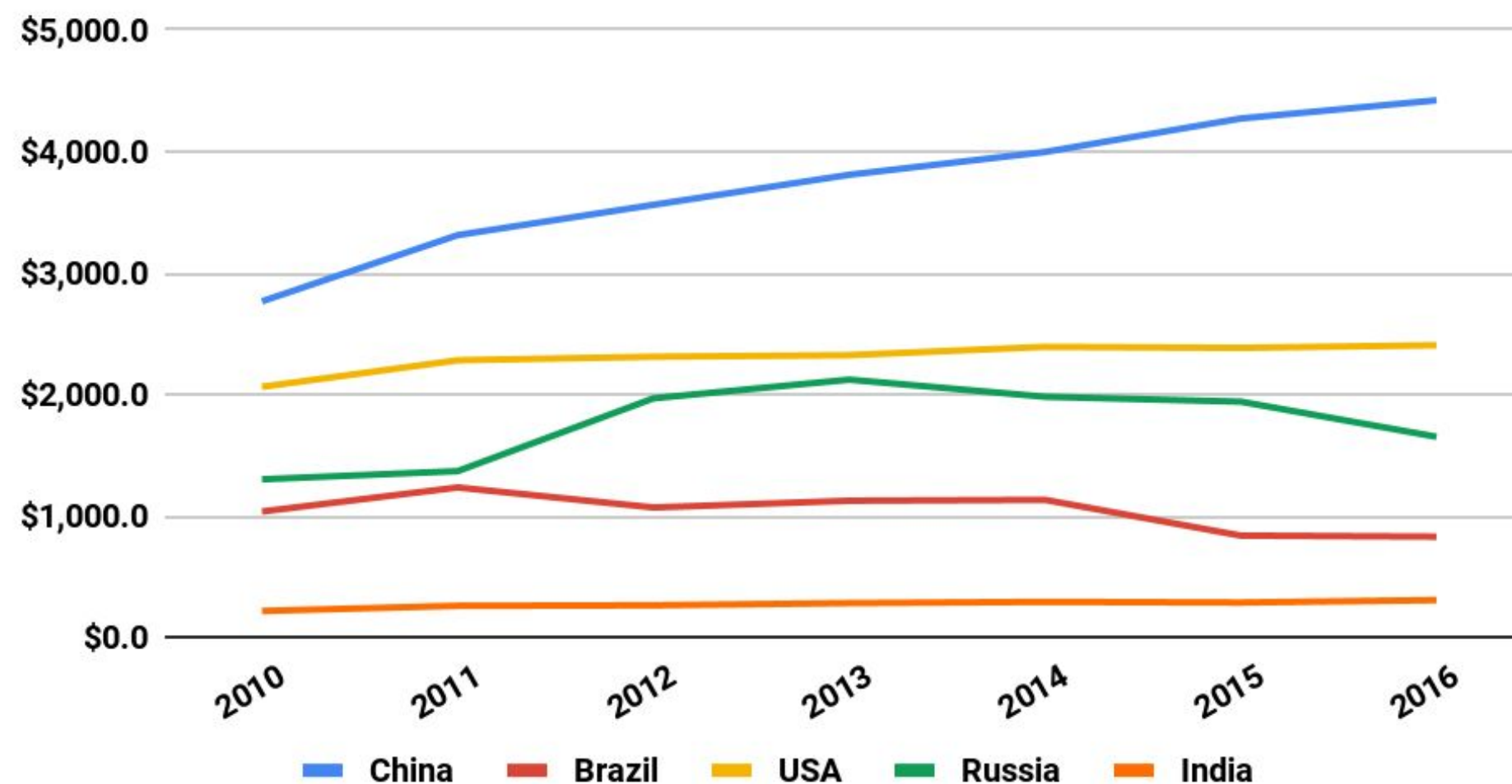
Changing lifestyles and food habits

Source: Dart Consulting, Grant Thornton, IBEF, Knoema



FOOD: PER CAPITA FOOD EXPENDITURES COMPARISON

Per Capita Food Expenditures, Selected Countries (in \$)



Apart from China and to an extent Russia, for other major countries the average expenditure on food has been been stagnant over the years

Source: Knoema



FOOD: CHALLENGES & OPPORTUNITIES

CHALLENGES

- High costs of real estate for restaurants
- Inability to build native brands & globally scalable operations
- Inability to build scale globally
- Supply chain inefficiencies impacting cost
- Still early stage food product innovation
- Cost and turnover of staff
- Reduced margins driven by digital food marketplaces

OPPORTUNITIES

- Aggregation plays around sub-verticals
- Massive opportunity around building brands in traditional foods
- Leverage technology like IoT in food operations
- Revamp customer experience using personalization & engagement
- Newer business models like subscription
- Newer products around rising health consciousness
- Existing Food players launching digital platforms



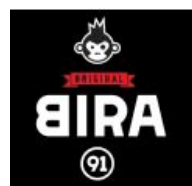
FOOD: PROMINENT STARTUPS



Founded in 2013

Grofers is a low-price online supermarket with products across categories like grocery, beauty & wellness, household care, baby care, pet care delivered to users home.

Total funding - \$885.7MN



Founded in 2009

BIRA White Ale launched as an alternative to the international brews imported to India with quirky and contemporary packaging. It has become an instant hit among the urban crowd.

Total funding - \$77.9MN



Founded in 2014

Food ordering & delivery company based out of Bengaluru. Swiggy delivers over 19 million orders monthly.

Total funding - \$465MN



Founded in 2015

Licious is an online meat and fish ordering startup that solves existing problem of finding safe & trustworthy fresh meat. Along with that,, they also sell pre-marinated meats, meat-based spreads, pickles and soup.

Total funding - \$39MN



Founded in 2008

Started as restaurant search and discovery app and website, is now a leader in food ordering & delivery platform in the country.

Total funding - \$443.8MN



Founded in 2010

A F&B retail brand whose focus is to serve great glass of Chai (Indian tea). Claims to sell 0.3 million cups of tea a day across its channels – stores, delivery, and dispensers.

Total funding - \$30MN



BANK AND FINANCIAL SERVICES



BANKING & FINANCIAL SERVICES: SNAPSHOT

15.51%

Mutual Funds AUM
CAGR Growth
(FY2008 – FY2018)

8.23%

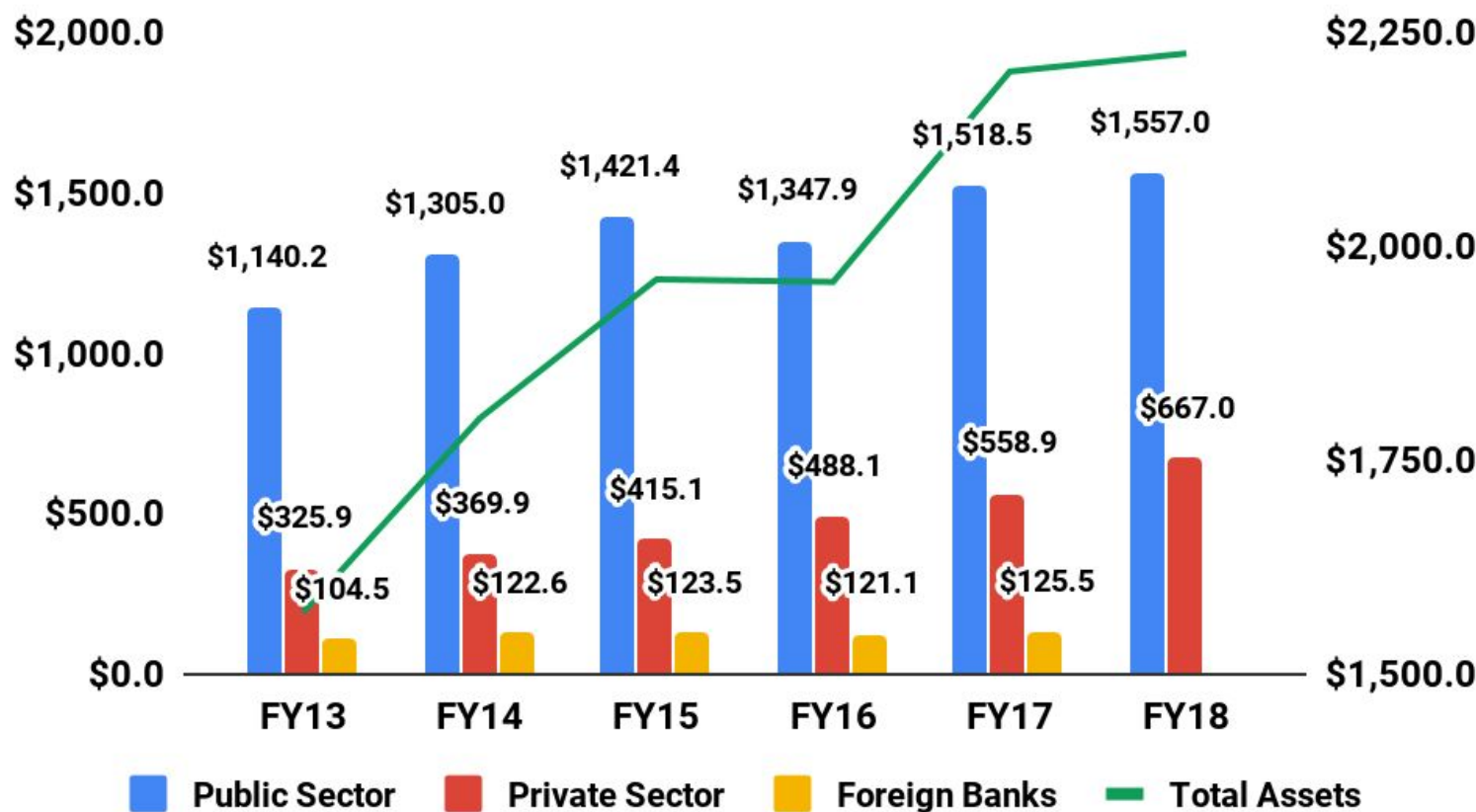
Banking deposits
CAGR growth
(FY2008 – FY2018)

\$350BN

Indian digital lending in 2023

Total Banking Sector Assets

(\$ in billions)



DRIVERS

Robust
Government &
monetary Policies

Technology
led initiatives

Innovative
banking models

High demand
for capital
from Industries

Surging
Domestic
consumption

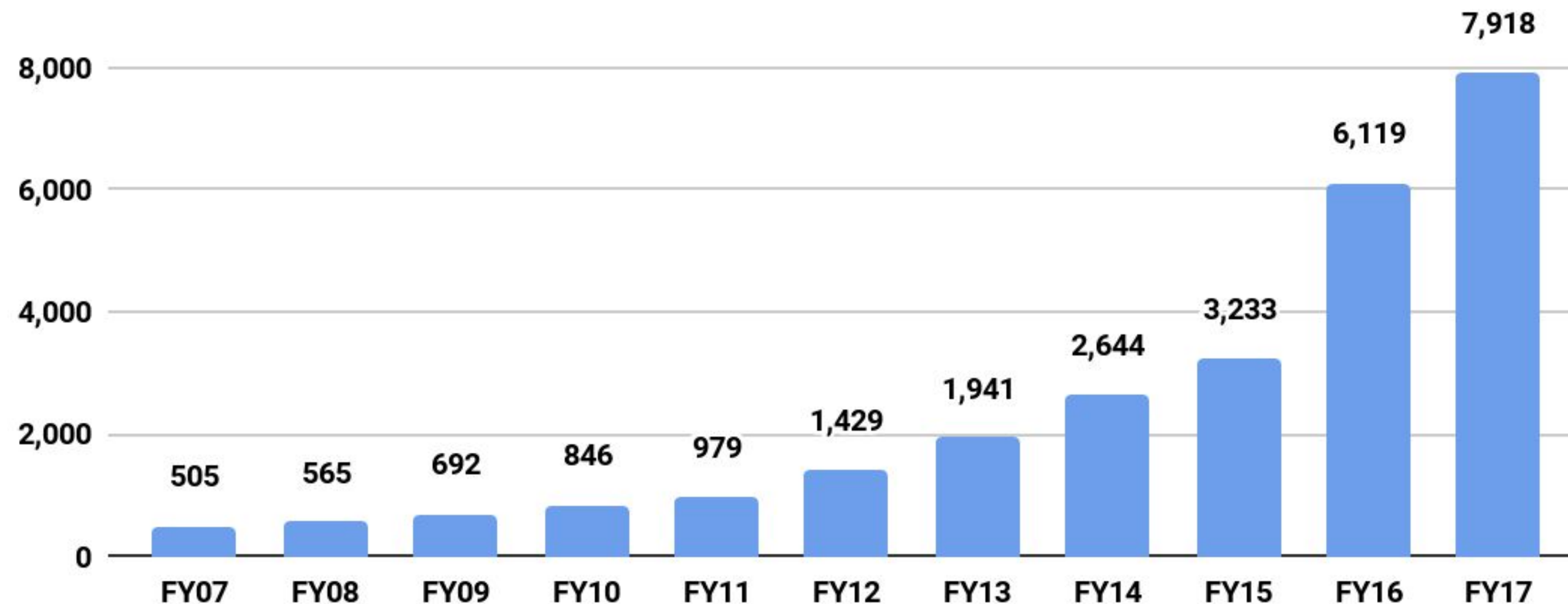
Customer
Expectations

Source: IBEF, BCG



BANKING & FINANCIAL SERVICES: NON PERFORMING ASSETS (NPAs)

Gross Non-Performing Assets Across all Banks (in billions of rupees)



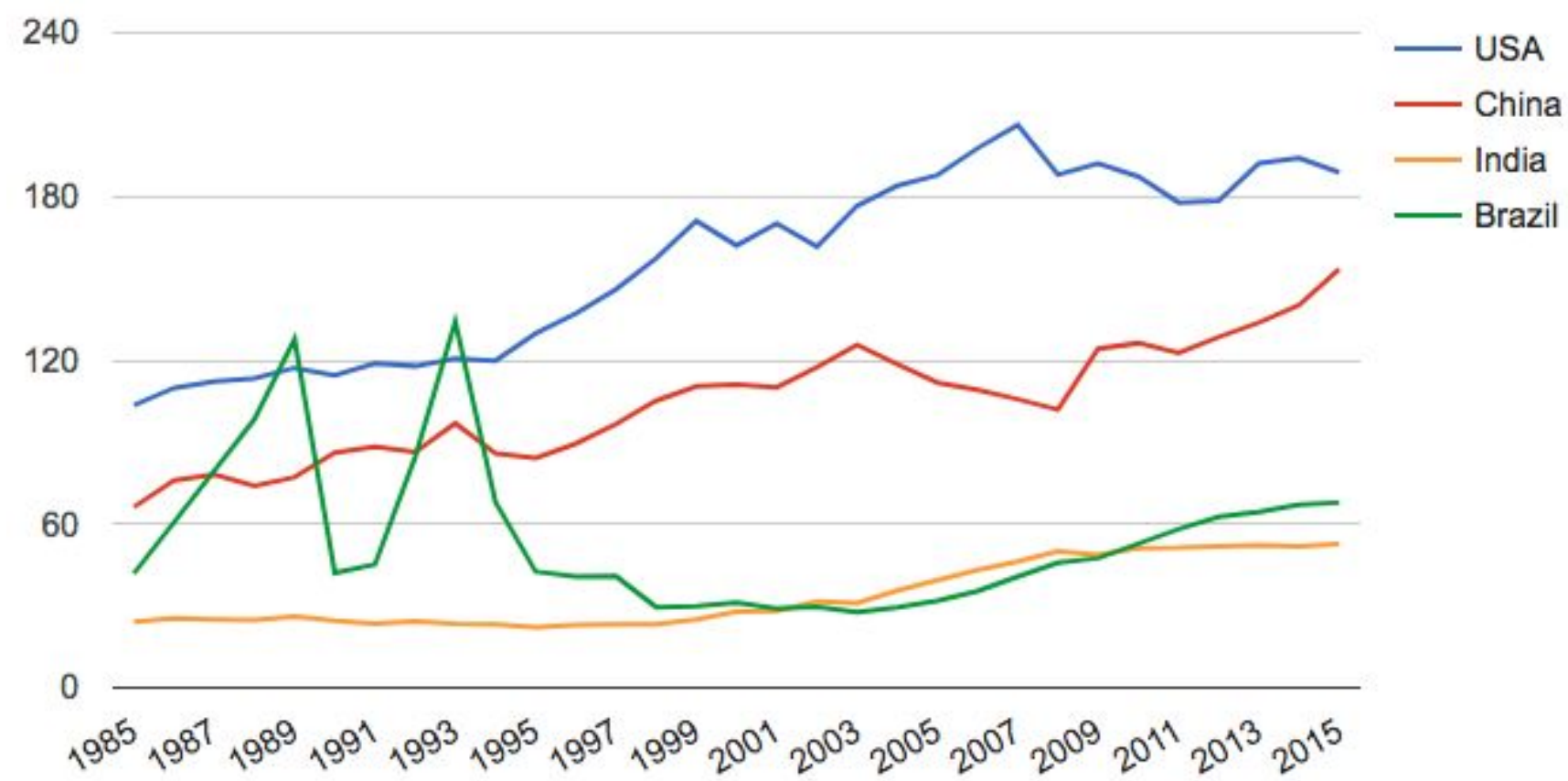
The Indian banking system is beleaguered with surging non-performing assets (NPAs). India has been ranked fifth on the list of countries with highest non-performing assets.

Source: Business Today, VC Circle, Business Today

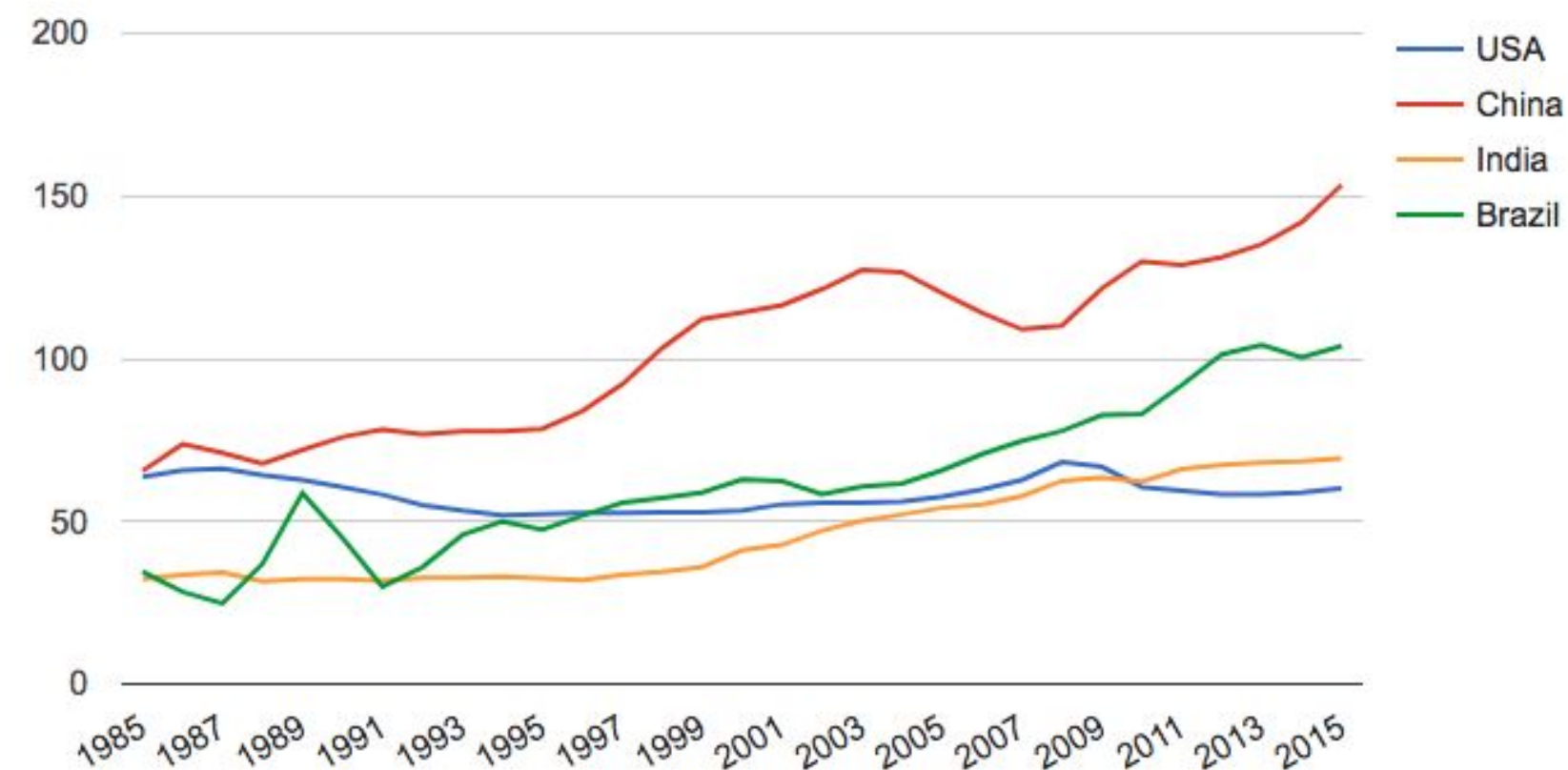


BANKING & FINANCIAL SERVICES: GLOBAL COMPARISON

Domestic Credit to Private Sector as Percent of GDP (%)



Bank Assets as Percent of GDP (%)



The banking economy in India has been much more steady from last 20 years, compared with other economies which are a little more turbulent

Source: The Global Economy



BANKING & FINANCIAL SERVICES: OPPORTUNITIES & CHALLENGES

CHALLENGES

- High degree of NPA, leading to lending crunch
- Evergreening of NPAs
- High cost of servicing customers
- Low return on BPL accounts
- Lack of underwriting information for 90% of the population
- Lack of credit to most SMEs
- High dependence on informal lending
- Fraud & cybersecurity
- Effective third party credit rating
- Gold & land are still the favoured investment channels for people

OPPORTUNITIES

- Leverage digital channels & tech for customer engagement & monetisation
- Reducing costs through marketplaces
- Massive opportunity to underwrite the new set of Indian customers
- Initiatives like GST, Aadhaar, UPI and digitisation generating data that can be used in multiple ways
- Opportunities around financing for Indian SMEs
- Newer opportunities around deposit generation through peer-peer lending
- Digital first opportunities around traditional banking including credit cards, trade finance etc
- Net new technology platforms using AI around fraud prevention, inter-bank communication, trading, underwriting, monetization etc.



BANKING & FINANCIAL SERVICES: PROMINENT STARTUPS



Founded in 2000

A mobile payment and e-commerce platform designed to provide bill payment services. Offers services such as utility bill recharges; bus, train, flight, hotel booking and investment services.

Total Funding – \$2.2BN



Founded in 2008

BankBazaar is a financial products marketplace that gives instant customized rate quotes on loans and insurance products.

Total Funding – \$109MN



Founded in 2014

An online financing company dedicated to help entrepreneurs and small businesses with working capital loans. Disbursed loans to more than 21k MSMEs across 26 diverse sectors.

Total Funding – \$156MN



Founded in 2014

A peer-to-peer lending startup that connects lenders with borrowers. With NBFC P2P lending licence from the RBI, it is the first P2P firm to get the certification. It closed 2018 at a run rate of \$3-4MN.

Total Funding – \$9.8MN



Founded in 2013

An online platform that provides working capital finance to SMEs in India. They offer flexible, short-term loans for inventory, service new orders or optimize cash cycles.

Total Funding – \$117MN



Founded in 2010

A trading platform providing one of the lowest brokerage. With revenue of \$27MN and a profit of \$16MN by the end of FY 2017, it is one of India's leading discount brokers.

Bootstrapped



INSURANCE



INSURANCE: SNAPSHOT

3.69%

Insurance penetration
(premiums as
% of GDP) in 2017

1.24%

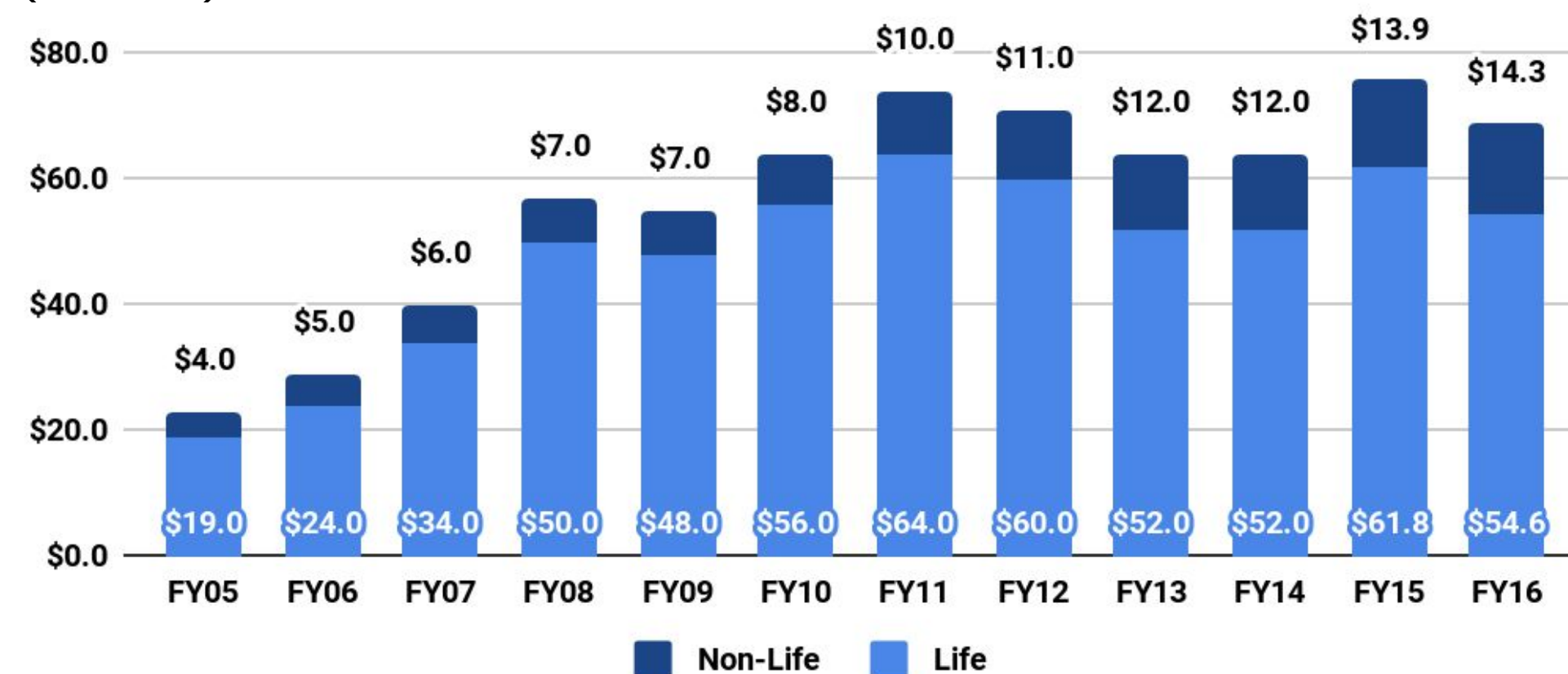
Gross premiums
Written CAGR Growth
FY10 – FY16

20%

General Insurance CAGR over last 5 years

Gross Insurance Premiums Written in India

(\$ in billions)



DRIVERS

Govt interventions
like Ayushman
Bharat & Crop
Insurance

New regulatory
initiatives

Spend on
awareness by
insurance
companies

Improvements in
customer
acquisition &
experience

Eco-systems
driving growth

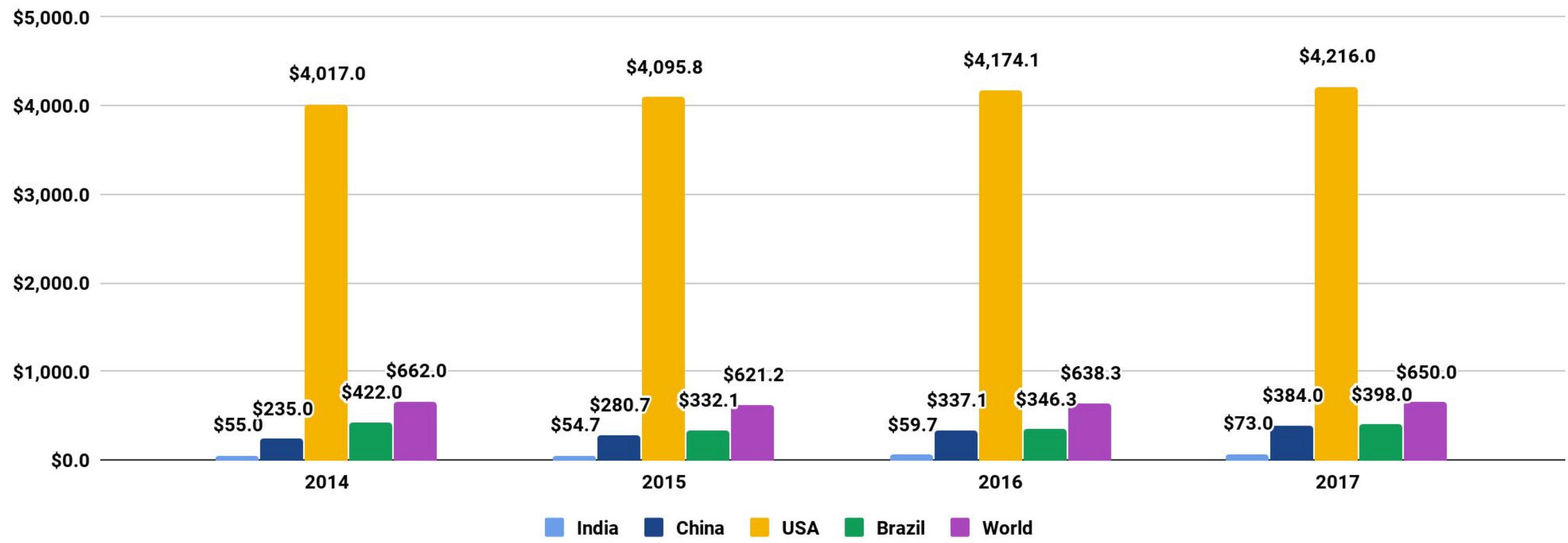
Newer offerings &
business models

Source: Swiss Re, PwC



INSURANCE: GLOBAL COMPARISON – INDIA VS WORLD

Insurance Density – Premiums Per Capita (in \$)



The low Insurance density in India means that there are massive opportunities for growth in the sector

Source: Swiss Re



INSURANCE: OPPORTUNITIES & CHALLENGES

CHALLENGES

- Very low mindshare and awareness of insurance
- Low trust on insurance claim payouts
- Inefficient distribution model with agency cost
- Misalignment between products and customer needs
- Very tough to drive differentiation
- Early stage market causing underwriting challenges
- Complicated claims processes

OPPORTUNITIES

- Very low penetration offers significant expansion potential
- Drive profitability by going Direct to Customer
- Digital Native Insurance companies offering better experience and trust
- Better underwriting by leveraging digital exhaust
- Newer micro-insurance opportunities around products & services
- Build insurance touchpoints around customer experience across multiple verticals
- Introduce newer points of data collection by leveraging IoT, etc.
- Boost underwriting and fraud detection using AI and leveraging cross-industry data sharing
- Evolve Regulation to allow newer insurance businesses to come into play
- Segment Leadership vs generalists



INSURANCE: PROMINENT STARTUPS



Founded in 2008

An online insurance aggregator. It educates people on insurance products and helps insurance comparisons. It accounts for nearly 25% of India's life cover and records nearly 300,000 transactions a month.

Total funding - \$346MN



Founded in 2016

Acko is a general insurance company offering its services through a digital platform. It provides personalised insurance products based on user behaviour, as well as general / auto insurance.

Total funding - \$42MN



Founded in 2013

An online insurance platform. It has integrated with more than 35 insurers and offers more than 150 policies across motor, life and health insurance. Sells about 50,000 policies monthly.

Total funding - \$41.5MN



Founded in 2015

Auto insurance aggregator which offers solutions for car and bike owners such as instant policy, digital locker for all documents, servicing, and claim assistance.

Total funding - \$10.8MN



Founded in 2016

Digit is a online general Insurance startup which insures a range of products across categories like motor, travel, and jewellery. It sells around 6000 policies per day & has a customer base of more than 400,000.

Total funding - \$45MN



Founded in 2017

Offering unique solutions to millennials in a digital-only format. Policies includes anti-dengue 'toffee', commuters 'toffee' and globetrotters 'toffee'.

Total funding - \$1.6MN



MEDIA & ENTERTAINMENT



MEDIA, COMMUNICATION & ENTERTAINMENT: SNAPSHOT

~1%

Contribution to
Indian GDP

40BN+ Hours

Total time spent on
video apps (2017)

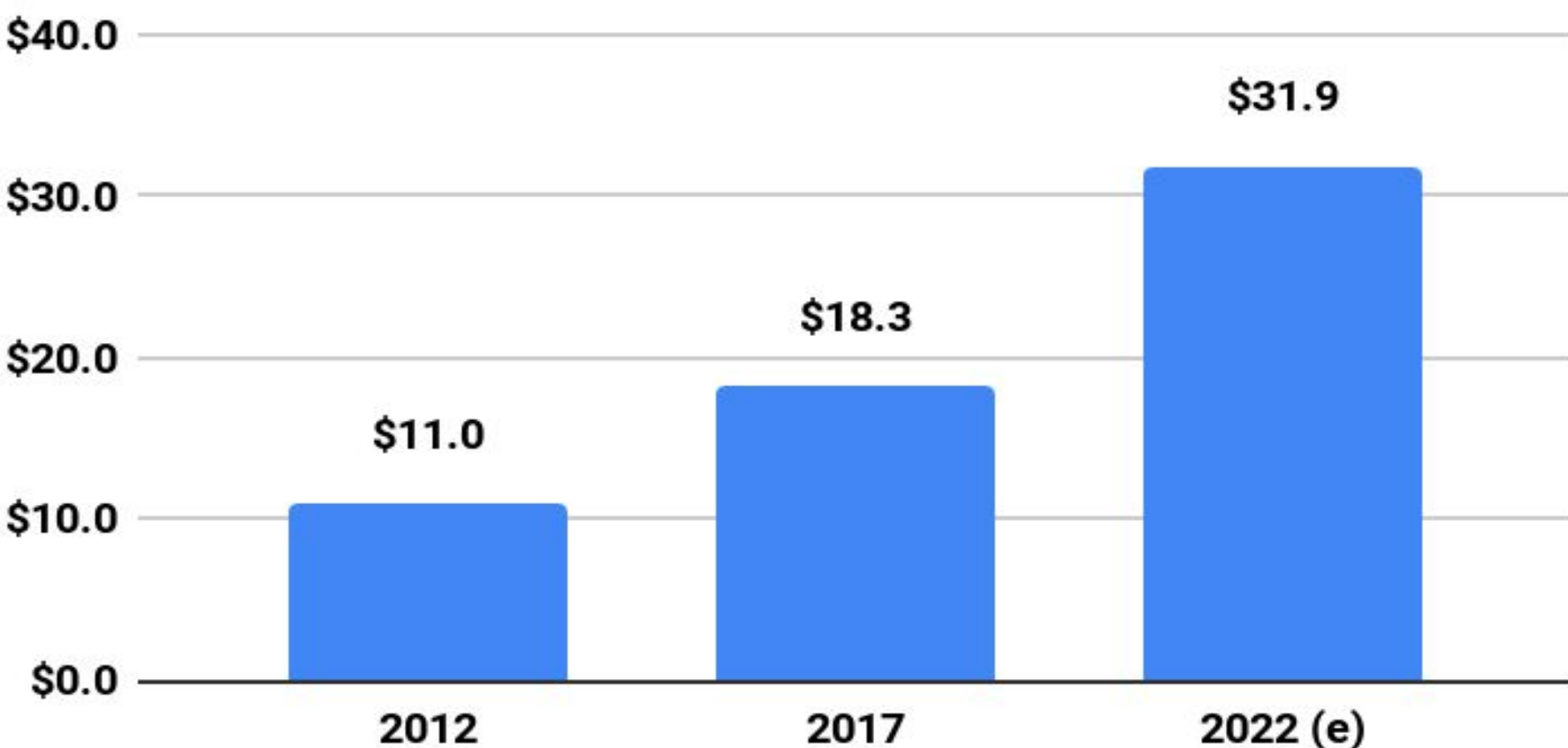
10%

CAGR Growth
2012 – 2017

11% – 12%

CAGR Growth
2017 – 2022

Media & Entertainment Industry Market Size, India
(\$ in billions)



DRIVERS

Huge growth in
internet &
smartphones

Massive FDI
investments

Reduced cost of
content creation

Content integration
with lifestyle

The cord cutter
movement

New digital
platforms

Newer revenue
models

Personalization &
hyper localisation

Source: CII, BCG, E&Y



MEDIA, COMMUNICATION & ENTERTAINMENT: OPPORTUNITIES & CHALLENGES

CHALLENGES

- Dwindling newspaper subscriptions & Cord cutting
- Divergence of ad spend across channels
- Digital assets not monetising for traditional companies
- Lack of targeting infra for traditional media
- Challenges around outcome attribution
- Last mile payments for digital properties
- Limited understanding of monetizing new model like mobile gaming
- Challenges around successful original content for mobile gaming

OPPORTUNITIES

- Rise of Digital native media houses
- Opportunities in digital native vernacular content
- Crowdsourced content & media platforms
- Digital first video content producers
- Newer models of content consumption in specialized verticals
- Diversification & newer monetization models for traditional media
- Emerging subscription models for high quality content
- Payment innovations from digital platforms like Apple and Google for emerging countries



MEDIA, COMMUNICATION & ENTERTAINMENT: PROMINENT STARTUPS



Founded in 1999

BookMyShow offers showtimes, movie tickets, reviews, trailers, concert and event tickets. Also features promotional offers, coupons and mobile app.

Total funding - \$224.5MN



Founded in 2015

Hotstar is a an Indian digital and mobile entertainment platform. It provides streaming media and video-on-demand services and is available on Web, Android, iOS, and Apple TV platforms.

Total funding - \$73.8MN



Founded in 2015

ShareChat is a social networking and regional content platform for the fast growing Internet users in India.

Total funding - \$122.8MN



Founded in 2012

Dream11 is India's Biggest Sports Game with 30 million + users playing Fantasy Cricket, Football, Kabaddi and NBA.

Total funding - \$100MN



Founded in 2007

Moonfrog Labs is a Bangalore-based startup that makes mobile-first games for the masses. The company has made games like Mafia Wars, CastleVille, and Bubble Safari, among others.

Total funding - \$16MN



Founded in 2013

Culture Machine is a media company that helps creators, brands, and traditional media firms reach the right viewers.

Total funding - \$21.5MN



LOGISTICS



LOGISTICS: SNAPSHOT

10%

Contribution to
Indian GDP

44

Global Logistics
Performance Index
Rank of India

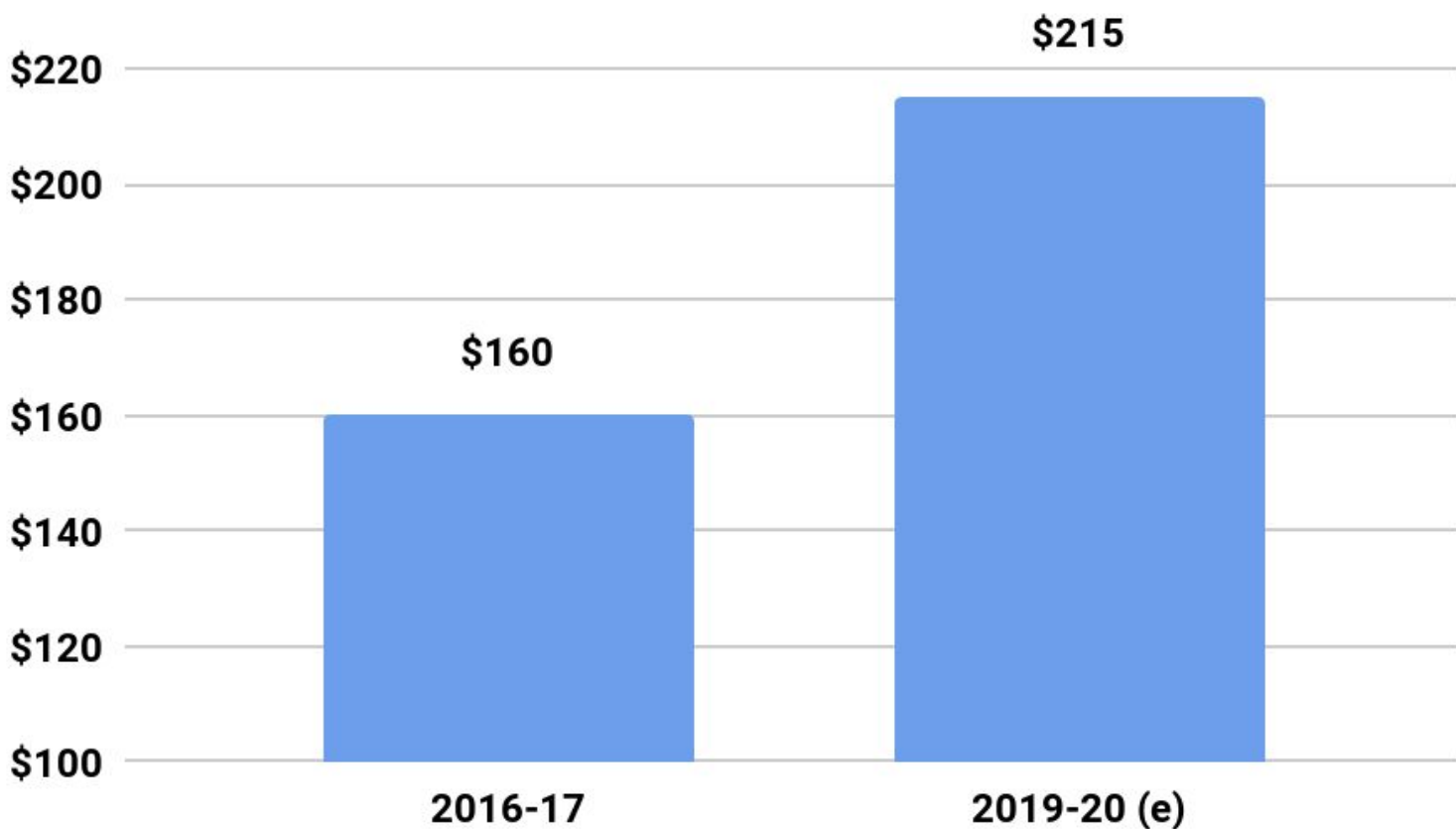
7.8%

CAGR Growth
2012 – 2017

10.5%

CAGR Growth
2017 – 2020

Logistics Industry Market Size, India
(\$ in billions)



DRIVERS

implementation
of GST

Govt & regulatory
initiatives like
exclusive Freight
corridor

Growing
ecommerce

Technology &
Automation

Improvement
in Logistics
Infrastructure

Source: Indian Economic Survey, World Bank



LOGISTICS: OPPORTUNITIES & CHALLENGES

CHALLENGES

- High cost of logistics
- Unfavorable modal mix (Roadways 60%, Railways 30%)
- Inefficient fleet mix
- Underdeveloped material handling infrastructure
- Fragmented warehousing
- Lack of seamless movement of goods across modes
- Multiple regulatory/policy making bodies
- Procedural complexities

OPPORTUNITIES

- Digital platforms for optimal matching of transport supply & demand
- Increased collaboration between B2B logistics players driving utilization
- Newer operational models leading to reduced pricing & demand increase
- Leveraging AI to drive optimization of asset maintenance life cycle
- Newer Uber like models in the B2B space
- Opportunities around building EV infrastructure & applications
- Digital players aggregating supply chain in specific industries
- AI driven services around factory planning & inventory optimization



LOGISTICS: PROMINENT STARTUPS



Founded in 2010

An online cab aggregator that brings together cab drivers and customers using technology to make transportation hassle-free in India.

Total funding - \$3.3BN



Founded in 2011

A third-party logistics service provider which offers a full suite of services such as transit, warehousing, reverse logistics, payment collection, and vendor-to-warehouse shipping.

Total funding - \$258MN



Founded in 2014

A technology-enabled company that offers logistics services and solutions in India. Their full-stack logistics offering includes relay-led trucking and freight marketplace.

Total funding - \$181MN



Founded in 2015

A logistics company operating in the B2B logistics space. It provides trucks to large firms for transporting their goods across the country with the support of a technological backend.

Total funding - \$135MN



Founded in 2015

India's leader in the online-2-offline (O2O) logistics segment, it offers multi-modal logistics platform which integrates with bikes, minivans, trucks as well as airlines. It currently fulfils 90,000 orders per day.

Total funding - \$41MN



Founded in 2013

A supply chain solutions provider for returnable packaging and pooling of equipment such as plastic containers, wooden boxes to all sectors, which use the equipment to store or transfer products.

Total funding - \$23MN



04

OPPORTUNITIES FOR THE NEXT BILLION

INDIA – PER CAPITA INCOME BREAKDOWN

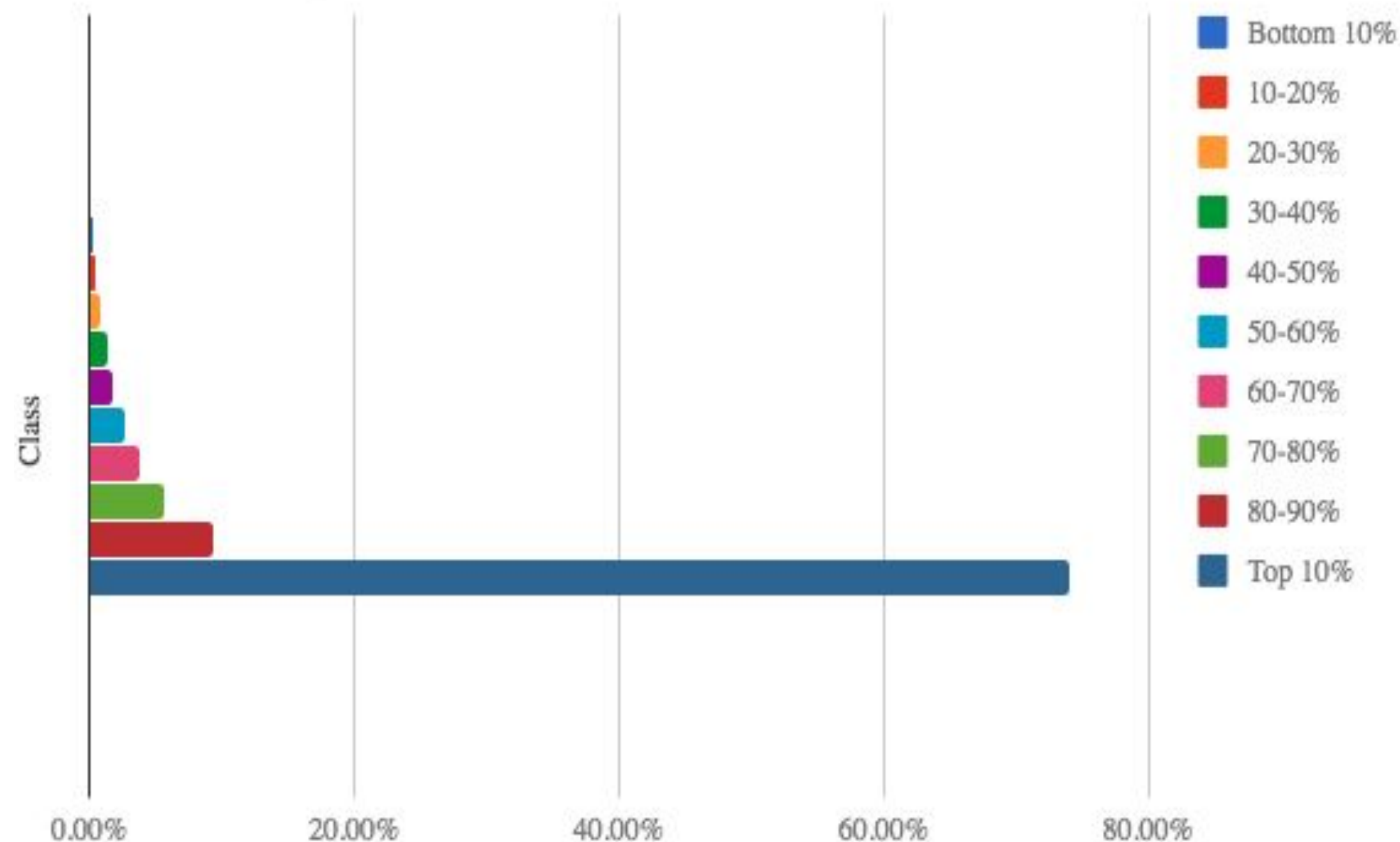
Income Group (distribution of per- adult pre-tax national income)	Number of Adults	Income Share (%)	Income Threshold (INR)	Average Income	Comparison to Average (Ratio)
Average	794, 305, 664	100.0%	0	138, 426	1
Bottom 50%	397, 152, 832	17.7%	0	40, 671	0.3
Middle 40%	317, 722, 266	29.2%	63,728	101, 084	0.7
Top 10%	7, 430, 566	56.1%	195,445	776, 567	6
Incl. Top 1%	7, 943, 057	21.3%	1,303,946	2, 954, 386	21
Incl. Top 0.1%	794, 306	8.2%	4,459,114	11, 346, 371	82
Incl. Top 0.01%	79, 431	3.4%	18,260,916	47, 154, 896	341
Incl. Top 0.001%	7, 943	1.4%	77,801,552	188, 558, 192	1362

- The top 10% of the population in India owns more than **56% of the income in the country**
- The bottom 50% owns less than **18% of the national income**
- The needs of the bottom 50% are therefore very different from the ones at the top

Source: World Inequality Database

INDIAN INCOME DISTRIBUTION

Income Distribution in India, Share of Wealth by Class

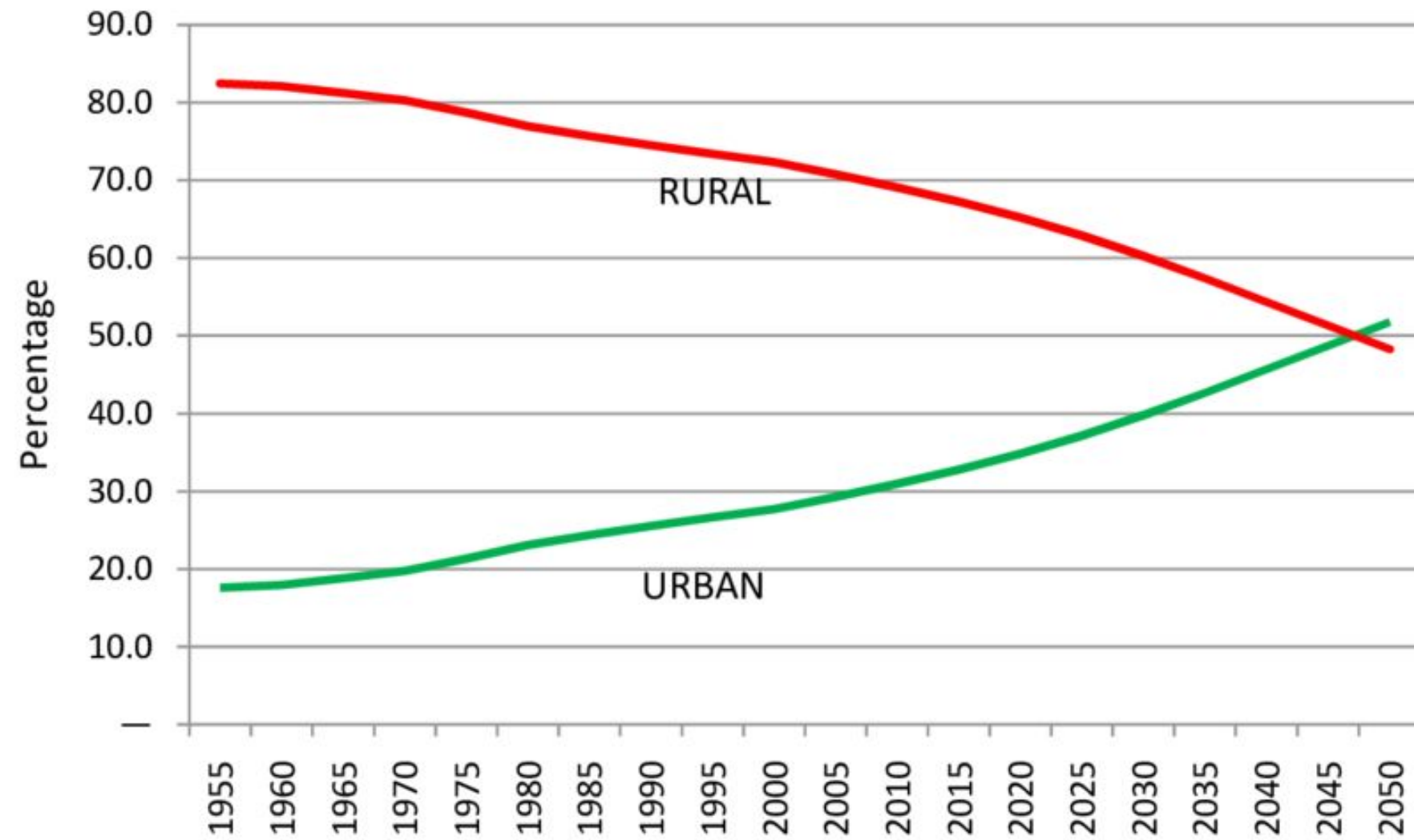


Source: World Inequality Database

- The middle and bottom 50% are now having access to smartphones & internet with the emergence of Jio
- This is expected to create a new wave of opportunity around the citizens who're not yet part of the formal economy. They're often called "The next billion"

INDIA – RURAL / URBAN DIVIDE

Changing Share of Urban and Rural Populations in India: 1950 – 2050



- The urban population in general has higher social and economic value compared to their rural cousins
- As economies get developed, the rural population typically gets reduced, and the urban population increases. However that trend works at a slow pace

By 2050, urban population is set to overtake the rural population in India

Source: Research Gate

THE NEXT BILLION



DEMOGRAPHICS

- Low income group (driver, farm worker, retail worker, house maid/jobless)
- Congested communities in cities
- Casual employment / self employed
- Low to medium literacy



PSYCHOGRAPHY

- More time at hand than ways to use it
- Looking for low cost or free entertainment
- Social standing important in close knit community
- Traditional and well integrated into religion
- Very open to new revenue opportunities



ACCESS

- Low cost Android phone
- Prepaid internet
- Jio Internet
- Mostly voice interaction
- Comfortable with vernacular language

DIGITAL OPPORTUNITIES FOR THE NEXT BILLION IN INDIA

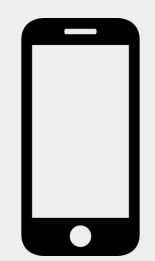
OPPORTUNITIES

Improvement	Identity	Empowerment	Religion
Finance	Entertainment	Health	Technology

SPAN

Individual	Family	Community	Government
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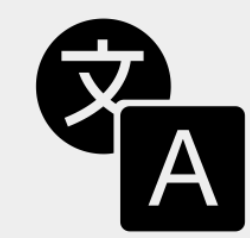
INFRASTRUCTURE



SOCIAL APPS



VOICE INTERFACE



VERNACULAR

DIGITAL PRODUCT OPPORTUNITY LANDSCAPE FOR THE NEXT BILLION

EMPOWERMENT

- Low skilled employment
 - On demand errands
 - Low skill jobs like driver/housekeeping/factory
- Business Opportunities
 - Product visibility to urban areas
- Self employment
 - Micro-agency
 - Delivering Last mile access

ENTERTAINMENT

- Short Video
 - Time killers
 - Original local content
- Mobile gaming
 - Casual & casino games / local flavour
- News apps
 - Vernacular + local
- Live events
 - Virtual connect

FINANCE

- Micro-loans
 - Digital exhaust based underwriting
- Remittances/ payments
 - Quick remittances & payments across geos
- Saving pools
 - Saving pools products like chit funds
- Essential insurance
 - Crop insurance, health insurance etc

OPPORTUNITY LANDSCAPE

IMPROVEMENT

- Micro-learning
 - English learning
 - Vocational skills
- Opinion & knowledge
 - Communities for Opinion sharing
- Social Buying
 - Driving bargain discounts
- Citizen Services
 - Broad citizen services

TECHNOLOGY

- Vernacular language -Voice
- Vernacular language Text NLP
- Vernacular Language translation services
- Low cost wearables & health tracking
- Localised image recognition
- Video and Voice driven apps

OTHERS

- Religion/Faith based engagement
- Second hand merchandise marketplaces
- E-consultation for health
- Newer models around used goods sales
- Low cost child care
- Low cost travel & tourism offerings

PROMINENT STARTUPS IN THE NEXT BILLION SPACE



Founded in 2015

ShareChat is a social networking and regional content platform for the fast growing Internet users in India.

Total funding – \$122.8MN



Founded in 2012

NowFloats enables small and medium businesses (SME) to get an online presence by using SMS.

Total Funding – \$13.7MN



Founded in 2013

Inshorts is a news app that sources content from national & international media and sends out stories in 60 word bites

Total Funding – \$29MN



Founded in 2006

Octro is one of the fastest growing gaming companies in India, with games like Teen Patti and Indian Rummy topping the charts on mobile & windows.

Total Funding – \$15MN



Founded in 2015

Vokal is peer-to-peer knowledge sharing platform. It enables voice based questions & answers in Indian languages.

Total Funding – \$6.5MN



Founded in 2015

Samosa is a regional content discovery app, which allows users to view and share audio clips and gif files

Total Funding – \$8.3MN



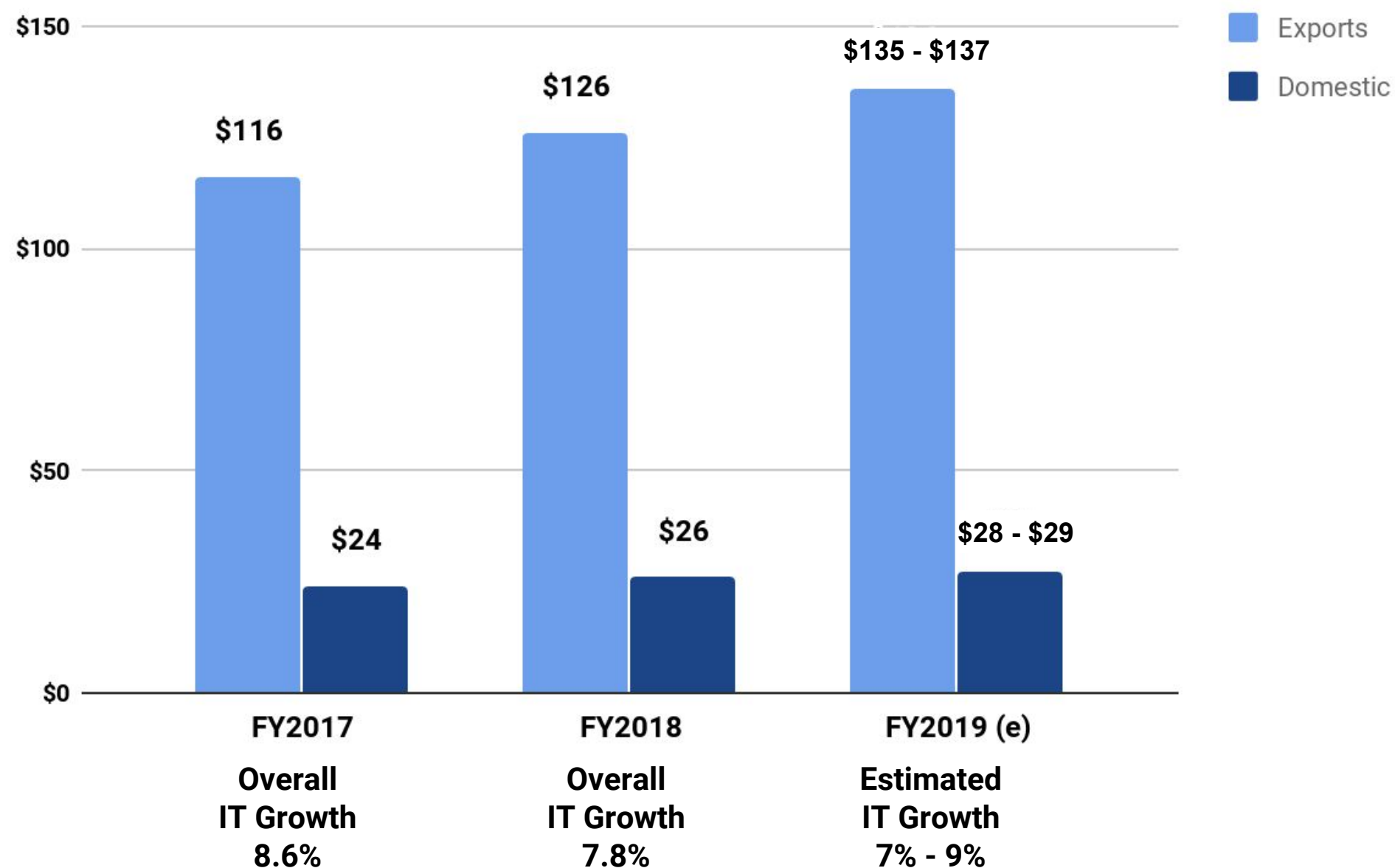
05

INDIA=
SOFTWARE CAPITAL
OF THE WORLD

A MORE SOBER GROWTH EXPECTATION FROM THE IT SERVICES INDUSTRY

Indian IT Services Exports and Domestic Revenues

(\$ in billions)



Growth in the Indian IT Services market has flattened out over the past few years.

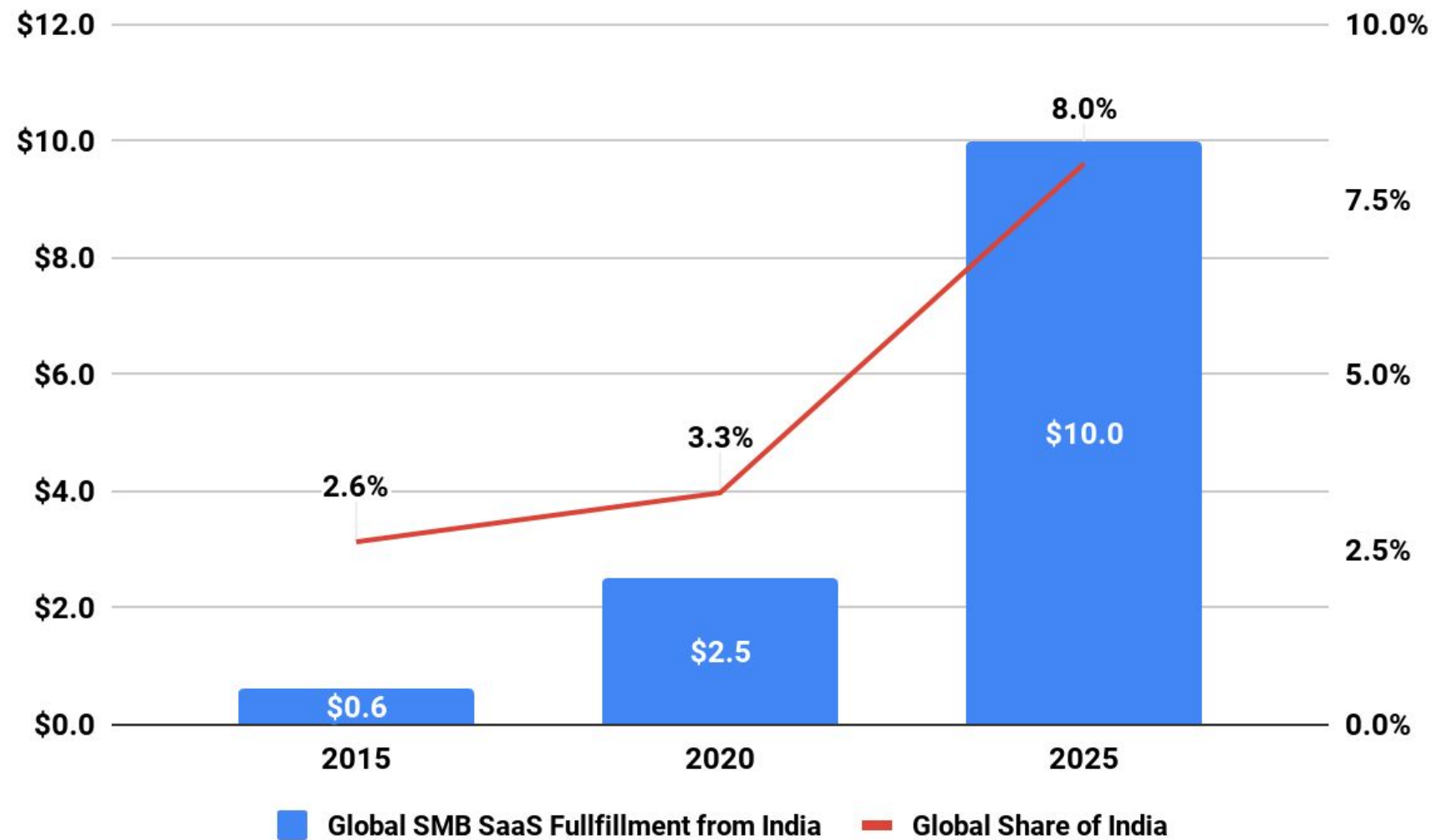
The IT services market which grew at 8.6% during FY 2017 grew only by 7.8% during FY18 and is expected to grow between 7% - 9% during FY 2019.

Single-digit growth forecasts may be the new normal for India's software sector.

Source: NASSCOM

A STEEP RAMP IN SAAS GROWTH

Indian SMB SaaS Industry Projections (\$ in billions)



Key Market Drivers Include:

1. Changing customer behaviour
2. Market accessibility and growth
3. Availability of talent
4. Cost advantages

Source: Google, Accel Partners

INDIA'S KEY SAAS STRENGTHS

STRENGTHS

01

IT SERVICES BEHEMOTHS

Strong Enterprise
GTM expertise
Symbiotic partnerships
High quality execution

02

LOWER COST BASE

Longer staying power
Faster feature development
Differentiated GTM

03

SCALE IN TALENT

Easy adaptability to new
technologies
Large trained talent pool

04

PIONEERS AS ROLE MODELS

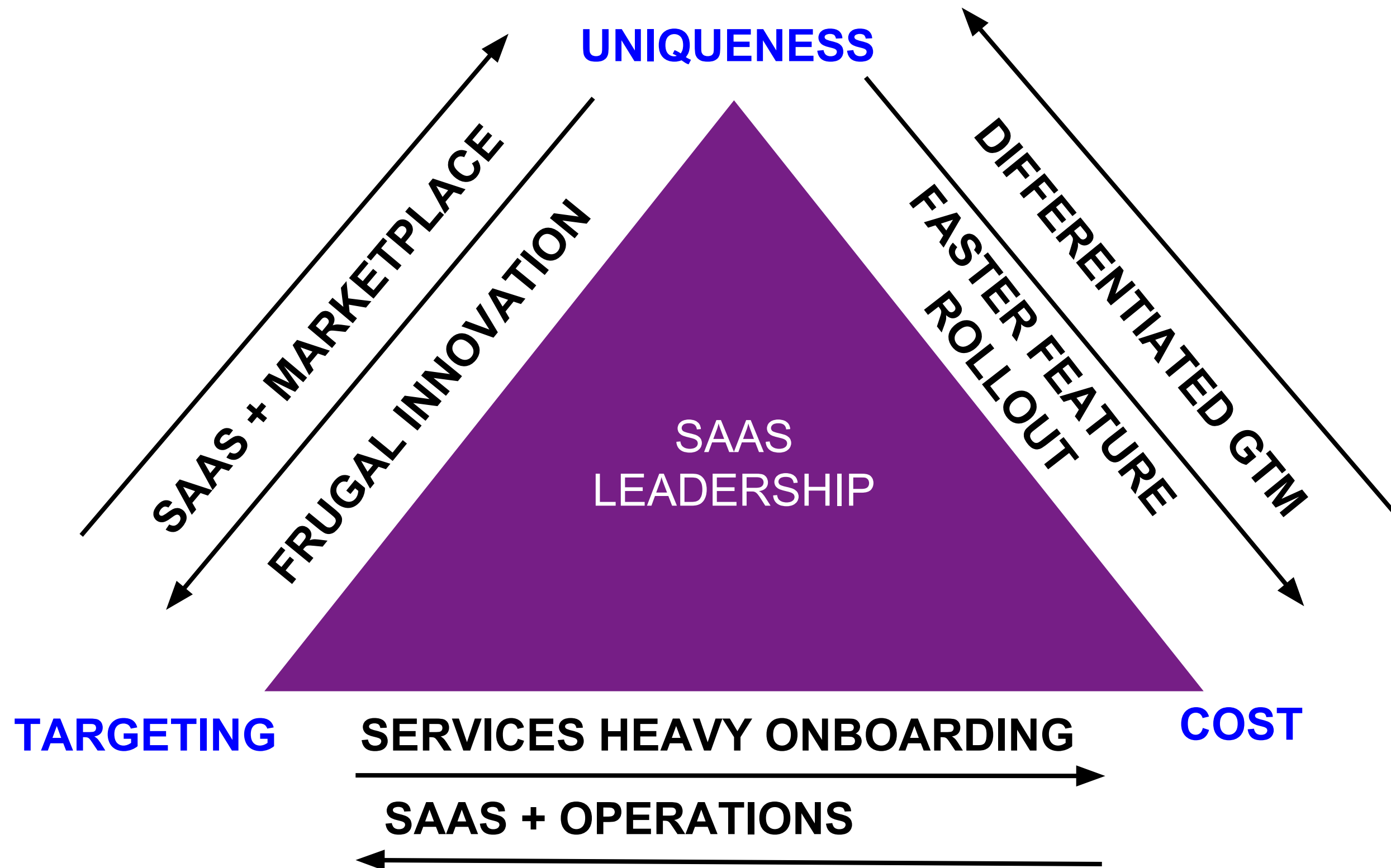
Lot of pioneers in SAAS
Companies that attained scale in
revenues & valuation

05

FRUGAL INNOVATION

Business model & pricing
for indian customers
Can enable global
leadership

THE 3 AXES OF INDIAN SAAS SUCCESS



INDIA CENTRIC SAAS BUSINESS MODELS

MARKETING DRIVEN

SMB focused freemium plan that is marketing driven

INSIDE SALES DRIVEN

Inside sales driven GTM that focuses on mid market & enterprise

LEGACY REPLACEMENT

Replacing certain legacy software requires expensive consulting.

Typically possible only with low-cost consulting

PRODUCT + OPERATIONS

Opportunity to deliver SAAS platform plus operations driven by lower cost

INDIA CENTRIC SAAS BUSINESS MODELS

INDIA FIRST, ASIA NEXT, US LAST

Model through which leadership is achieved in India, spread to surrounding ASIAN market & then North America.

SAAS + MARKETPLACE

Enter account through SAAS play, follow it up with marketplace services.

INNOVATION FIRST

High quality US based Indian origin leadership, returnees with product experience in the US, top percentile & eager talent, value creation on cutting edge technology in categories like Drone, Blockchain, AI, etc.

LEADING INDIAN SAAS COMPANIES



Founded in 1996

Offers a suite of business, collaboration and productivity applications, from CRM to email, office suite, invoicing, email marketing, etc.

Bootstrapped



Founded in 2003

Manthan offers a portfolio of business-ready products in advanced analytics and big data for consumer industries.

Total Funding - \$98.4MN



Founded in 2010

An online customer support software and helpdesk solution through chat, telephony, email, mobile apps, forums, websites and social media channels.

Total Funding - \$249MN



Founded in 2011

BrowserStack is the web and mobile app testing platform on the market used by more than 2 million developers across 135 countries.

Total Funding - \$50MN



Founded in 2008

Provides suite of products for customer engagement. With big data and analytics engine, it optimizes discounts, offers and increases the profitability.

Total Funding - \$102MN



Founded in 2010

Zenoti is an enterprise software for wellness & beauty businesses. Clients can manage operations with its all-in-one platform.

Total Funding - \$21MN

THE NASSCOM DEEP TECH CLUB MEMBERS



Founded in 2016

Olivewear builds a connected health ecosystem for pregnant women to deliver personalized maternal care and postnatal care leveraging IOT and AI.



Founded in 2016

OCEO is an IoT-enabled smart water purifier with sensors that are designed to gather data on water for its quality, level and flow on a real time basis.



Founded in 2006

S&I Engineering Solutions is a technology company with state-of-the-art computational fluid dynamics (CFD) products for engineering applications.



Founded in 2016

Intellect Labs is working on the quality grading of commodities, pest and disease detection in crops, and yield estimation using image recognition, IoT, AI and Big Data.



Founded in 2015

Streamingo, enhances video viewing experience using AI, through combination of speech recognition, image processing, NLP, ML, Neural networks and GPU computing.



Founded in 2016

Ziroh Labs is a cybersecurity system for untrusted, third-party cloud without compromising usability, privacy and business confidentiality.



06

THE ROAD AHEAD

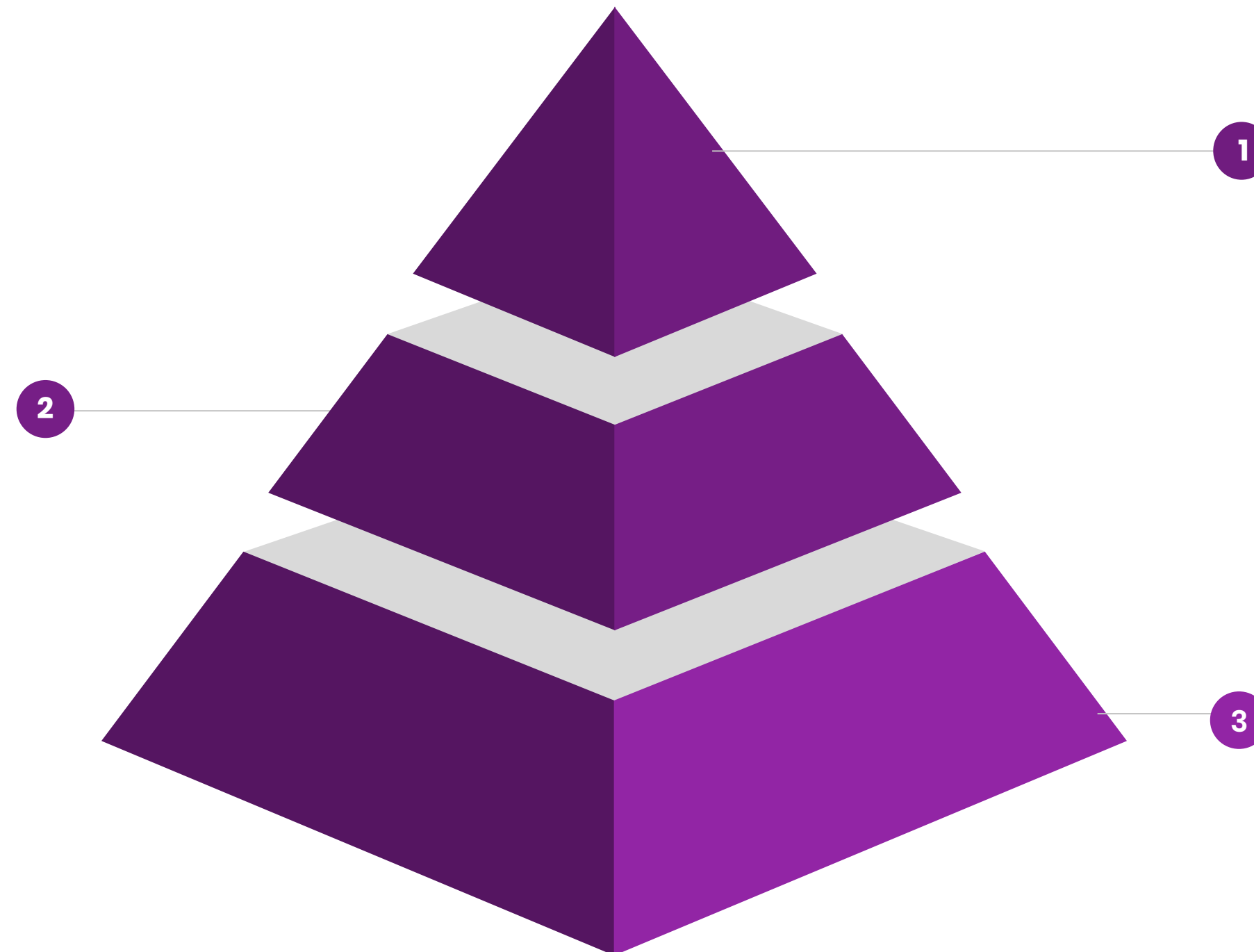
THE \$10 TRILLION NATIONAL ECONOMY, \$1 TRILLION DIGITAL ECONOMY – CONCEPT PYRAMID

DIGITAL NATIVE ENTERPRISES & EXPANSION

Build Digital native companies across most verticals, and expand into geographies outside of India.

This will be fast growth, with a layer of digital connectivity across all customers.

Companies like OLA and OYO are expanding into geographies outside of India right now.



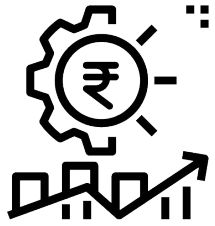
LEADERSHIP IN DEEP TECH

Create national policies and ensure leadership in emerging areas like Artificial Intelligence, Blockchain, Quantum computing etc that'll enable the rise of global deep tech leadership technology from India. Also ring fence these initiatives with strong data protection laws.

SOLVE FOR THE BASICS

Build the infrastructure foundations around transport, connectivity, education, etc. that are inevitable for growth as well as a stable economy and society.

THE \$10 TRILLION DOLLAR ECONOMY – KEY THEMES



BANKING

With more than 80% of the population still unbanked, providing financial inclusivity, credit & investment options offers plethora of opportunities for companies.

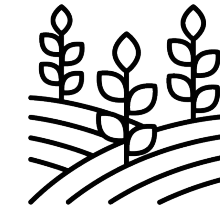
- CREDIT FOR INDIA'S NEXT BILLION: SMEs & MSMEs
- FINANCIAL SERVICES MARKETPLACES
- NEW FINANCIAL PRODUCTS LIKE P2P LENDING, AI DRIVEN WEALTH MANAGEMENT ETC
- FINANCIAL TRANSACTION PLATFORMS



INSURANCE

Leveraging government initiatives and consumers' preference for digital channels to buy, compare and understand Insurance, offers numerous opportunities.

- HEALTH & CROP INSURANCE MODELS FOR THE NEXT BILLION
- NEW PRODUCT CATEGORIES LIKE MICRO-INSURANCE
- FOCUSING ON DIGITAL FIRST SEGMENT LEADERSHIP VS BE ALL
- INSURANCE MARKETPLACES



AGRICULTURE

A space which employs more than 50% of the total workforce in India and contributes around 17% - 18% to the country's GDP has still lot of areas for exploration.

- NEW AGRICULTURE INVESTMENT TRUSTS
- PUREPLAY PRECISION AGRICULTURE TECH COMPANIES
- FINANCING & RISK MANAGEMENT COMPANIES
- DIRECT TO CUSTOMER MARKETPLACES
- SUPPLY CHAIN MODERNIZATION

THE \$ 10 TRILLION INDIAN ECONOMIC JOURNEY PRESENTS OPPORTUNITIES FOR TENS OF UNICORNS

THE \$10 TRILLION DOLLAR ECONOMY – KEY THEMES



RETAIL

Due to GST & cashless economy, even mom and pop shops have brought in POS systems, wallet payments, mobile apps, new delivery models etc opening world of opportunities for the sector projected to be \$1.2TN by 2020

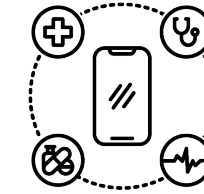
- NEW ECOMMERCE MODELS LIKE SOCIAL BUYING
- MARKETPLACES AROUND USED GOODS
- ECOMMERCE CATEGORY LEADERSHIP
- ROLLUP MODELS AROUND EXISTING CATEGORIES IN PHYSICAL RETAIL



ENTERTAINMENT

Since time immemorial, India's love for fun & play is ingrained, whether it is folk songs, cultural events or indigenous sports, now with newer mediums this will only grow to bigger proportions.

- INDIA'S MOBILE GAMING LEADER
- INDIA'S SHORT VIDEO LEADERS
- DIGITAL DRIVEN VERNACULAR CONTENT
- ENTERTAINMENT, THEME PARKS AND SPORTS ZONES RUN ON TECHNOLOGY



HEALTHCARE

With growing need for faster, better and budget friendly health services, there is no shortage of opportunities which covers one and all and is expected to reach \$372BN by 2022.

- PRIMARY CARE ENABLED THROUGH DIGITAL
- REMOTE HEALTHCARE MONITORING & CARE
- PREVENTIVE HEALTHCARE & WELLNESS PLATFORMS
- NEWER MODELS OF TERTIARY CARE
- DIGITAL PHARMA PLATFORMS

THE \$ 10 TRILLION INDIAN ECONOMIC JOURNEY PRESENTS OPPORTUNITIES FOR TENS OF UNICORNS

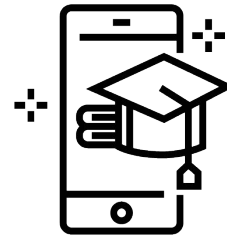
THE \$10 TRILLION DOLLAR ECONOMY – KEY THEMES



FOOD

With evolving consumer eating habits, mega food park schemes & 100% FDI permission, the processed food market is expected to grow to \$543BN by 2020.

- AGGREGATING ACROSS SUB-VERTICALS
- BUILDING BRANDS AROUND TRADITIONAL FOODS
- NEWER BUSINESS MODELS LIKE SUBSCRIPTION
- EVOLVE FOODS & SERVICES TO ACCOMMODATE GROWING HEALTH CONCERNS



EDUCATION

With world's largest population of kids aged under 18, education market is poised for complete new trajectory which can cater to huge demand of skilled resources

- CUSTOMER EXPERIENCE INNOVATIONS IN JOB MATCHING MARKETPLACES
- BRIDGE LEARNING PROGRAMS FOR RE-SKILLING
- LEARNING IN VERNACULAR LANGUAGES
- PLATFORMS FOR KNOWLEDGE SHARING, JOB TEST PREPARATIONS AND INTERNSHIPS



LOGISTICS

Retail sector demands, manufacturing initiatives, port & road projects and new modes of transport has open world of possibilities for the sector which recently got infrastructure status

- DIGITAL MARKETPLACES FOR MATCHING SUPPLY & DEMAND
- EV PRODUCTS – COMPONENTS & INFRASTRUCTURE
- DIGITAL PLAYERS AGGREGATING ACROSS SUPPLY CHAIN IN SPECIFIC INDUSTRIES

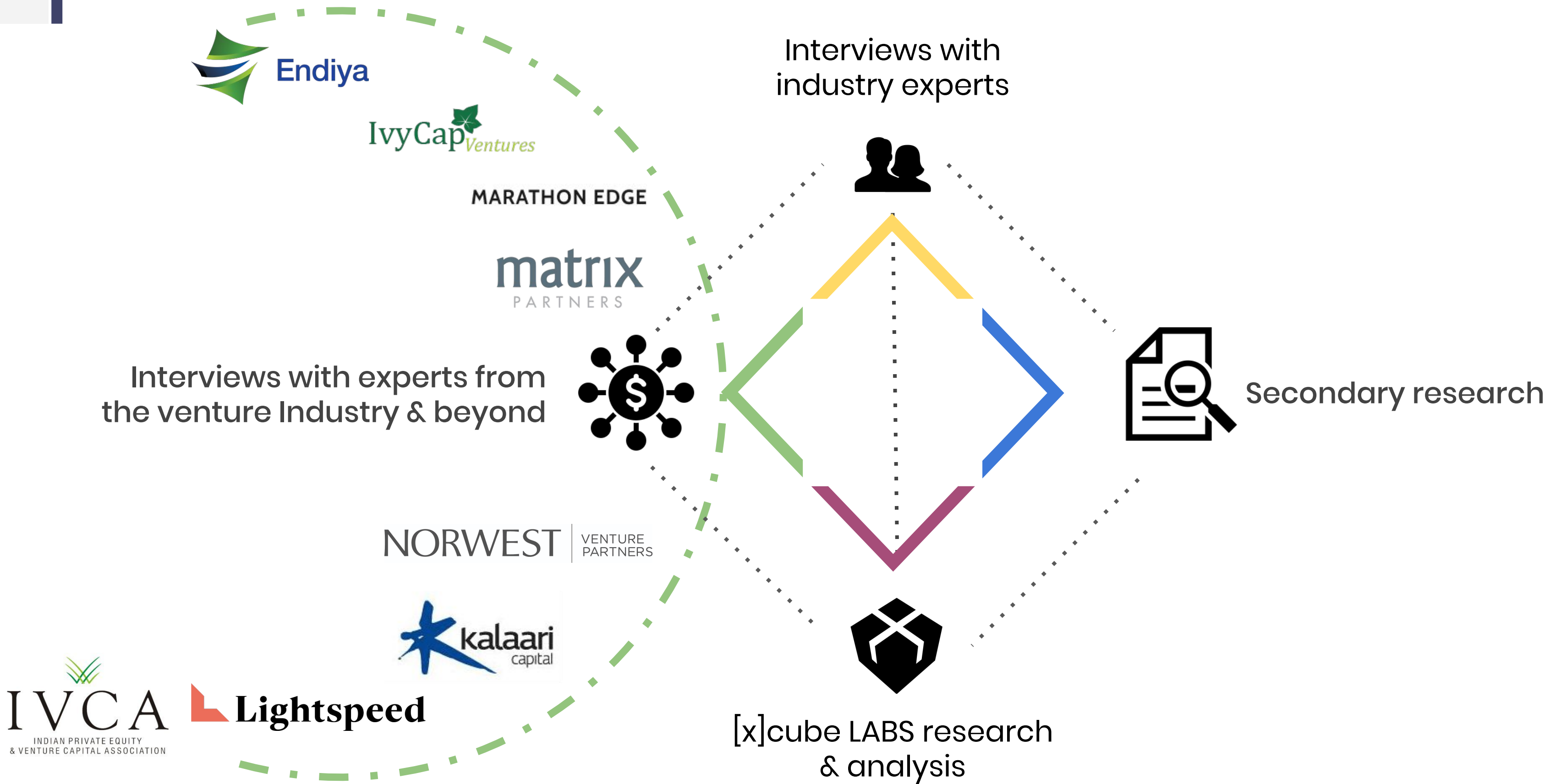
THE \$ 10 TRILLION INDIAN ECONOMIC JOURNEY PRESENTS OPPORTUNITIES FOR TENS OF UNICORNS



07

METHODOLOGY & ACKNOWLEDGEMENTS

METHODOLOGY



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About NASSCOM

NASSCOM, a not-for-profit industry association, is the apex body for the 154 billion dollar IT BPM industry in India, an industry that has made a phenomenal contribution to India's GDP, exports, employment, infrastructure and global visibility.

A not-for-profit organization funded by the industry, its objective is to build a growth led and sustainable technology and business services sector in the country. Established in 1988, NASSCOM's membership has grown over the years and currently stands at over 2,500. These companies represent 95% of industry revenues and have enabled the association to spearhead initiatives and programs to build the sector in the country and globally. NASSCOM members are active participants in the new global economy and are admired for their innovative business practices, social initiatives, and thrust on emerging opportunities.

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About [x]cube LABS

[x]cube LABS is a leading digital strategy and digital platform engineering company. With a team size of over 600 people spread across North America, Europe, India and Australia, [x]cube LABS works with a number of Fortune 500 companies helping transform them into digital native enterprises.

[x]cube LABS is one of the first dozen companies to be recognised as a Google certified developer agency. It is distinguished by a strong early focus on design, an innate ability to solve hard technology problems and proprietary methodologies and platforms built to accelerate digital transformation.



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08

SOURCES

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