PRODUCT OPPORTUNITIES DRIVING A USD 10 TRILLION ECONOMY

WHO ARE THE NEXT SET OF UNICORNS?
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.
• 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
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.
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.

EXECUTIVE SUMMARY

Bharat Lingam
Chief Executive Officer,
[x]cube LABS
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

<table>
<thead>
<tr>
<th><strong>Luxury Goods</strong></th>
<th><strong>Metallurgy</strong></th>
<th><strong>Science</strong></th>
<th><strong>Science</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muslin &amp; Calico</strong></td>
<td><strong>Wootz Steel</strong></td>
<td><strong>Mathematics</strong></td>
<td><strong>Astronomy</strong></td>
</tr>
<tr>
<td>During the 17th &amp; 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 &amp; was exported worldwide.</td>
<td>Wootz Steel is a high carbon steel alloy that originated in India. It was exported to Europe and the Arab world.</td>
<td>Numerous concepts by ancient Indian mathematicians like Zero, the decimal system, Integers, Trigonometry were transmitted to medieval Arabia, Europe, China.</td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Diamonds</strong></th>
<th><strong>Iron Smelting</strong></th>
<th><strong>Medicine</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>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.</td>
<td>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.’</td>
</tr>
</tbody>
</table>
## INDIA - ECONOMIC SNAPSHOT

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>$2.6TN</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>$1,940</td>
</tr>
<tr>
<td>GDP Growth Rate</td>
<td>7.4% (2018)</td>
</tr>
<tr>
<td>Population</td>
<td>1.3 billion</td>
</tr>
<tr>
<td>Urban Population</td>
<td>439 million</td>
</tr>
<tr>
<td>Rural Population</td>
<td>885 million</td>
</tr>
<tr>
<td>Consumption Expenditures</td>
<td>$1.4TN</td>
</tr>
<tr>
<td>Internet Users</td>
<td>500 million</td>
</tr>
<tr>
<td>Smartphone Users</td>
<td>337 million</td>
</tr>
</tbody>
</table>

**Strong Leadership in**

- IT Services
- Gem Production
- Pharmaceuticals
- Agriculture

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

Source: World Bank, BCG, Index Mundi, eMarketer, IMF
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 stated 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%
- **China (1978 – 2017)**: 11.96%

Source: World Bank
THE UNPRECEDENTED CHINESE GROWTH STORY

Decoding the Chinese Growth Miracle

- Special economic zones
- FDI / Capital Inflows
- Export led growth
- Rising per capita
  - Rapid urbanization
  - Infrastructure investments
- Economic diversification
- Increased skill levels
- Free markets
- Global expansion
- One Road One Belt

China GDP ($ in trillions)

Source: World Bank
THE RISE OF THE ASIAN TIGER – SOUTH KOREA GROWTH DRIVERS

South Korea GDP ($ in trillions)

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP (in trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>0.55</td>
</tr>
<tr>
<td>1970</td>
<td>0.00</td>
</tr>
<tr>
<td>1980</td>
<td>0.50</td>
</tr>
<tr>
<td>1990</td>
<td>1.00</td>
</tr>
<tr>
<td>2000</td>
<td>1.50</td>
</tr>
<tr>
<td>2010</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Decoding the South Korean Growth Machine

- Manufacturing revolution around import substitution
- Rising per capita income
- Increased skill base
- Exporting finished capital goods
- Brand development
- Economic diversification

Source: World Bank
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

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

Source: World Bank
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.
India is the fastest growing major internet market today with over 500 million users.

Source: IAMA & Kantar IMRB I - CUBE 207
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.

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

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

**INNOVATION**
- Innovation in products and services for India, low cost, high penetration

**NO FRICTION**
- Reduced friction => Increased transaction volumes

**SPECIALIZATION**
- Specialization of economic, and scaling of it will lead to strong comparative advantage among nations

**INFRASTRUCTURE**
- Infrastructure => Build infrastructure to improve standard of living

**SKILLS**
- Higher order skills will lead to greater productivity per capita and faster growth
INDIA’S ECONOMIC GROWTH FRAMEWORK: THE VIRTUOUS CYCLE OF INNOVATION, INVESTMENT, & CONSUMPTION

INSIS framework will propel the economy towards growth and development
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 a 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

**Easy Immediate Payments**
Real time posting, funds are not locked

**Validation & Assurance**
Real time account & balance validation

**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.

Unified payments interface is the APIsation 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
- Google Pay
- BHIM
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.

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

<table>
<thead>
<tr>
<th>Registration Under Old Indirect Tax Regime</th>
<th>Registrations Under GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4 million</td>
<td>11.2 million</td>
</tr>
</tbody>
</table>

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

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
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 ARPU for telecom in the world.

Global Innovation Index (GII) – India Ranking

<table>
<thead>
<tr>
<th>Year</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>76</td>
</tr>
<tr>
<td>2016</td>
<td>67</td>
</tr>
<tr>
<td>2018</td>
<td>54</td>
</tr>
</tbody>
</table>

Mission to be in top 10 of GII – 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.

SCALE

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.
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 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.

- **Presenceless**: Providing a nationally accepted, unique ID
- **Consent Driven**: Consent driven secure movement of database on user consent
- **Paperless**: Storing KYC documents and acceptability of digital signatures based on unique ID
- **Cashless**: Accessing bank accounts and mobile money using the unique ID and authenticating digitally

- **Aadhaar Card, Mobile Aadhaar**
- **Digitally share data with service providers for easier access to credit, etc**...
- **Aadhaar e-KYC, E-Sign, Digital Locker**
- **UPI, IMPS, AePS, APB**

New digital infrastructure will bring paradigm shift

- 80% Reduction in time taken in consumer onboarding
- 3 billion Invoices p.m. on GSTN build underwriting models for SMEs
- 10c Flat cost of a UPI transaction
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)**

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 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.

118.3 crore citizens’ accounts linked to the 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.

Source: DBT Bharat

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**DBT Funds Transferred and Beneficiaries, India**

<table>
<thead>
<tr>
<th>FY</th>
<th>DBT Funds Transferred (in crores)</th>
<th>DBT Beneficiaries (in crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2014</td>
<td>20.0</td>
<td>5.0</td>
</tr>
<tr>
<td>FY2015</td>
<td>30.0</td>
<td>10.0</td>
</tr>
<tr>
<td>FY2016</td>
<td>40.0</td>
<td>15.0</td>
</tr>
<tr>
<td>FY2017</td>
<td>50.0</td>
<td>20.0</td>
</tr>
<tr>
<td>FY2018</td>
<td>125.0</td>
<td>30.0</td>
</tr>
<tr>
<td>FY2019</td>
<td>100.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Source: DBT Bharat
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
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.
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.
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.
THE NEXT SET OF UNICORNS

AGRICULTURE
AGRICULTURE: SNAPSHOT

18% Contribution to GDP

58% Of the population depends on agriculture as the primary source of livelihood

16.5% agricultural exports CAGR growth FY2010 - FY2018

DRIVERS

Newer investment models
Global Health Consciousness
Crop Insurance etc
Precision Farming, Hydroponics
Increased availability of seeds, implements

Source: World Bank

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

Source: World Bank
Crop yields remain low in India compared to countries such as China, Brazil and USA. However, the situation is slowing 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
AGRICULTURE: PROMINENT STARTUPS

**Stellapps**
Founded in 2011
Stellapps is focused 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 – $14 MN

**AgroStar**
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 – $14 MN

**Ninjacart**
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 – $14.7 MN

**EM3**
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 – $13.3 MN

**Agrostar**
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 – $14 MN

**FarmTaaza**
Founded in 2015
FarmTaaza is a fresh produce supply management company. It is a wholly owned subsidiary of Gram Suchana Solutions Pvt Ltd. and is a B2B (Business to Business) entity.
Total funding – $8 MN

**Gramcover**
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 – $1 MN
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

DRIVERS

Govt initiatives (Ayushman Bharat)
Lowered cost of remote healthcare
FDI, Private Sector Investments
Population health platforms
Precision medicine & innovations

Health Expenditures as % of GDP (%)

Source: Assocham, RNCOS, World Bank
At $63.6, India has one of the lowest healthcare per capita expenditures globally.

Source: World Bank
# HEALTHCARE: CHALLENGES & OPPORTUNITIES

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Low public spending on healthcare</td>
<td>● Technology driven, low cost primary health centres</td>
</tr>
<tr>
<td>● Physician shortage in rural areas</td>
<td>● Leverage govt initiatives like Ayushman Bharat</td>
</tr>
<tr>
<td>● Low insurance penetration</td>
<td>● Medical devices at India costs &amp; remote health management</td>
</tr>
<tr>
<td>● High costs relative to per capita income</td>
<td>● Strong infrastructure for digital health records</td>
</tr>
<tr>
<td>● Poor adherence &amp; education levels</td>
<td>● Wellness &amp; Preventive healthcare initiatives</td>
</tr>
<tr>
<td>● Poor health infrastructure</td>
<td>● Predictive population health management</td>
</tr>
</tbody>
</table>
HEALTHCARE: PROMINENT STARTUPS

**practo**

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

**cure.fit**

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

**netmeds.com**

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

**1mg**

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

**Portea**

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

**Lybrate**

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

$1.96BN
Expected Indian e-learning market by 2021

$140BN
Expected annual R&D spending by 2030

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 facilities
- Continuous education & certification programs for teachers
THE NEXT SET OF UNICORNS

EDUCATION: PROMINENT STARTUPS

BYJU'S
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

Unacademy
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

Simplilearn
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

Toppr
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

Vedantu
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

CultureAlley
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
THE NEXT SET OF UNICORNS

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

**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

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

**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
- Massive tech opportunities around personalization, engagement, AI, block chain etc
- Opportunities around supply chain disintermediation
RETAIL: PROMINENT STARTUPS

Urban Ladder
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

Flipkart
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

Pepperfry
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

Nykaa.com
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

Limeroad
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

Udaan
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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$41.07</td>
</tr>
<tr>
<td>2017</td>
<td>$55.99</td>
</tr>
<tr>
<td>2018 (e)</td>
<td>$76.34</td>
</tr>
<tr>
<td>2019 (e)</td>
<td>$104.08</td>
</tr>
<tr>
<td>2020 (e)</td>
<td>$141.90</td>
</tr>
</tbody>
</table>

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

Source: Knoema
# FOOD: CHALLENGES & OPPORTUNITIES

<table>
<thead>
<tr>
<th>CHALLENGES</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>● High costs of real estate for restaurants</td>
<td>● Digital aggregation around sub-verticals</td>
</tr>
<tr>
<td>● Inability to build brands &amp; scalable operations</td>
<td>● Massive opportunity around building brands around traditional foods</td>
</tr>
<tr>
<td>● Inability to build scale globally</td>
<td>● Leverage technology like IoT in food operations</td>
</tr>
<tr>
<td>● Supply chain inefficiencies impacting cost</td>
<td>● Revamp customer experience using personalization &amp; engagement</td>
</tr>
<tr>
<td>● Still early stage food product innovation</td>
<td>● Newer business models like subscription for groceries</td>
</tr>
<tr>
<td>● Supply chain inefficiencies impacting cost</td>
<td>● Newer products around rising health consciousness</td>
</tr>
</tbody>
</table>
FOOD: PROMINENT STARTUPS

**Grofers**

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

**Swiggy**

Founded in 2014

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

Total funding - $465MN

**Chai Point**

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

**BIRA**

Founded in 2009

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

Total funding - $77.9MN

**Licious**

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

**Zomato**

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
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

---

**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
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
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
### 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% consumers
- 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
- Rapid transformation of customer experience across all channels
- 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

**Paytm**
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

**LendingKart**
Think Cash, Think Lendingkart Group!
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

**Capital Float**
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

**BankBazaar.com**
Founded in 2008
BankBazaar is a financial products marketplace that gives instant customized rate quotes on loans and insurance products.
Total Funding - $109MN

**Faircent**
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

**ZeroDha**
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

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
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 receiving insurance claims
- 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 possibility
- Drive profitability by going direct to customer
- Differentiation through customer centric operations
- 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
- Underwriting Technology to bolster growth in insurance
INSURANCE: PROMINENT STARTUPS

**PolicyBazaar**

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**

**Coverfox.com**

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 - **$415MN**

**Digit**

Founded in **2016**

Digit is an 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**

**Acko**

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**

**RenewBuy.com**

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**

**Toffee**

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

**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

**BookMyShow**
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

**ShareChat**
Founded in 2015
ShareChat is a social networking and regional content platform for the fast growing Internet users in India.
Total funding - $122.8MN

**Moonfrog**
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

**Hotstar**
Founded in 2015
Hotstar is 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

**Dream11**
Founded in 2012
Dream11 is India’s Biggest Sports Game with 30 million + users playing Fantasy Cricket, Football, Kabaddi and NBA.
Total funding - $100MN

**Culture Machine**
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
THE NEXT SET OF UNICORNS

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**

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Size ($ in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>160</td>
</tr>
<tr>
<td>2019-20 (e)</td>
<td>215</td>
</tr>
</tbody>
</table>

**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

**OLA**
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

**BLACKBUCK**
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

**Delivery**
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

**RIVIGO**
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

**shadowfax**
Founded in 2015
India’s leader in the online-to-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

**LEAP**
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
OPPORTUNITIES FOR
THE NEXT BILLION

THE NEXT SET OF UNICORNS
### India - Per Capita Income Breakdown

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

- 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
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”
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

**INFRASTRUCTURE**

- Social Apps
- Voice Interface
- Vernacular
DIGITAL PRODUCT OPPORTUNITY SCAPE 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
ShareChat, founded in 2015, is a social networking and regional content platform for the fast-growing Internet users in India. Total funding: $122.8 MN.

Inshorts, founded in 2013, is a news app that sources content from national & international media and sends out stories in 60 word bites. Total Funding: $29 MN.

NowFloats, founded in 2012, enables small and medium businesses (SME) to get an online presence by using SMS. Total Funding: $13.7 MN.

Octro, founded in 2006, 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: $15 MN.

Vokal, founded in 2015, is a peer-to-peer knowledge sharing platform. It enables voice based questions & answers in Indian languages. Total Funding: $6.5 MN.

Samosa is a regional content discovery app, which allows users to view and share audio clips and gif files. Total Funding: $8.3 MN.
INDIA = SOFTWARE CAPITAL OF THE WORLD
A MORE SOBER GROWTH EXPECTATION FROM THE IT SERVICES INDUSTRY

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
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

- Uniqueness
  - Frugal Innovation
  - SaaS + Marketplace
  - Differentiated GTM
- Targeting
  - Services Heavy Onboarding
  - Cost
- SaaS Leadership
  - Faster Feature Rollout
  - SaaS + Operations
### India Centric SaaS Business Models

<table>
<thead>
<tr>
<th>MARKETING DRIVEN</th>
<th>INSIDE SALES DRIVEN</th>
<th>LEGACY REPLACEMENT</th>
<th>PRODUCT + OPERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMB focused freemium plan that is marketing driven</td>
<td>Inside sales driven GTM that focuses on mid market &amp; enterprise</td>
<td>Replacing certain legacy software requires expensive consulting. Typically possible only with low-cost consulting</td>
<td>Opportunity to deliver SaaS platform plus operations driven by lower cost</td>
</tr>
</tbody>
</table>
# 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

**Zoho**
- Founded in 1996
- Offers a suite of business, collaboration and productivity applications, from CRM to email, office suite, invoicing, email marketing, etc.
- Bootstrapped

**Freshworks**
- 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

**Capillary**
- 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

**Manthan**
- Founded in 2003
- Manthan offers a portfolio of business-ready products in advanced analytics and big data for consumer industries.
- Total Funding - $98.4MN

**BrowserStack**
- 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

**Zenoti**
- 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
<table>
<thead>
<tr>
<th>Company</th>
<th>Founded</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Olivewear</td>
<td>2016</td>
<td>Builds a connected health ecosystem for pregnant women to deliver personalized maternal care and postnatal care leveraging IOT and AI.</td>
</tr>
<tr>
<td>OCEO</td>
<td>2016</td>
<td>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.</td>
</tr>
<tr>
<td>S&amp;I Engineering</td>
<td>2006</td>
<td>S&amp;I Engineering Solutions is a technology company with state-of-the-art computational fluid dynamics (CFD) products for engineering applications.</td>
</tr>
<tr>
<td>Streamingo</td>
<td>2015</td>
<td>Streamingo enhances video viewing experience using AI, through combination of speech recognition, image processing, NLP, ML, Neural networks and GPU computing.</td>
</tr>
<tr>
<td>Ziroh Labs</td>
<td>2016</td>
<td>Ziroh Labs is a cybersecurity system for untrusted, third-party cloud without compromising usability, privacy and business confidentiality.</td>
</tr>
</tbody>
</table>
THE ROAD AHEAD
THE NEXT SET OF UNICORNS

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.

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

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 INSURANCE MODELS FOR THE NEXT BILLION
- NEW PRODUCT CATEGORIES LIKE MICRO-INSURANCE
- CUSTOMER CENTRIC ENGAGEMENT & OPERATIONS LEVERAGING DATA, AI, IoT

**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.

➔ DIGITAL AGGREGATION AROUND SUB VERTICALS
➔ BUILDING BRANDS AROUND TRADITIONAL FOODS
➔ NEWER BUSINESS MODELS LIKE SUBSCRIPTION
➔ NEWER CATEGORIES LIKE HEALTH

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
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METHODOLOGY & ACKNOWLEDGEMENTS
METHODOLOGY

Interviews with experts from the venture Industry & beyond

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IvyCap

MARATHON EDGE

matrix

NORWEST

[k]cube LABS research & analysis

Secondary research

[k]cube LABS research & analysis

IVCA

Lightspeed

[Capital]
THE NEXT SET OF UNICORNS

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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.
[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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