

# India's Growth Transformation - Moving Ahead and Moving Up

ISB - Centre for Business Innovation

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These are interesting times for the Indian economy and the tea leaves are pointing to a new playing field. On one side, new-age startups are making bigger and bolder bets. Take Ola Electric - it is targeting 15% of the entire global capacity for EV 2-wheeler manufacturing, it is also setting up a \$500M battery research center and aims to be a vertically integrated EV player. Its battery factory will be 20 GwH in capacity (to compare, Tesla's new Gigafactory in California will have a capacity 40 GwH).

Another high growth startup, Boat is disrupting the consumer electronics market in India, long dominated by international brands. It started as a D2C brand, growing revenues multi-fold in just 4 years. As it has grown it has also integrated backwards, manufacturing more of its products in India and investing in its own R&D.

On the other side, the top conglomerates in India are entering new businesses, investing in higher value areas and driving innovation (both organically and by acquiring startups). The top 3 conglomerates in India together are looking to invest close \$200 billion over the next 5 years in the country! These investments include specialized areas like semiconductor manufacturing, developing, and deploying homegrown 5G technology, participating in defense opportunities, targeting the global green hydrogen market, etc.

This transformation will widen with SMEs, powered by the digital infrastructure and enabling frameworks, also looking to grow and become competitive. For example, SMEs will be able to leverage Indiastack and platforms like ONDC, which challenges the e-commerce models of the Amazons and Flipkarts of the world.

## Enabling ecosystem, scale and value-capture approach is transforming the India opportunity

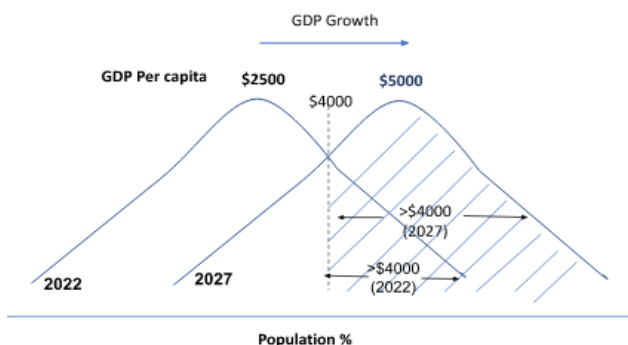
There are many moving pieces and the emerging big picture is about India entering a transformative growth, enabled by scale and value addition. This potentially multi-decadal growth phase will not just mean tremendous value creation and value capture opportunities but will also transform the Indian businesses. The key underlying trends that will drive this transformation are:

- Declining marginal cost of transactions and increasing speed

Digital and physical infrastructure, market enablement frameworks and regulations result in reducing transaction costs in the economy and increase the speed. This is what is at the core of the current transformation in India.

- Growing base of consumers with disposable income:

A consumption inflection point occurs when GDP per capita reaches \$3000-\$4000. As the GDP grows, even before it crosses the per capita inflection point, the proportion of people whose incomes are higher keeps increasing. Given India's population base this translates into a large number and as the GDP grows, this number will keep increasing.



- Simultaneous growth

Both infrastructure and consumption growth are forming a virtuous cycle.

India’s growth transformation:

We analyzed how the various transformational aspects are coming together:

- physical, digital and market infra
- purchasing power and aggregated opportunity of a billion plus people market
- scale thinking and execution
- and how companies and entrepreneurs capturing more of the value (value creation and value capture)

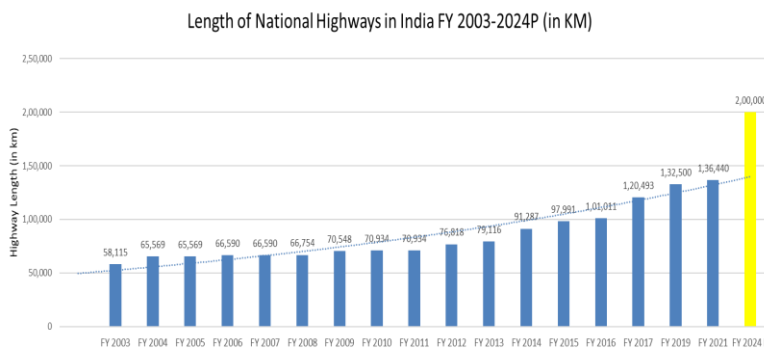
We cover these in detail below and they all point to businesses in India growing and moving up.

Some of the key infrastructure pillars are reaching critical scale

While infrastructure in advanced countries on a per capita basis is probably much higher, in absolute numbers, India has one of the largest physical infrastructure bases globally, at par with the top 2-3 economies of the world. They will enable higher growth and at the same time, they also showcase ‘scale thinking’ in India.

**Roads**

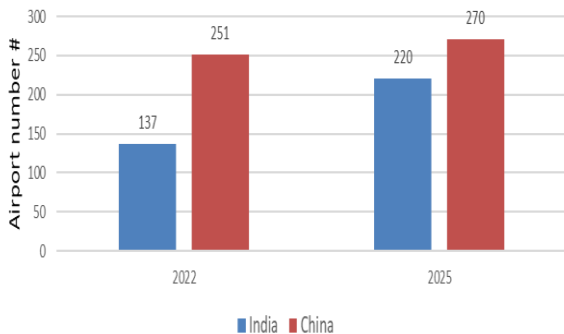
The national highway network is on track to reach 200,000 kms by FY24, doubling in 8 years from FY16 and approaching the size of highway network in China in the next 2 years.



Source: Ministry of Road Transport and Highways (India); Reserve Bank of India

**Airports**

India is the world’s 3rd largest and one of the fastest growing domestic aviation markets. It has been investing in its airport infrastructure, increasing public airports from 66 airports in FY14 to the current number of 137 and to 220 airports by FY25. Airport terminal capacity to handle an additional 120-125 million passengers a year is coming up in the top half a dozen cities starting next fiscal year - this will increase the current capacity by more than 50%.



Source: Airports Authority of India (AAI) & Civil Aviation Administration of China

## Railways

Indian Railways has grown both in terms of the infrastructure as well as leveraging the purchasing power of railways to drive innovation and scale.

The upgrades include 100% electrification of railways by 2023 and by 2030, upgrading existing lines, developing a large high-speed train network interconnecting major cities and developing various freight corridors. The Dedicated Freight Corridors (DFC) project, spanning a total length of 3400 route km, is one of the largest rail infrastructure projects undertaken by the Government of India.

## Unified national market with increased efficiencies

A nationwide GST, which subsumed many local levies and cesses, was rolled out in 2017. GST has been a key enabler in creating a seamless nationwide market of a billion plus people.

While it will continue to evolve for the better, 2 recent surveys give an interesting picture of its impact (which is contrary to skeptical views that tend to make headlines about GST). Majority of the businesses said that it has a) increased the ease of doing business and b) helped reduced costs and price by removing inefficiencies and optimizing supply chains

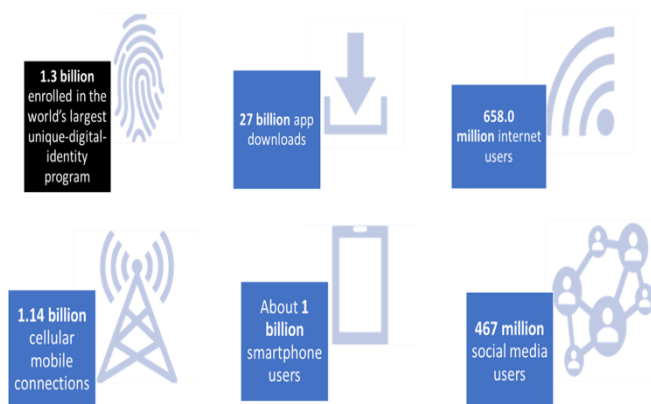
*"Ninety percent Indian CXOs across key sectors have backed this dynamic and technologically driven indirect tax regime. Industry leaders are of the view that 'one nation, one tax' reform has certainly brought down barriers across the country and made doing business easy and effective for both businesses and taxpayers, the survey said."*<sup>1</sup>

Physical infrastructure like roads, railways, airports, warehousing, etc. combined with a national market will have a beneficial impact on overall growth. One of the multiplier effects will be a reduction in logistics costs and increase in efficiency. Logistics costs currently constitute 14%-15% of the GDP in India. This is nearly double of that in the advanced economies. For instance, logistics costs in China are only about 9% of GDP and in the U.S. and Europe only about 8%. This infrastructure push will help reduce logistics costs in India and will make the economy more competitive.

## Digital fabric: tools, technology and enablers coming together

Digital infrastructure plays a critical role in today's world. It's the ubiquitous digital revolution in India - on the back of infrastructure, enablers and applications - that has even more potential to drive growth.

According to the Economic Survey of India 2021-22, India's internet user base crossed the 830 million mark in 2021, growing by over 530 million since 2015. There are close to a billion smartphone users in India. One survey, Annual Status of Education Report (ASER), found that the availability of smartphones in rural India was 36.5% in 2018, which increased to 61.8% in 2020 and 67.6 % in 2021.

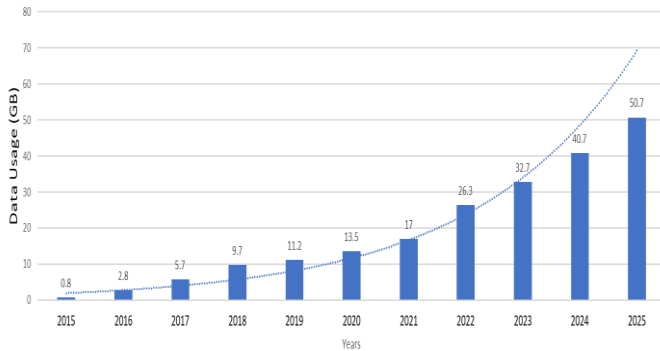


India No.1 globally India No.2 globally behind China

Source: TRAI, GSMA Intelligence; Kepios, UIDAI

<sup>1</sup> Source: Deloitte GST@5 Survey 2022 <https://www2.deloitte.com/in/en/pages/tax/articles/GST-Fifth-anniversary.html>

India's Bharatnet program has laid almost 600,000 kms of optical fiber cable to take fiber-based internet to 260,000 villages, making it the largest rural broadband connectivity program in the world.



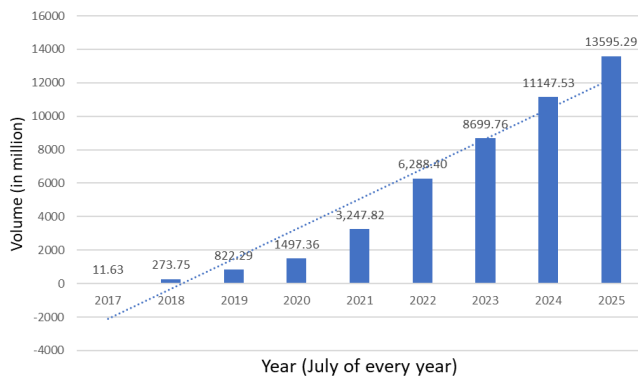
Data usage in India has grown at a CAGR of 53% in the last 6 years and is expected to continue to grow at 31% CAGR, crossing 50 Gb per user by 2025.

Source: Primary; Nokia Survey 2015-2021

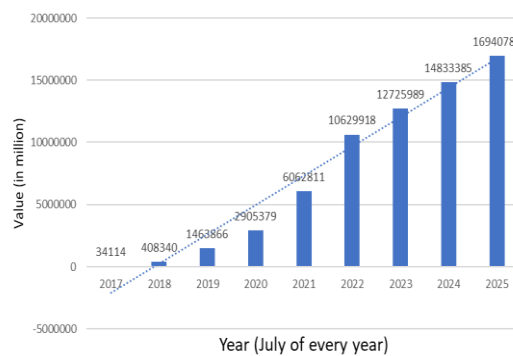
### The JAM trinity and Indiastack

It's not just about the number of smartphone and internet users. The coming together of banking (Jandhan accounts), individual ID (Aadhaar) and mobile phone and all the associated standards, frameworks and interoperability - that has been the game changer. Today India leads the world in real-time digital payment transactions with UPI becoming the world's largest payment system by volume. UPI processed 6.6 billion real time payment transactions in the month of August 2022, recording a 10% month-on-month growth.

UPI Transactions in Volume (in mn)

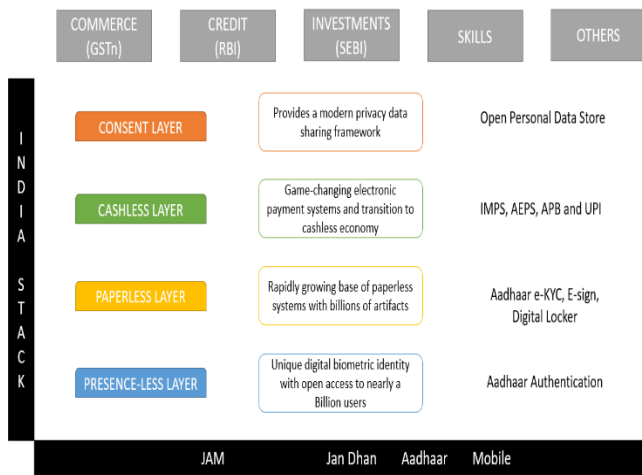


UPI Transactions in Value (in mn)



Source: NPCI

UPI is only one of the pieces though - it forms one of the layers of a broader framework called "IndiaStack". Overall Indiastack brings together a very robust framework, the core premise of which is to enable all transactions and interactions in the digital layer.



IndiaStack is designed to power many use cases

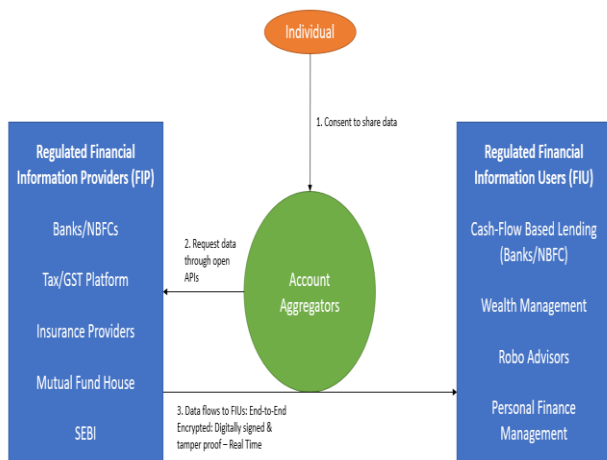


Source: Indiastack and iSPIRT

The potential of Indiastack is wide-ranging and its impact will depend on the innovation capabilities of all companies and startups that leverage it. Take the example of one of the enabling services that runs on IndiaStack - Account Aggregators.

**Account aggregator**

The Reserve Bank of India (RBI) launched the Account Aggregator system to bring all financial data and related information in one place. This framework allows the user to share real-time information to all the regulated entities registered in this system. Just like the UPI, it will broaden the access to financial services – both credit and investment related – to 1.3 billion people.



Account aggregator framework makes it possible for all financial services providers – banks, tax authorities, insurers and others – to aggregate data of customers depending on their consent. The data is then stored with the account aggregator, allowing access to balance information, transaction records, etc. Besides the financial information, additional information about the borrower like property valuations, debt liabilities and cash inflows and outflows can also be brought together. The customer can avail both lending and other financial services including money management services.

Source: Press Information Bureau

**Account Aggregators framework and its potential in financial services (Credit and lending):**

Through account aggregator’s data, a financial services provider can determine a borrower's creditworthiness using a variety of data points about the assets they own and transactions they conduct, which would then form the basis for extending credit. Fintechs that offer aggregation services, such as FiMoney, Jupiter and FamPay, allow borrowers to obtain credit quickly without putting up any collateral.

While many countries have a well-defined credit scoring system, the account aggregator approach is much wider in the number of data points it collects, and some of it in real-time. Any financial services provider will be able to analyze that data in much more granular detail and expand its reach as well as introduce innovative products.

Today most of the large Banks are participating and there are more than 1 billion accounts (individuals and businesses) connected with the AA framework<sup>2</sup>. This number has the potential to reach 2 billion by the end of 2023 as all banks and financial service providers join this framework. This will form an “account-data-lake” that will enable quick and seamless financial transactions as well as deliver new insights to the financial service providers.

*Account aggregators as facilitators of credit: a quick analysis on how this can transform the lending market in India:*

There are over 60 million micro, small and medium-sized businesses (MSMEs) in India. These make up about 40% of India's exports and 30% of its GDP. However, only 20% of these small businesses have access to credit<sup>3</sup>. Some studies call this the “missing middle” in lending as microfinance (MFI) lenders have been able to penetrate the smaller retail loans usually < INR 100,000 and the banks/NBPCs have been able to tap the organized sector but the MSME segment has been underserved. AA framework can facilitate a large number of loans to this sector through analytics, access to GST data, transactions data and bank statements.

*Account Aggregators (and OCEN) can potentially add \$200 bn to MSME credit market in India*

Open Credit Enablement Network (OCEN) is a framework of APIs for interaction between lenders, loan service providers and account aggregators. Account Aggregator frameworks, bundled with OCEN APIs for lending, can transform the MSME lending market in India. We did a quick estimate of the market potential:

50 Mn (80%) do not have access to credit. Various studies (by Equifax India/Access, CRIF-Highmark) put the average loan ticket size for a microenterprise at around INR 300,000 - 400,000 (\$4000-5000). According to ECLGS also (during Covid), 1.19 crore MSMEs received loans of 3.48 lakh crores (average ticket size of INR 290,000).

*50 Mn micro-SMEs - average loan INR 3 lakhs (\$4000) = \$200 bn in new market / additional opportunity*

The total lending market in India was around \$2 Tn in March 22. Various estimates put loans to MSMEs as a \$200 bn - \$400 bn market. By catering to this underserved segment and adding another \$200 bn account aggregators have the potential to double the loan market for MSMEs!

This is one example of the large-scale opportunities that Indiastack and digital transformation of India will throw up. The applicability of India stack goes beyond just financial services. Healthcare, education and many other sectors can get digitalized.

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<sup>2</sup> Source: Sahamati

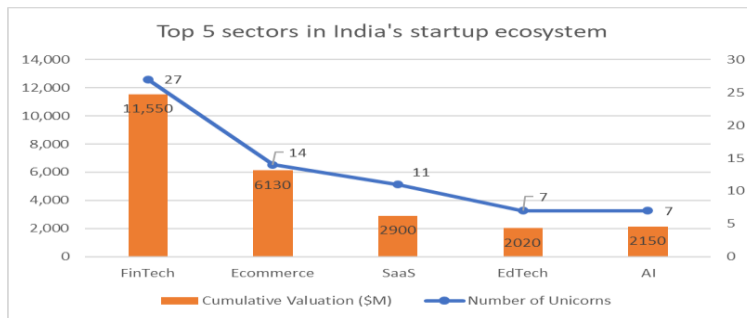
<sup>3</sup> Source: Association of Chartered Certified Accountants report).

### UPI, Indiastack and Business Models: To charge or not to

Indiastack, and UPI, is a hugely disruptive technology platform. Many countries have shown interest. UPI on its own does not have a business model - it's free but needs several hundred million dollars in running expenses. While there maybe merits for India to see it as a public good but long-term investments and innovations around Indiastack are needed. Some of the startup service providers are thinking of an overall "subscription" or convenience fee. Another – potentially bigger – approach is to allow Indian companies to license the platform/tech stack and let them take UPI and Indiastack to other international markets. Acceptance of the concept can be driven at the government-to-government level and the implementation, ownership and management can be done by local and Indian companies (for example, India's IT companies can play a role). Indian startups can be allowed to enter the markets in other countries and they can pay a licensing fee which can be reinvested in Indiastack.

### This digital infra impact is already playing out

Fintech startups are amongst the key beneficiaries. 27 out of the 100 Indian unicorns are fintech plays and Indiastack is a key enabler for many of them! With 2500+ fintech operating currently, Fintech is projected to be a \$1 Tn+ opportunity in India by 2025<sup>4</sup>.



Source: Hurun India Future Unicorn Index 2022; ajuniorvc.com

### Digital Platforms & Ecosystem approach

Indiastack framework can enable businesses across domains - fintech is one, but other verticals like healthcare and education are also being transformed. Diksha platform is transforming public school education in India. National Health Authority's Ayushman Bharat Digital Mission will digitally transform and unify health system for all citizens and turn it into a seamless experience across all healthcare providers. Multiple industries will get disrupted with new businesses riding on Indiastack digitalization capabilities.

### Increasing Capital Availability

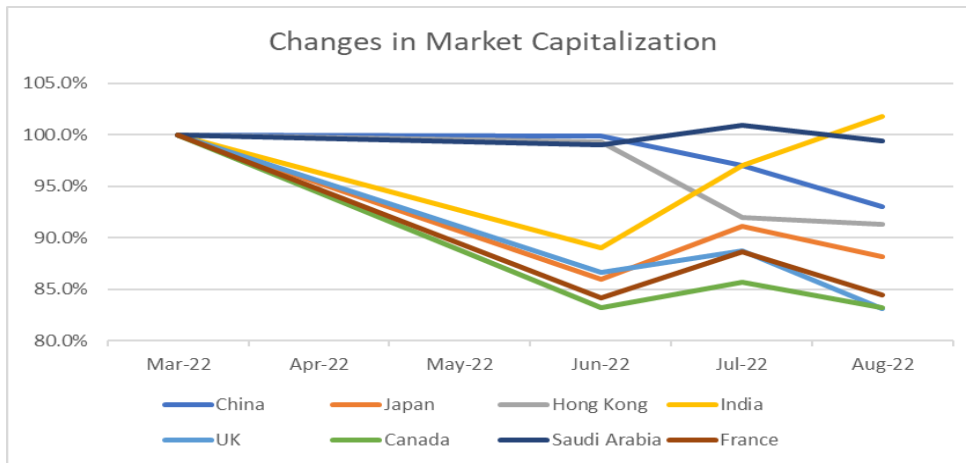
The growth in public markets, increased private investments (PE/VC) and growth in credit augur well for increased capital availability for businesses in India.

#### a. *Public and Private financial markets as a leading indicator of India's growth potential*

India is one of the top 5 markets globally in terms of market capitalization and is ahead of countries like UK, Germany and Japan. It's also a market that has weathered the global uncertainties better than several other top markets. Using March 2022 market capitalization as the base (the month when global markets were generally at a peak), we mapped market capitalization for 8 countries from June through August 2022. India's market cap declined relatively

<sup>4</sup> Source: Inc42

less till June 22 vs other markets and then increased again in July & August becoming higher than that in March 2022, thus breaking out from all the other countries where market-cap is still lower than what it was in March 2022.



Data Source: Bloomberg

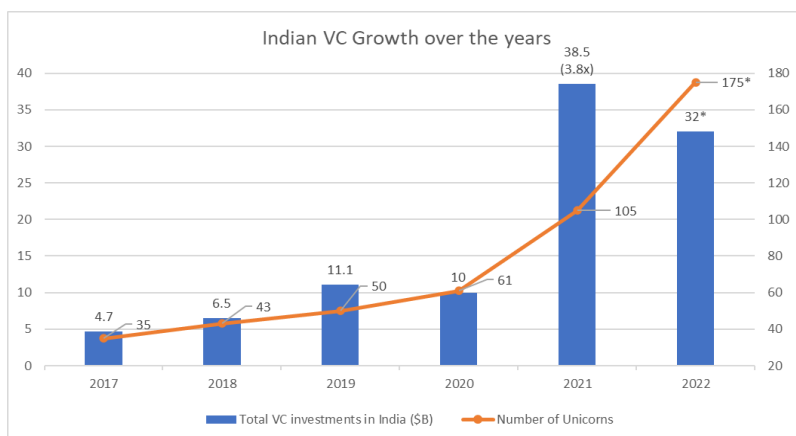
India’s market cap held steady despite large selling by foreign portfolio (stock) investors (FPIs). According to data from SEBI and NSDL, FPIs were net sellers to the tune of \$18 billion by the end of FY22. The most significant FPI outflow occurred in March-22 and was caused by ongoing global uncertainties. The FPI

ownership of India stock index was at its lowest point in the last three years. While FPIs turned buyers again in August, their new investments are still lower than what they sold earlier this year.

The floor was provided by Domestic Institutional Investors (DIIs) who emerged as net buyers, investing close to \$30 bn in the same period. Increasing domestic investment pool and investor base has helped give strength to the market. For example, the number of domestic MF investors has seen a huge increase and is expected to see another three-fold growth, touching 130 million investor accounts by 2025.

**b. VC & PE investment trends**

Since the 2010s, India has been one of the top 3 startups nations in the world. Now in the last few years India has also emerged as the world’s 3<sup>rd</sup> largest VC market - behind US and China - with close to \$40bn invested in 2021. India’s share of global VC funding almost doubled from less than 3% to 5.6% in 2021.

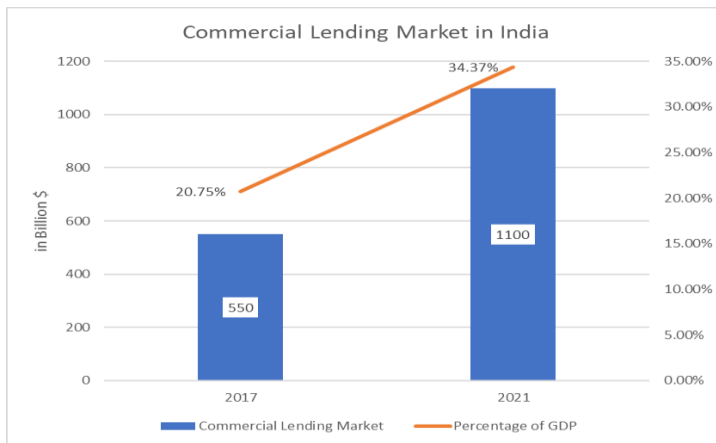


This investing momentum is driven partly by the same set of enablers that will drive the Indian economy. It is also driven by the quality of startups and entrepreneurs, proven models of “build in India, sell globally” when it comes to tech and improving scenario for exits both through public and secondary routes. India currently has 105 unicorns with a total valuation of \$300+ billion. The startup action spans B2C, B2B and deep tech sectors like space, web 3.0.

Source: Various market reports and ISB CBI est. for 2022

**c. Credit markets are also scaling up and adding to the availability of capital**





Commercial credit market in India is showing strong growth, doubling over the last 4 years to cross \$1 Trillion. At ~33% of the GDP in India, the lending market is reaching a relative scale similar to the US, where commercial credit at \$8.8 Trillion amounts to 38% of the GDP.

Source: Bloomberg, CRIF

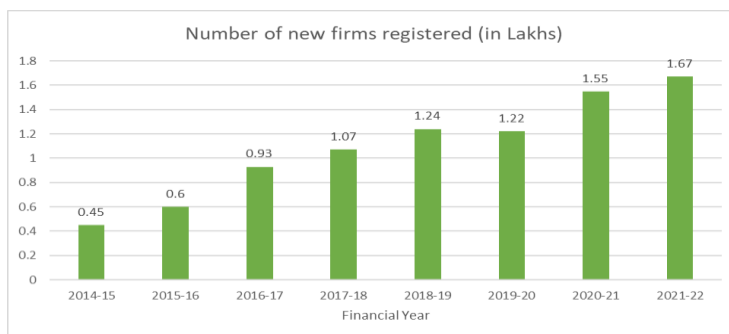
### India’s domestic market scale will become a key factor

India’s large population numbers have been equated with potential market size/demand in the past but due to low per capita income with little disposable income, till now it never really delivered the kind of demand that companies estimated. That is set to change as the GDP grows and per capita income rises.

Around \$3,000-\$4,000 GDP per capita is usually seen as an inflection point for any economy. For example, China which saw this growth in the previous decade hit \$2000+ in per capita income in mid-2000s. GDP per capita in India is ~\$2500 and is growing at a rate of 5-6% a year. It will reach the inflection point in the next 3-4 years, crossing \$3300. This rising per capita income will start translating the billion plus population numbers into equivalent markets.

### A key outcome of this new playing field: increasing company formation and formalization

With infrastructure growth, digital transformation and capital growth, conditions are ripe for increasing business momentum. There has been a strong growth in the number of companies being formed in India annually and at 167,000 in FY22, it more than tripled since FY15. This is potentially an important indicator of increasing business activity.



Source: MCA

### Indian companies and entrepreneurs are planning and executing for scale

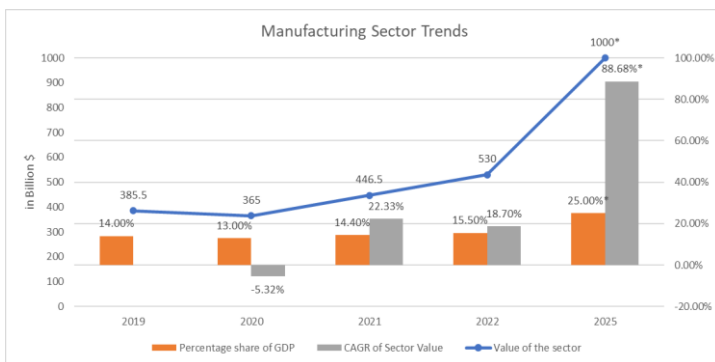
All these changes in physical and digital infrastructure and the enabling financial and market frameworks are driving scale thinking across more sectors in India. Manufacturing is one such, somewhat under-reported, example. Startups sector is another example - more startups are scaling and doing so in shorter timeframes.

**Increasing scale in manufacturing in India:**

Manufacturing is an increasingly strong play - India is now the sixth-largest manufacturing economy in the world and from accounting for a small portion of our GDP for many decades ago, it has grown close to 17% of the GDP. There are a few areas where India has started touching global scale. For example, India is now the world’s second largest mobile handset manufacturer.

As India strengthens its manufacturing base, driven by favorable policies and geopolitical changes, the sector has the potential to reach US\$ 1 trillion by 2025 as per IBEF.

*Bain Report July 2022:<sup>5</sup> Chemicals, pharmaceuticals, electronics, automotive, industrial machinery, and textiles (among others) are expected to propel manufacturing exports to reach \$1 trillion by FY28. The positive developments in the manufacturing sector, driven by production capacity expansion, government policy support, heightened M&A activity, and PE/VC-led investment, are creating a robust pipeline for the country’s sustained economic growth in the years to come.*



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As we have mentioned in the beginning, sometimes India’s scale numbers are lost in the per-capita comparison. For example, in Vietnam, which has seen tremendous success as a manufacturing destination, it accounted for

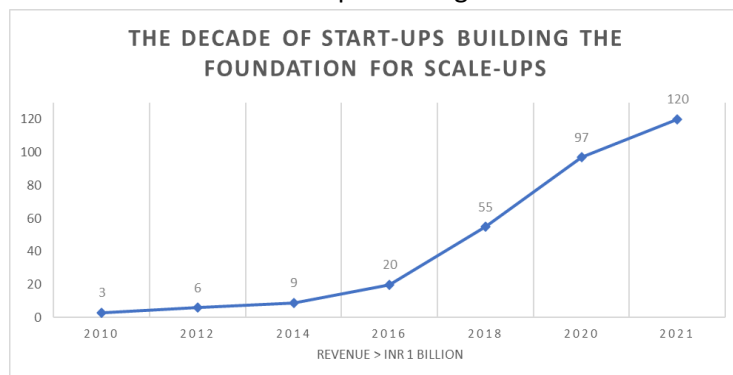
Source: ITA, World Bank, Bloomberg, IBEF

25.1% of GDP in 2021. India is projected to touch that figure by 2025. In absolute terms though, even now, India’s manufacturing is 4X of Vietnam and will be 10X that of Vietnam by 2025.

**Startups on a scale-up path in India:**

A lot has been written about startups in India and how the sector has been booming. One of the challenges for startups in India (for that matter, in any other country) is how fast and by how much do they scale their business. The Covid-19 crisis caused disruptions but it also became an opportunity for many startups to grow their business and improve their operations.

The number of Indian startups crossing INR 1 billion in revenues has been increasing every year since 2015 and the time to reach that revenue scale has been shrinking.



*Indian start-up ecosystem is expected to add additional 250+ scale-ups by 2025 with a time to scale expected at ~5 years and it may reduce further with increasing market potential and faster funding and larger ticket size rounds.*

Source: Nasscom - Zinnov study

<sup>5</sup>[https://www.bain.com/globalassets/noindex/2022/bain\\_brief\\_the\\_trillion\\_dollar\\_manufacturing\\_exports\\_opportunity\\_for\\_india.pdf](https://www.bain.com/globalassets/noindex/2022/bain_brief_the_trillion_dollar_manufacturing_exports_opportunity_for_india.pdf)

### *Scale thinking needs to be pervasive*

Some of the larger Indian conglomerates are talking about scale - but that's either in infrastructure projects or in their existing areas. Startups are growing but billion-dollar revenue is still a distant goal for many.

In the next decade, as India gets close to becoming a \$10 trillion economy, more than \$6 trillion of annual economic value will be created. Businesses need to plan for scale from the start if they want to tap into these opportunities. Here's one simple way to define scale goals - small businesses should aim to cross INR 1 billion (\$15M+) in revenues, become mid-size and then grow to a large enterprise. Mid-size businesses need to aim for billion dollars in revenues. What this means is that new businesses need to build a business and investment strategy that aims to capture more value, enter new markets (including international) and is ready for scale.

### India is 'moving-up' the value stack

IT/ITeS companies have been the growth engine of India for over a decade and while they have had an outsized impact, it's not sufficient for a country the size and population of India. Other sectors, including manufacturing, need to take off to have a broad-based impact. And that does seem to be happening, with the enabling ecosystem that is coming together being leveraged by businesses for both value-creation and value-capture.

#### *Value capture by combining engineering and software skills with digital business models*

Consumer electronics in India was basically about foreign brands and imports. That is now changing with brands like Boat, Noise becoming strong homegrown brands. Boat launches 40-50 new products annually and product innovation has been critical to Boat's success. Boat is now the world's 5th largest wearable brand by volume with close to 30Mn units shipped in 2021. Equally interesting is the backward integration they are doing investing in R&D in India, leveraging local engineering skills and increasing local manufacturing. Their target is to manufacture close to 40% of the production volume in the home market by 2024<sup>6</sup>.

Lenskart is another company that has used a value-capture approach over time. Starting as an online retailer of eyewear, it moved to opening physical stores also, creating an omnichannel player. It recently acquired Japanese eyewear retailer Owndays, thus expanding its footprint to 13 countries across Asia Pacific. This will take the company to \$650Mn in revenues. Continuing its value-capture approach, the company is now building one of the world's largest eyewear manufacturing plants in India and moving the production from Owndays' SE Asia factory to India. It will manufacture and ship close to 100 million pairs of eyewear annually from India. Lenskart will thus have a presence from mass-market (Lenskart brand) to premium eyewear (Owndays), its own manufacturing and R&D, effectively creating a "full-stack", omnichannel eyewear brand from India.

The TV industry is another example which is moving in the same direction. Almost all the TVs sold in India are made locally but the brands and the IP is international. That is changing with Indian TV companies acquiring the rights to some of the older but well-known international brands like Thomson and Kodak. And now some of them are licensing TV software from Google and LG to turn into ODMs. This coming together of all pieces - from brand to design to manufacturing - will value and profitability.

#### *Using domestic market scale to take a bigger share of the pie: Defense and Railways*

India's defense procurement is a \$20 bn+ annual opportunity and thus large enough to enable local businesses and startups. Railways is another big customer segment on its own. These 2 sectors have opened opportunities for

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<sup>6</sup> Source: TechRadar

Indian companies and startups to build higher value, cutting edge products ranging from Vande Bharat trains to swarm drones to be used by defense forces.

For example, the newly designed and made in India Vande Bharat set of trains showcase scale thinking and a move up the value ladder. 400 of these next-gen high speed trains will be manufactured in India over the next 3 years.

All these opportunities have 2 effects - it positions India as a place where engineering/tech and local manufacturing come together to capture more value from products. Second, it has the potential to spawn large Indian defense, transportation, and other electronics players.

*Manufacturing and the bigger picture*

Manufacturing is a key engine for economic growth and to generate jobs. It is also pulls in a broader ecosystem across the value chain, including design and development capabilities and helps companies roll out product innovations faster.

*Value creation and value capture in new age industries:*

a. Space

Space is another sector that is throwing opportunities for startups in India. This sector is at the cutting edge of multiple technologies. Since the opening of the sector by the government in 2020, an increasing number of space startups have been formed. It has caught the fancy of India’s top engineering talent who, under the new policy, have access to India’s vast space infrastructure and know-how, including from ISRO.

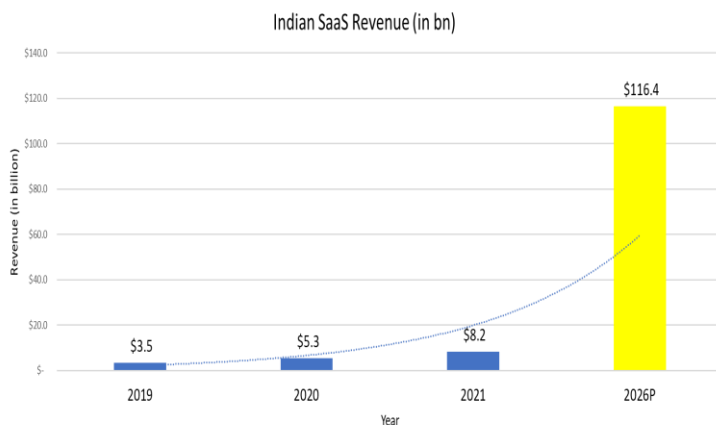
The total number of space startups in the country has crossed 100 with 47 space technology startups being established in 2021 itself. India now has the fifth largest number of space firms in the world after the US, the UK, Canada, and Germany and the sector is projected to grow to \$50 billion by 2024<sup>7</sup>.

b. Software products (SaaS)

There has been a lot of debate on what it will take for Indian software talent to be successful in the products business as that’s where the margins are. SaaS - which is software products delivered through the cloud - became the opportunity enabler that Indian software talent was waiting for!

India’s SaaS story has been a big success. According to a Bain & Company report India now has 13 SaaS unicorns and close to 10 companies with \$100 million+ in Annual Recurring Revenue (ARR). A recent report on Indian SaaS

startups projected 55-70% CAGR for these companies, scaling to \$100+ billion in revenues by 2026 (chart below). The investments into Indian SaaS firms would reach \$6.5 billion, growing from \$4 billion in 2021, despite the slowdown in VC funding.



Zoho, Freshworks, iCertis, Whatfix, Browserstack, Postman and many others are good examples of companies that have scaled as global software product players.

<sup>7</sup> Source: Business Standard news article

Source: Zinnov Analysis, Chiratae & Zinnov India SaaS Report 2022

These are global product businesses with high gross margins - SaaS company gross margins are in the 75-90% range, more than double of typical services companies. Once these companies scale and need to spend less on sales and marketing, their EBITDA margins become very attractive as well.

c. Global Capability Centers (GCCs) and their evolving role

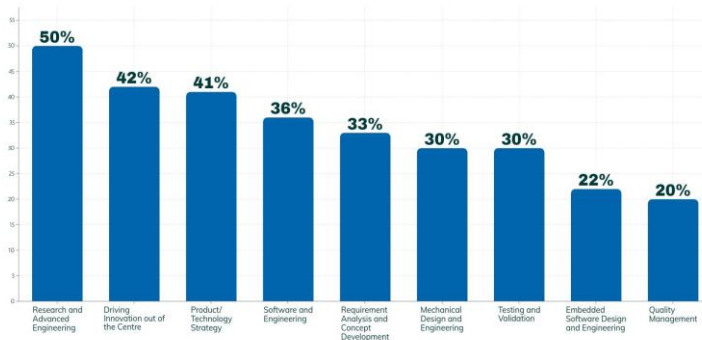
“Captives” or dedicated engineering, R&D and support centers set up by MNCs in India have been a key pillar of the outsourcing industry in India. India accounts for 45% of GCCs in the world. According to a Nasscom report in Sept. 2021, India’s global capability center (GCC) sector comprised 1430+ global organizations, employing more than 1.4 million people and generating \$36 billion in annual revenues. They are projected to employ 2 Mn - 3 Mn people and generate \$60 bn+ in revenue by 2025.

*Product design and development work - GCCs as “Innovation Centers”*

GCCs are moving towards higher value-addition and in many cases now manage the entire product lines from India. Product management and core innovation from India also means that GCCs have their own budgets and may do P&L management - thus moving up from the traditional project or jobs-based outsourcing.

*Global Engineering R&D Pulse Survey 2022 points<sup>8</sup> out that over 70 percent of the surveyed companies with GCC in India plan to increase their engineering R&D spend in their India GCCs this year. Research and Advanced Engineering (R&AE), especially in advanced technologies, such as AI/ML, automation, and big data, is shaping up to be the principal focus area for India GCCs.*

Top Activities Delivered form India's GCCs



*Companies with mature GCCs plan to drive their innovation cycle and core product/technology strategy through their India centers. About 60 percent of the surveyed enterprises in the industrial sector plan to deliver their product/technology strategy from their India centers. While already delivering a large portion of the ER&D initiatives for companies, they have the vision to deliver the core product strategy.*

Source: NASSCOM-Deloitte Global ER&D Pulse Survey 2022, Global Engineering Pulse Survey, Global Market Insights, May 2022.

<sup>8</sup> Global Engineering R&D Pulse Survey 2022

<https://www2.deloitte.com/in/en/pages/strategy/articles/global-ernd-pulse-survey-2022.html>

### When will India have its Google or Apple or Tesla

It can be seen as a rhetorical question but one that needs to be asked with new seriousness. To some extent B2B SaaS from India has started showing signs of becoming large players. But the market for their products is a small part of the overall global software products markets and most of these companies are still a long way off from crossing the billion-dollar revenue mark. Still, they have a base they can build upon and innovate. Some of the consumer brands from India also have the potential to scale globally. A large global player from India in new age industries is still an aspiration but a mix of expanding domestic market, value migration, innovation, branding combined with entrepreneurial ambition should get us there.

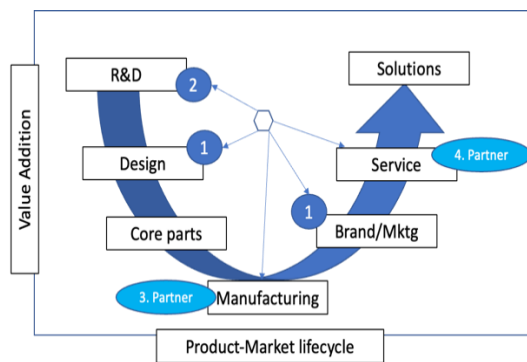
### In Conclusion – The Key Takeaways for Businesses (and Policy Makers)

- Business strategy will also be about scale

Asia will have 3 of the 4 largest economies in the world in the next few years (China, Japan and India). India is in a strong place and the additional trillions of dollars that will be added to the GDP in the next decade will require businesses to think in terms of scale. A large unified national market will also require scale and growth mindset.

- Value migration and capture will play a bigger role

Skills in engineering and design, software, access to local manufacturing combined with the macro enablers (physical, digital, and business) open up opportunities for Indian companies to capture more value.



India has the ecosystem for several of these above

A “staggered” approach to value capture: Start with one part, preferably one which has a higher value and add other parts of the total product and solution. For example, a disruption through a D2C brand with a new product design or even having scale in manufacturing can be the starting point. Local engineering, software and manufacturing ecosystem can enable faster product design and development. Growing GDP will mean a large domestic market. It can be ‘prove in India and sell globally’ strategy in some sectors or ‘start in India, scale in India and globally’ strategy in some others.

These playbooks can be adopted by Indian companies looking for growth. D2C players have adopted the sequence shown in the left chart. Vaccine players started with scale manufacturing for global vaccines and are now licensing or co-working with R&D bodies to launch home grown vaccines. Covaxin was an earlier example, Genovax’s Gemcovac mRNA vaccine and SII’s vaccine Cervavac are the recent ones.

- Investments in human capital will have a bigger impact on growth...

Human capital is key to driving growth in today’s world. While increasing business activity is a good sign, the capabilities of the workforce will become important. Entrepreneurial energy and skills will be critical as will be R&D, business management skills, etc. This is a great time to invest in education as a skilled population will ensure that India continues to grow in the decades to come.

- ....as will investments in R&D

One area that will determine the longer-term growth of the economy is investments in research and innovation. For a large economy like India, just being able to produce things locally or move up the value stack in incremental steps are a good starting point but not sufficient to sustain the growth over longer horizons. It will require dominance in certain sectors and industries driven by country level advantage (like it happened in ITes) and

investments in R&D. Large enterprises need to think about innovation and disruption. It could be driven inhouse or through inorganic partnerships and investments.

*R&D in India - it's about both investments and commercialization*

Indian companies and India don't rank high in R&D spending. That needs to change. But another low hanging fruit is commercialization of existing innovations. Existing research and solutions relevant to India - in Govt bodies, in private labs, in universities or institutions - need to have a path to reality. This industry-academia-Govt partnership is critical.

- A big opportunity for knowledge transfer

This is a 'scale' opportunity for India to engage globally! Both for sharing the knowledge, the IP and for partnering with other nations in their growth journey.

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