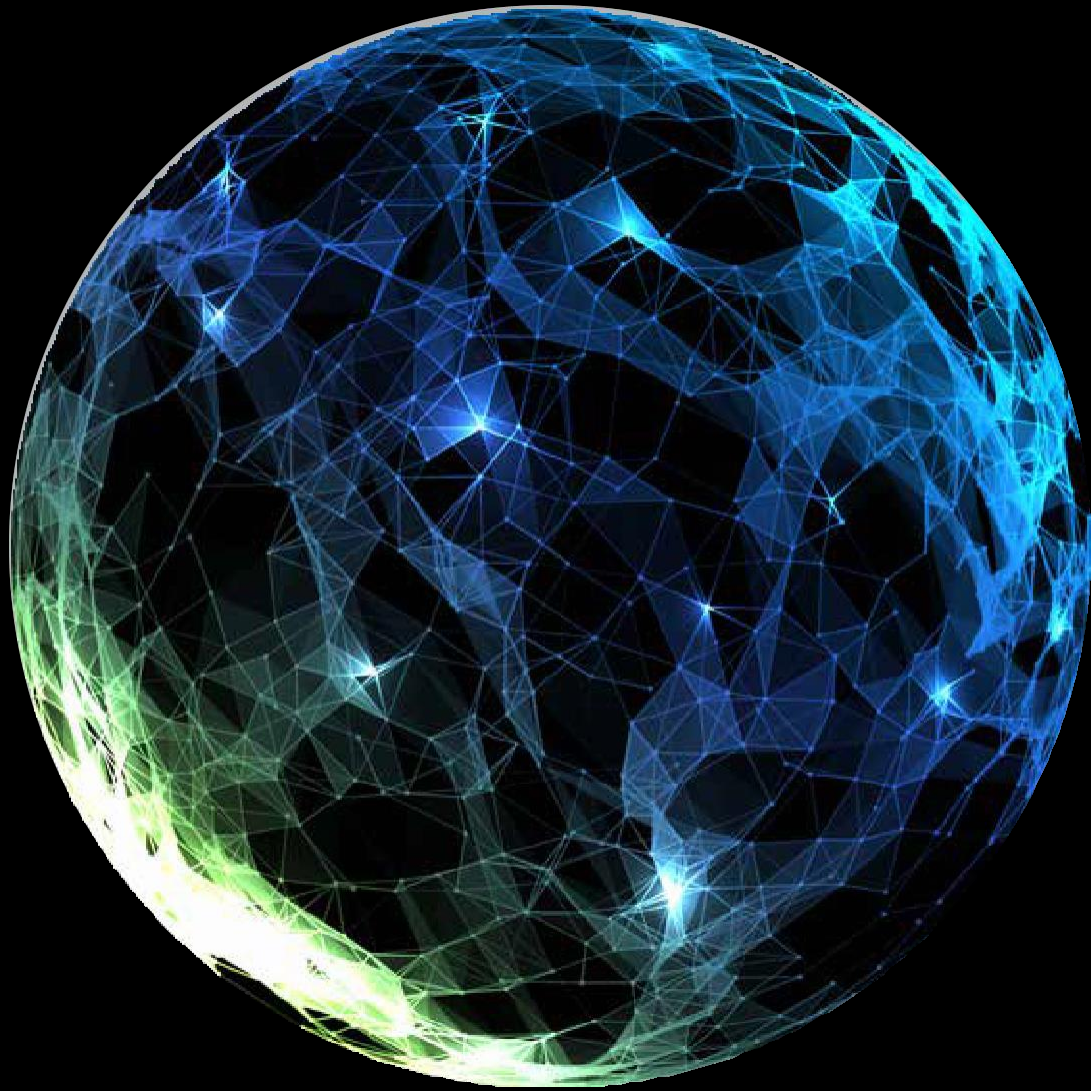


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**Start-up Ecosystem
Deloitte Private Newsletter**

For private circulation only

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Foreword

Welcome to the fourth edition of our Deloitte Private Newsletter. It gives me immense pleasure to present the current edition focusing on digital, innovation, and start-ups.

India's journey in digital adoption witnessed a phenomenal growth in the past decade. A multitude of factors such as the increasing use of digital tools and changing consumer preferences enabled a proliferation of digital services, fundamentally altering the way products and services are developed, delivered, and consumed. In 2020, India is one of the largest and fastest-growing digital markets in the world. As of March 2020, the total internet subscribers are 743 million. The country is expected to cross the 900 million mark by 2025. Around the same time, our digital economy is expected to contribute 18–23% to the overall economic activity. Primarily driven by affordable smartphones and mobile internet connectivity, the digital revolution also brought significant progress across the value chain, most notably in the electronics manufacturing industry. From two mobile phone manufacturing units in 2014, India has now emerged as the second-largest manufacturer of mobile handsets in the world. It now has more than 200 mobile manufacturing units producing over 290 million handsets.

Digital transformation in the economy has the potential to disrupt existing business models, optimise resource usage, improve customer experience, bring new sources of revenue, and redefine value chains. Not surprisingly, India's digital transformation also

brought with it the start-up boom in the past decade. The country now has the third-largest start-up ecosystem in the world. Between 2014 and 2019, about 9,200 start-ups were founded. Of these, more than 1,600 were in "deep-tech" domains, which refer to start-ups in core technology areas, such as IoT, AI/ML, robotics, and blockchain. In 2020, seven start-ups entered the unicorn club, taking the total to 33 in India, which refers to startups valued at billion dollars. India's startup ecosystem is at the forefront of driving large-scale digital adoption in bringing mobile first digital services to the mass market. Leading MNCs are actively tapping into the start-up ecosystem in India for ideas and talent through their innovation hubs, accelerators, and venture investment arms.

It brings into question, the importance of "ecosystem" in the context of start-ups. Start-ups, especially in the technology industry, require wider support in the initial stages of their inception as they navigate through identifying the product market fit, hiring talent, and getting paying customers. The US technology industry's success can be directly attributed to the successful ecosystem that took shape in Silicon Valley in the 1990s. A similar success story was repeated by China at the turn of the past decade. Amongst ecosystem players, the roles of incubators, accelerators, and venture capital funds are usually well understood. However, the roles of the industry, academia, the government, and the support of end customers are equally important. So far, India's start-up successes in the b2c markets have

brought "digital applications" at scale. The learnings from India are directly relevant across the world in designing mobile first digital services for large end-consumer markets. Now it is time for us to build on the initial successes to create global success stories from India.

In the current context, COVID-19 has irrevocably altered the technology and digital adoption for consumers, corporates, and governments alike. Technology is now playing an important role in the recovery too. For companies, especially start-ups in the consumer internet and digital services segments, the current crisis is truly an inflexion point in their journey. Start-ups in domains such as online education, digital health, cyber security, cloud transformation, digital media and online gaming are likely to witness support from a positive demand environment in the near term. It should be noted that the current environment of extreme dynamism is naturally suited for agile and nimble footed start-ups to survive and thrive. Start-ups that are quick to adapt to the changing dynamics and seize the immediate opportunities are likely to survive through this phase and be better placed to grow faster during the recovery phase.

We have curated some interesting stories in this topic for this edition of the newsletter, including interviews from market experts. We hope you find this edition an informative and engaging read.

Thank you!



Interview with Nathalie Tessier



(Global Deloitte Private Leader and Global Audit & Assurance Growth Leader and Global Audit Private Leader)

1. **How is the ecosystem globally for global emerging companies? How do you see the trends across the globe?**

Businesses are currently scaling faster than at any other time in history. The average lifespan of the world's largest businesses is now just 20 years. In the 1950s, it was 60. This change is being driven by disruption, exponential advances in technology, and globalisation. Emerging companies are important to the global economy as today's start-ups will become tomorrow's blue-chip companies. Deloitte Private, with our extensive breadth of services, is well positioned to serve them throughout this journey.

Even during the pandemic, the global ecosystem for start-ups is quite strong. We see more globalisation now than we ever did because we are operating in a mostly global, virtual world. It now matters less about where you are because of worldwide connectivity. The trend towards digitisation, which has been accelerated by COVID-19, is playing a big part in this.

Along with technology and digitisation, there are more options for capital, with a resurgence of initial public offerings and nearly US\$1.4 trillion of uninvested private equity capital available.

There are, of course, challenges. Working remotely has created complications for some companies. Many organisations are re-evaluating their supply chains and looking to build more resilience into them where possible. Finally, customer preferences are changing, and organisations need to be able to adapt to them.

important for them. Their strategic planning efforts will need to be rooted in resilience and agility, and they would do well to empower their teams to re-imagine a better normal. I believe emerging companies are ready to face these challenges. I am confident they can emerge from these challenges because disruption is in their DNA. They understand it and know how to respond to it.

2. In the next normal, what are your thoughts on challenges faced by emerging companies and how and where do you see the journey of emerging global companies during the revival phase?

As we continue to move through the recovery phase and begin to think about how to architect a new future in which to thrive, I would expect these emerging companies to benefit from their agility and nimbleness. An important starting point is to examine and validate the organisation's purpose, which is becoming even more important to stakeholders, including both customers and employees.

I think it is also critical to ensure that the multiple dimensions of trust are embedded into activities. For example, companies need to ensure their stakeholders that physical locations, including offices and stores, are safe. They also want to have trust that their emotional needs and those of the society are being safeguarded; their financial concerns are being served; and digital trust exists as data is shared online.

When we think about our framework of "Respond, Recover, and Thrive," I think as companies begin to move from the "interim normal" of recovery to a "better normal" they will need to redefine or validate their organisational aspirations and imperatives. Understanding how existing markets have changed and responding accordingly will be

3. Emerging global companies are strong in Asia Pacific, specifically in China/India/ASEAN, etc. What is your assessment on this segment's growth that is believed to be vital for economic growth ?

The APAC region houses 30 percent of the world's top start-up ecosystems, including some of the most successful start-ups. The Indian start-up ecosystem continues to be the third-largest in the world. There are 262 unicorns in the region (as of 2020) and APAC has lately emerged as the hub for tech innovation, such as artificial intelligence, cloud, and machine learning, with the rapid growth of several R&D powerhouses. Sectors such as fin-tech, mobile internet platforms, e-commerce platforms, offline-to-online business, and delivery and logistics, have attracted huge foreign investments in the past year.

This high-growth potential segment has become essential for the region's innovation capacity, employment generation, and economic growth. Start-ups are playing an important role in creating a new market and operating in a non-existent market because of their agility, scalability, innovative ideas, and flexible working culture. With large capital flowing into the start-up ecosystem, its rapid growth in the region has led to a ripple effect on the economy and society, leading to technology and structural disruptions. They were the driving force behind the changing consumer demand and their preferences, increasing productivity and competition, and boosting the economic activity.

Since the pandemic, these start-ups have played an important role in APAC countries in responding to challenges. Start-ups in areas such as e-commerce, fin-tech, health-tech, and ed-tech have helped the emerging and low-income nations in the region to deal with lockdowns and movement restrictions, and social distancing in ways that were unimaginable a few years ago.

I believe because of the lean cost structure, these companies will stay afloat and bounce back. Also, I am happy that the region's governments, including that in India, China, and other APAC countries, have announced measures to support this segment.

4. In your assessment on which areas emerging global companies should focus on and how Deloitte can provide support to these companies?

Along with examining purpose and building trust, I think there is a constant, ongoing need to manage and monetise intellectual property, regardless of the current crisis we face. Deloitte Private has a number of IP offerings, ranging from strategy and business model optimisation to transfer pricing, to help clients.

Technology will continue to play a critical role, particularly as companies accelerate their digitisation efforts. We can help with technology strategy, analytics, cyber risk, and ERP strategy and implementation.

Access to capital is always important to emerging companies. Our audit and assurance services can be valuable in this regard. We can help in areas ranging from valuation to IPO readiness. Our Deloitte Corporate Finance team has an impressive record of acquisition and

divestiture transactions in the private company segment.

The future of work has been undergoing an evolution even before the pandemic as companies evaluate what type of work is performed, how it gets done, and where it is done. Combining new technologies, such as robotics process automation with more traditional talent needs (including compensation and benefits design), allows us to meet a spectrum of talent-related needs.

Finally, in the area of risk and compliance, along with accounting and advisory, our international tax capabilities can help meet regulatory obligations and provide valuable insights.

5. The Indian economy is poised for rapid growth during the revival phase in the post-COVID-19 world. India has the largest pool of emerging global companies in multiple sectors. What are your words of advice to practitioners and entrepreneurs in this phase? India is poised to grow in double digits in FY 2022 and the emerging

global companies in multiple sectors, such as health care, finance, social services, and technology. These sectors are expected to play an important role in the revival. This crisis creates opportunities and this time it will be no different for several of these sectors, especially education, finance, and health.

India has a reputation of having the highest entrepreneurial spirit in the region (as reported in 2018) and 15 percent of the Indian population are involved in business start-ups (in 2019).ⁱ The start-up ecosystem in India is poised to mature and professionally evolve. This crisis is an opportunity for Indian entrepreneurs to enhance and

ⁱ Statistics; https://www.statista.com/topics/4780/startups-in-asia-pacific/#dossierSummary__chapter1

showcase their entrepreneurial skills, such as business management, analytical and problem-solving, strategic and creative business planning, emotional intelligence, and communication and listening.

This crisis is also an opportunity to be more agile and innovative. With working from home and flexibility becoming the new norms, these companies will become more flexible to tap resources globally and go for a global workspace.

6. Lastly how is your new role and what makes it more interesting in your new role?

Before taking over as the Global Deloitte Private Leader, I was the Managing Partner in the Audit function in Canada and Chile. Half of our business was to provide services to private clients and I enjoyed working with my partners and the leadership team to make an impact in the market. I have always seen a great potential for this segment.

My desire to work towards making an impact on a broader level for this

growing segment was the impetus for my decision to take on this role. I have always known that we as an organisation are stronger together. I see this play out every day in driving the Deloitte Private agenda.

Our professionals work in tandem across the globe to help clients recover from the effects of the pandemic and thrive in the post-COVID-19 world, bringing the differentiated offerings of our multi-dimensional model to help clients resolve their most difficult challenges. With a focus on emerging growth companies, Deloitte Private professionals also provide advice and solutions designed specifically for innovative enterprises scaling at pace today.

After a few months in this role, the highlights for me have been working with diverse teams, learning about other cultures, and understanding the different markets in which we operate. I am excited about the range of opportunities that exist—and those yet to be explored—for us to serve the multinational companies of tomorrow.

Sources:

- Heather Gates, National Managing Director, EGC and Audit & Assurance Private Growth Leader
- High Growth Ventures Storefront deck (UK) – Tom Rees, Matt Henderson
- The road to leadership and resilience presentation (Bill Marquard, Bob Rosone)



Could COVID-19 be a turning point for Indian start-ups?

Over the past one-and-half decade, start-up growth in India has been phenomenal; the number has increased by 12–15 percent between 2014 and 2019.ⁱ According to NASSCOM, India is currently the third-biggest start-up hub in the world with over 38,000 start-ups by the end of 2019. India houses 33 unicorns, of which 65 percent were added in 2018 and 2019.ⁱⁱ Primarily, 21 percent of the Indian startups focus on global markets.

Technology start-ups have been the most sought-after investment destinations. Within these, fintech,

enterprise tech, e-commerce, consumer services, and health technology have continued to dominate in terms of the number of deals. Enterprise, market place (including e-commerce), health technology, and fintech accounted for 62 percent of the funding.ⁱⁱⁱ According to a NASSCOM report, advanced technology startups (including Artificial Intelligence [AI], blockchain, Internet of Things [IoT]) grew cumulatively 40 percent since 2014 with enterprise software, fintech, ed-tech, and health-tech comprising over 40 percent of the total start-ups.^{iv}

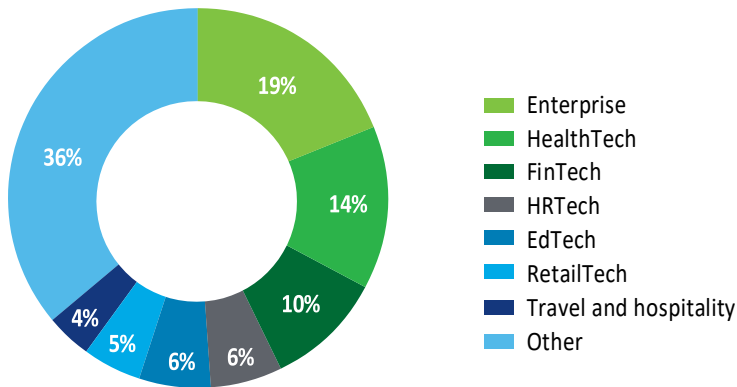
ⁱ The National Association of Software and Services Companies (NASSCOM). 2019. Indian tech startup ecosystem, Leading tech in the 20s-Edition 2019. <https://www.nasscom.in/knowledge-center/publications/indian-tech-start-ecosystem-leading-tech-20s>

ⁱⁱ Zinnov and TIE. 2020. COVID-19 And The Antifragility Of Indian Start-up Ecosystem. Nov 02 <https://zinnov.com/covid-19-and-the-antifragility-of-indian-start-up-ecosystem/>

ⁱⁱⁱ Deep Kalra. 2019. From angels to IPOs: Expanding the funding options for Indian startups. The Economic Times, July 2, <https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/from-angels-to-ipos-expanding-the-funding-options-for-indian-startups/articleshow/70035768.cms>

^{iv} NASSCOM, 2019, Ibid

Figure 1. Sectoral distribution of startups in 2019



Start-ups and economy share symbiotic relationship

Economy supporting startups
 A myriad set of economic factors have aided startup growth, including availability of funds, internet penetration, easy and affordable access to mobiles, rapidly rising income of the middle class, and a growing share of millennials and tech- skilled professionals in the population. For instance, the tremendous success of a few consumer brands and the rising number of unicorns have inspired younger demographics to take on more risks and enter less ventured markets. India has the reputation of having the highest entrepreneurial spirit in the region (as reported in 2018) and 15 percent of the Indian population is involved in business startups (in 2019).^v Similarly, a surge in demand for digital services and the advent of cutting-edge technology has provided ample opportunities for people to be creative and innovative in addressing tech-based demand and providing an improved experience.

Enabling ecosystem is also providing entrepreneurs a leg up. The government’s policies have provided tremendous support and initiatives, such as startup India, stand-up India, NITI Aayog’s Atal Innovation Mission (AIM), and Skill India, amongst others, have also added momentum in this space. The ‘Startup India’ initiative in

2016 was launched with the objective of supporting entrepreneurs, building a robust startup ecosystem, and transforming India into a country of job creators instead of job seekers.^{vi} Partnerships with corporations and research agencies are also opening up opportunities to support startups venturing into science and technology. Recently, a major technology company announced its partnership with India’s premier institute, to support deep science startups with societal impact.

Startups supporting economy
 This high growth potential startup segment has become essential for India’s innovation capacity, employment generation, investment and economic growth. Startups play an important role in creating new markets because of their agility, scalability, risk-taking ability, innovative ideas, and flexible working culture. With large capital flowing into the startup ecosystem, its rapid growth has led to a ripple effect on the economy and the society, leading to technological and structural disruptions. They have generated large-scale employment opportunities for the unorganised sector as well as semi-skilled workers. Startups have created approximately 60,000 direct jobs and 1.3-1.8 lakh indirect jobs.^{vii} They have also been boosting the

^v Statista; https://www.statista.com/topics/4780/startups-in-asia-pacific/#dossierSummary__chapter1
^{vi} Startup India. <https://www.startupindia.gov.in/>
^{vii} NASSCOM, 2019, Ibid

economic activity of non-metro and Tier- 2 and Tier-3 cities in the region.

Startups have been the driving force behind the changing consumer demand and their preferences, and increasing productivity and competition. For instance, fintech innovations such as mobile wallets and the Unified Payment Interface (UPI) platforms help the government achieve its mission to improve financial inclusion by providing services to under-banked population. Tech startups are working in collaboration with established and tenured companies in bridging gaps in infrastructure, communication, security, and customer experiences that the companies were unable to manage because of their structural challenges and cost- effectiveness.

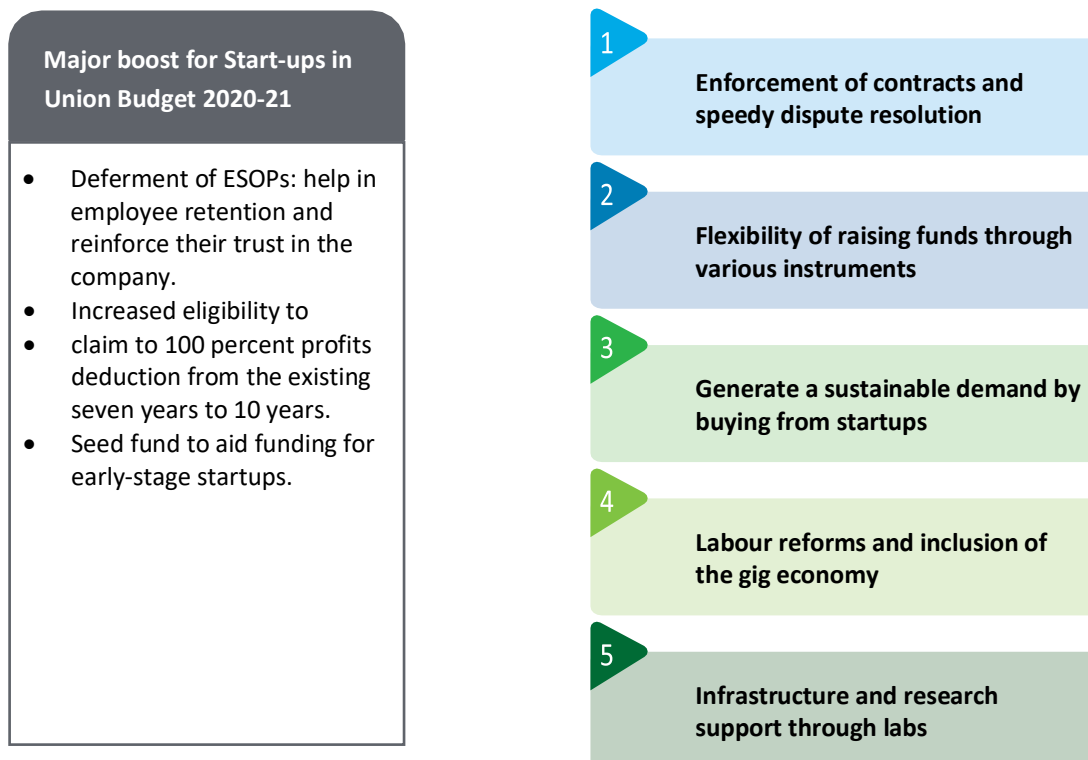
The government's aid has improved the startup ecosystem

The Indian government is also undertaking several initiatives to

support startups, looking at their rising significance. Under the 'Startup India' initiative, eligible companies are provided tax benefits, easier compliance, and IPR fast-tracking, among others. The Department for Promotion of Industry and Internal Trade (DPIIT) is working on schemes that can solve credit-related challenges for early-stage startups, initiating labour reforms, and providing infrastructure and research support through labs.

In addition, India has international bilateral cooperation with several countries that have brought the country closer to global investors, helped startups to tap funds globally, and aided in deepening investment and trade ties manifolds. Foreign governments of Israel, France, the United States, and Singapore, amongst others, are encouraging their startups/corporates to engage with the Indian startup ecosystem, especially in the technology sector.

Figure 2. How can the government encourage startups?



Source: Deloitte Research

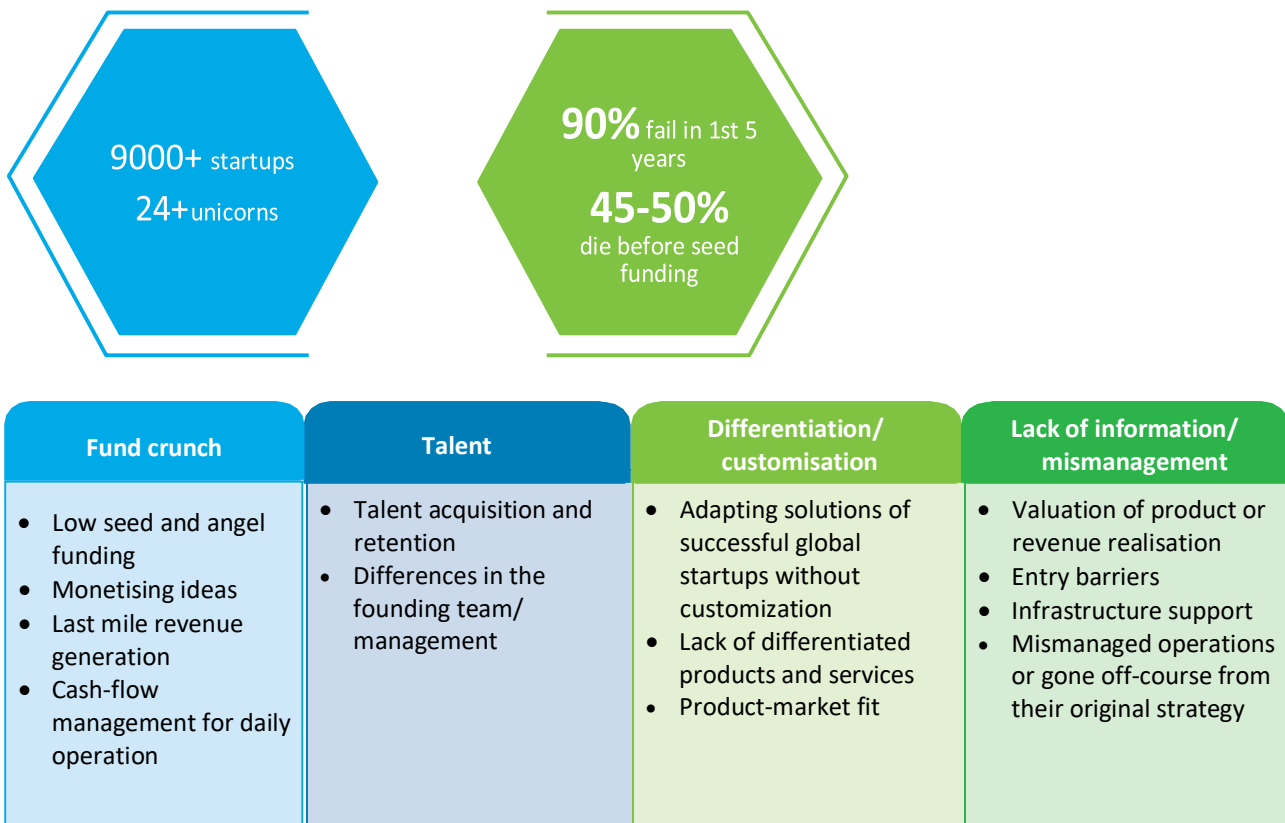
Much needs to be done to improve the ease of doing business environment, the ability to use varied and hybrid instruments for investment, flexible exit options, tax policies, amongst others. These improvements will discourage startups, which are growing and going global, from wanting to externalise or flip the holding company outside India.

The pandemic may have aggravated their pre-existing challenges

Despite favourable demographics and the government’s policy support, 90 percent of the startups fail within the first five years. Fund crunch is probably one of the crucial factors that challenges the growth of startups; first-time entrepreneurs struggle with seed funding and even ways to monetise their ideas.^{viii}

While high mortality rates of startups is a common challenge across the world, there are a few reasons for failure that are very specific to India. One of the crucial factors is inadequate infrastructure support, such as consistent power supply or internet connectivity. Lack of differentiated products or innovative and customised solutions to problems leading to poor product-market fit is another challenge. It is very common to come across aspiring entrepreneurs who, despite having brilliant ideas and opportunities to tap into a growing consumer market, have struggled to find their proper ‘business footing’ and traction in the marketplace. A few reasons identified for startup failures are mentioned in the figure below.^{ix}

Figure 3. A few reasons startups fail



Source: Deloitte Research*

^{viii} Rumki Majumdar. 2020. Finding New Frontiers: The Challenges of Early-Stage Indian Entrepreneurs in Accessing Finance in an Evolving Startup Ecosystem. Entrepreneurial Finance in Emerging Markets, Springer Link, pp 193-211 https://link.springer.com/chapter/10.1007/978-3-030-46220-8_13

^{ix} Rumki Majumdar, Ibid

^x https://link.springer.com/chapter/10.1007/978-3-030-46220-8_13

COVID-19 has had a mixed impact on Indian startups. Several startups have been facing challenges due to a sudden fall in demand, revenue, and capital funding. Most of these companies have low financial reserves and had to lay off employees to sustain. Several early-stage startups had to temporarily or completely shut off their businesses and operations.

However, a recent survey revealed that COVID-19 had a mixed impact on different sectors and only 15 percent of the startups have halted operations.^{xi} Most startup segments have recovered to pre-COVID levels, while a few such as EdTech, online health insurance, online fitness, and online teleconsultations have grown significantly even during this phase.

Over the past few years, China has had a disproportionate share in several Indian unicorns. However, since COVID-19, capital flows from China have reduced because of geopolitical tensions and COVID-related disruptions. Primarily, this has affected mid-and- late-stage startups that have a very high dependence on capital flows from this region. On the positive side, global investors from other regions, such as Singapore and the United States, among others, have stepped up investments in Indian startups, thanks to global low policy rates and high global liquidity.

The COVID-19 crisis offers opportunities for Indian startups

Startups have played a very important role in India in responding to the COVID-19 challenges. Startups such as e-commerce, fintech, food-tech, health-tech, and ed-tech have helped the country deal with lockdowns and movement restrictions, and social distancing in ways that were

unimaginable a few years back. Be it enabling virtual communication or manufacturing ventilators for use in hospitals and homes, startup innovations have rapidly met the changing consumer demand.

Besides, startups are offering various opportunities to re-imagine and re- invigorate businesses across sectors and industries. These companies have been harnessing modern technologies such as AI, machine learning, IoT, or blockchain, and are complementing (and even aiding in re-structuring) traditional firms and products in dealing with the pandemic-related stress. Automation startups are gaining momentum as they help companies cut costs, improve user experience, and scale up operations.^{xii}

Startups have played an important role by offering solutions to the pandemic challenges , but COVID-19 could be an opportunity for the startup ecosystem to mature faster and entrepreneurs to professionally evolve. Young entrepreneurs must improve their skills of business management, analytical and problem-solving, and emotional intelligence to bring innovative products and solutions for the economy. Besides, businesses have to be more agile, innovative, and rebuild their model to survive and sustain in this long overhaul.

The government must also ensure sustenance of the startup ecosystem through prudent policy initiatives and support infrastructure. Going forward, these startups will be key for our economy and society to revive and adapt to a new normal, as the economy recovers and businesses return to pre-pandemic levels.

^{xi} Zinnov and TIE. 2020. COVID-19 And The Antifragility Of Indian Start-up Ecosystem. Nov 02, <https://zinnov.com/covid-19-and-the-antifragility-of-indian-start-up-ecosystem/>

^{xii} Ayushman Baruah. 2020. Automation startups see business momentum in India in 2021. Livemint, Dec 02, <https://www.livemint.com/companies/startups/automation-startups-see-business-momentum-in-india-in-2021-11606905392378.html>



Interview with Ashutosh Sharma



Ashutosh Sharma

India Head - Investments and M&A at Prosus Ventures

- Naspers Ventures recently re-branded itself as Prosus. How do Naspers and Prosus work in India? Are there two different investment teams?**

Last year, Naspers listed its international internet assets as Prosus on Euronext Amsterdam, creating Europe’s most valuable listed consumer internet group. Here is some background on the difference between Prosus and Prosus Ventures. Prosus Ventures helps Prosus prepare for future growth. We identify new consumer needs that are being transformed by technology . We find founders and entrepreneurs at early-stage

companies across the globe, who are addressing those needs in the most innovative ways.

The Ventures team has led a series of investments in new sectors that could potentially be future segments for the group. Since 2016, we have built a strong presence in online food delivery within Ventures. Last year, online food delivery became its own segment within Prosus. The Prosus Ventures portfolio spans sectors, including edtech, logistics, blockchain, mobility, and health. One of these sectors may become a core segment of the group in the future.

2. Most VCs are now seeing their new investment activity at pre- COVID-19 levels. What is Prosus Ventures outlook on investing in India for the next three and 12 months?

We identify new consumer needs that are being transformed by technology. We find founders and entrepreneurs at early-stage companies across the globe, who are addressing those needs in the most innovative ways.

One of our key advantages as an investor is our long-term perspective. Short economic cycles do not affect our overall outlook. We focus on India's growth story and Indian entrepreneurs. We have not experienced a change in investment activity during COVID-19 in India or globally. Therefore, we continue to keep investing in India at the same pace.

Also, across our portfolio, we believe that the current environment may drive a structural shift in global consumption patterns in favour of many of our businesses. For example, our edtech companies that are doing quite well.

3. Can you share some qualitative and quantitative attributes that you evaluate when investing in a new portfolio company?

There are several key factors that input into whether we will do an investment. First, Prosus Ventures looks for businesses within areas of high consumer spend that are addressing big societal needs in high-growth markets, and where we can make an impact as an investor. Next, we are zeroing in on sectors where technology can lead to a meaningful change in consumer behaviour and economics. And most importantly, we look to invest in world-class entrepreneurs that want to partner with us for the long term to build leading technology companies.

We are quite flexible in terms of amount of investment and the stage of the company. We build leading companies via whatever

structure makes sense – minority or majority and early or late stage. We have partnered with Series A companies and public companies and invested from US\$1 million to US\$1 billion. Also, we are long-term investors looking to tie-up with companies for an extended period. Prosus Ventures is driven by long-term success, not by short-term exit requirements.

4. What is the “exit” philosophy for Naspers/Prosus? Do you look at exiting in the usual four-six year timeframe? Do you also consider non-exit, dividend-driven investments?

As mentioned previously, we are long-term investors looking to tie-up with companies for an extended period. Prosus Ventures strives for long-term success, and is not driven by short-term exit requirements.

5. Given your investment portfolio, it is clear that you prefer B2C technology companies – what are the themes that you are currently pursuing in India and globally?

Prosus/Prosus Ventures is one of the biggest technology investors in the world. It has a unique perspective on global tech trends given our operations and investments cover major continents. Prosus Ventures invests in businesses that are addressing big societal needs in high-growth markets and India fits well within that investment strategy. A few examples of large societal needs served by our portfolio include Meesho bringing e-commerce to the underserved in India, BYJU'S is democratising access to quality education, and ElasticRun is bringing technology to the millions of kirana stores across the country.

We continue to explore similar themes. We are also looking to make a meaningful positive change to a large section of the Indian society through our investment. These include but are not limited to healthcare, commerce, agriculture, and education.

6. The pandemic seems to be resulting in a big digital transformation. How are your portfolio companies adapting in terms of their business model?

Across the Prosus Ventures portfolio, we believe that the current environment may drive a structural shift in global consumption patterns in favour of many of our businesses. For example, our edtech companies are doing well at present. Throughout the pandemic, most edtech companies have experienced an increase in traffic, while some experienced a significant uplift.

We have observed solid performance in our edtech portfolio and the sector (more broadly over the past several years). The sector has witnessed a strong momentum and our enthusiasm has only increased of late, with COVID-19 providing a generational tailwind.

The pandemic's effects on food delivery have varied significantly by country. In Brazil, where food delivery operations have been uninterrupted and demand for food delivery has surged, food delivery has thrived. Over the past six months, order volumes, Average Order Values (AOV) and other KPIs have hit record levels. In contrast, the Indian food delivery industry was hit hard by the government's early lockdown. Restaurants were closed and transportation was restricted. Since then, the industry has been gradually recovering as cities open up again and volumes return. We believe that the COVID-19 crisis is driving a structural shift in global consumption patterns that will favour the food delivery industry in the long term.

7. Are there any changes to your evaluation criteria in the post-pandemic world?

Our investment criteria will remain unchanged as we believe it has served us well for decades and driven us successfully through several economic cycles. Again, we look for businesses within areas of high consumer spend that are addressing big societal

needs in high-growth markets and zeroing in on sectors of the economy where technology can lead to a meaningful change in consumer behaviour and economics. Ultimately, this works in up and down markets.

8. You recently invested in Eruditus. Could you share some views on the Eruditus investment and how the Eruditus ecosystem is expected to play out?

Education technology is a major focus area for Prosus Ventures. We now have seven edtech portfolio companies spanning K-12, vocational upskilling, corporate and lifelong learning, and higher education. Eruditus looks to democratise access of quality resources for a much broader audience. The value of the teachings of the great institutions has typically been rationed to those who can physically and monetarily access their facilities. Eruditus unlocks those assets and enables those institutions to help a whole new cohort of learners across the globe.

Before the pandemic, traditional higher education delivery in developed countries was already under strain – including how to scale to serve more students effectively using existing models, and how to provide enough “value” to offset dramatic cost increases in recent years. In developing countries, the physical institutions of the West will not be recreated.

- COVID-19, with the constraints it places on in-person attendance, is raising serious questions around the real value of a ‘traditional’ college education. How universities will respond, and if they can adjust their business models to ‘the new normal’, will have a dramatic impact on the delivery of college-level education in the future.
- In developing countries, new models are emerging for higher education that look through a completely different lens to create a robust, online experience without any real estate.

9. How do you see edtech evolving in India, from the parent, student, and teacher's perspectives.

The current global health crisis has resulted in accelerated growth in edtech, pushing the market dynamics and industry forward by five years in just the past few months.

- Many providers are working furiously to respond to this dramatic growth during 2020 by continuing to identify those emerging opportunities. While edtech companies may see some pullback after the crisis recedes, we believe consumer behaviour will have changed fundamentally and the edtech sector will be set on a different trajectory, with room for even greater innovation and growth in the future.

The challenges that K-8 schools face in delivering effective online education have exposed cracks in traditional education methods. Now that parents, students, and teachers see the gaps clearly, they are looking for resources and new models to fill them or replace the methods.

- To date, the first and second generation edtech digital platforms have been used for supplemental resources for those ultra-motivated students. Now we are seeing users turn to platforms for effective delivery of core content to assist in teaching concepts as well as entire subjects. Teachers and parents are grabbing whatever tools they can and are repurposing them to help in this effort.
- Parents are increasing the pressure for effective materials to enhance current schooling or provide new alternatives. This creates a huge opportunity. Given the long-existed conditions in their home markets, edtech businesses from developing countries are leading the way – showing how to deliver compelling, engaging content at scale.

COVID-19 has provided a chance to run an experiment at a mass scale.

At least for a set of students, the pandemic helped prove that stay-at-home – online only – education works. Therefore, it would be not too far-fetched to believe in a future that has online-only schools. If various ecosystem players are able to figure out a scalable model to provide online education, this approach could even fill the quality education and access gap that we see between schools at the top and the bottom.

10. Please share some views on positive impact that Prosus has made (or the companies have made) – including support towards indirect and direct CSR activities.

Prosus has been investing in India since 2005. It is committed to contributing to India's growth and digital evolution through investing in local Indian entrepreneurs and companies. To date, Prosus has invested more than US\$5 billion in Indian technology businesses, including classifieds, payments and fintech, e-commerce, education, and food delivery. The group continues to partner with exceptional and transformative entrepreneurs who are using technology to provide economic opportunities and improve the everyday lives of millions of people in India.

In April, Prosus committed INR 100 crore to the Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM CARES) fund to help India fight COVID-19.

Prosus recently launched a programme called the Prosus Social Impact Challenge for Accessibility (Prosus SICA) and committed INR 1.6 crore to fund start-ups over three years to start-ups that provide assistive technologies. The grants will go to companies with products that are socially impactful, technologically innovative, sustainable, scalable, and capable of introducing a positive change in the lives of persons with disabilities. Winning start-ups will receive the financial grant, be inducted into the Prosus SICA mentorship programme, and have access to technical support, mentorship, and business advice.



Technology and Education: Overview and way forward

Heralding change; breaking barriers

Keeping with the changing times, the Indian education sector is moving beyond classrooms to reach millions of students, thanks to disruptive technologies and affordable connectivity. Now, the COVID-19 pandemic has forced digital adoption in this sector and heralding the next phase of education in India where digital first learning is directly integrated into school (and university) curriculum. With the potential to fundamentally transform our approach towards educational content and pedagogy, digital first learning is likely to be the biggest game changer for India in the coming decade, and possibly can bridge the urban-rural divide in education. What it means for the blooming EdTech industry and the future of our economy remains to be seen.

The road ahead

Digital and technology adoption in India has been increasing at a steady rate over the past few years. As of March 2020, the

total number of internet subscribers in India were around 740 million, and an estimated 60 percent of the population is expected to use internet by 2022, making India one of the largest and fastest growing digital economy in the world. The current COVID-19 pandemic has further catalysed the rate of technology adoption across sectors, and made it imperative for the government, corporates, and consumers to rely on digital channels for accessing goods, services, information, and entertainment. From consumer perspective, the current situation has brought about a behavioural shift in the usage of digital channels for high velocity everyday purchases. One sector that has gone through phenomenal transformation is education. Schools and educational institutions were amongst the earliest sectors to face the lockdown situation, and they continue to maintain restrictions. As the learning is going virtual, the education sector is witnessing a rather forced adoption to digital in a very short period of time, as digital first

learning is directly integrated in school and university curriculum. What it means for the blooming EdTech industry and our economy remains to be seen, as the country prepares for the future after the pandemic.

Usage of technology in the education sector has always held greater promise, in its potential to bring the best of learning outcomes through adoption of targeted and adaptive learning methodologies. Customised learning programmes (N=1 learning) personalised for the individual learner has the potential to bring out the best learning outcomes. India's EdTech industry has so far operated in the peripherals, catering to the supplementary learning needs in the K-12 segment (including test preparation for competitive exams) and in continuous education/skill development needs of post-K12 segment (including training and certifications). Now, as the market moves to a fully digital learning model integrated to school and university curriculum, various new models of EdTech are emerging, including flipped classroom, synchronous and asynchronous mode of teaching, online tutorials, collaborative learning, gamification, etc., bringing a paradigm shift in our thinking towards education, from mere syllabus or theory- oriented learning to application-based learning and problem solving, cultivating a multi-dimensional approach to learning.

More specifically, as digital first learning gets integrated in school curriculum, it's likely to fundamentally transform our approach towards content and pedagogy, and also bring flexibility for students to be in control of their learning pathways, seeking out content relevant to their interests and aspirations. A digital- oriented pedagogy gives us the flexibility to keep the curriculum up to date, and bridge the rural-urban divide, as the marginal cost of delivery is very low in reaching the target student population across the country. A digital mindset and curiosity when nurtured in students from a young age could possibly provide

them a bigger exposure to growth and development opportunities, especially to students from non-urban areas.

Furthermore, the National Education Policy 2020 (NEP 2020) approved by the government in July 2020 provides a comprehensive framework to guide the development of education and aims to transform India's education system by 2040.¹ Some of the fundamental principles of the policy are: 1) To recognise, identify, and strengthen the unique capabilities of every student; 2) to promote a student's holistic development both in academic and non-academic spheres; 3) removing hard separations between arts and sciences, curricular and extra-curricular activities, vocational and academic streams to eliminate hierarchies and silos in learning; 4) promoting multilingualism and life skills such as communication, teamwork, co- operation and resilience, and 5) regular formative assessment for learning instead of summative assessment.

While NEP 2020 envisages significant improvements in the education system in India, one common thread that runs across the policy is the importance of technology in teaching and learning, removing language barriers, increasing access for students, and in educational planning and management. As the country prepares its next generation, technology is likely to be an integral part of their learning journey.

Technology is expected to be fully integrated in the education ecosystem, helping students to leverage online tools and build relevant skills. However, affordable devices and bandwidth along with access to quality content would be required to fully take advantage of this opportunity. It's equally important to ensure that the teachers are well trained and equipped to integrate digital tools in their curriculum development and pedagogy, and also monitor student performance to ensure that the targeted learning outcomes are met.

¹ 'National Education Policy 2020', MHRD, July 2020

Education sector landscape in India

India has a multi-layered education system from pre-primary/*anganwadi*'s to higher education institutions.

Formal education sector comprises primary, middle, and higher secondary schools, intermediate or pre-university course colleges, under graduation and post-graduation colleges, regulated by the state and central governments and funded by the state or private organisations. In addition, there are professional institutions and universities dedicated for professional courses, such as engineering, medicine, law, and business administration.

The informal sector consists of pre-primary, coaching classes, vocational education, and technology-based educational courses as a supplement to formal education.

As of 2019, around 248 million students² were enrolled in 1.6 million schools, of which, 1.2 million government and aided schools cater to around 156 million students. The gross enrolment ratio for higher education in India is 26.3 with 37 million students enrolled in 41,000 colleges and universities across the country.³

In 2018, National Statistical Office (NSO) recorded that 76 percent of students from rural households attended primary and middle schools run by the government as opposed to 38 percent of students from urban households. However, the gap becomes smaller when it comes to graduates and above, with 50 percent rural and 41 percent urban students opting to study in government institutions.⁴

This gap extends to the digital sector as well, where just 4 percent of the rural households are reported to have

computer access, compared with 23 percent of the urban households. In terms of internet access, 15 percent of rural households are reported to have internet access compared with 42 percent of urban households.

As India has only 9.4 million teachers for around 250 million students, the ratio has been disproportionate. Also, the difference in quality education in urban and rural areas has created a market for quality education with affordable access.

An overview: EdTech

Globally, online education market is estimated to be around US\$ 157 billion in 2019,⁵ estimated to grow at 14 percent Compound Annual Growth Rate (CAGR) to reach US\$ 345 billion in 2025. In terms of learning mode, self-paced learning accounted for 60 percent of the market share compared with instructor-led learning.

Over the last decade, disruptive technologies in Information and Communication Technology (ICT)-linked classrooms, cloud-based platform, Virtual Reality (VR), and Augmented Reality (AR) have become more prevalent in the education sector. For the learning platforms in the current market, game-based learning content, mobile learning (m-learning), deployment of AR, and increased adoption of cloud infrastructure for hosting applications are expected to be the key growth drivers.

EdTech in India has witnessed a steady growth in the past few years. As of 2019, there were around 4450 startups in India focusing on digital education services, and the market size was estimated to be around US\$ 2.9 billion in 2019, projected to grow to US\$ 10 billion by 2025 at 39 percent CAGR.⁶ The COVID-19 pandemic has acted as a strong catalyst, forcing digital adoption across segments.

² Department of School Education & Literacy, MHRD, 2018-2019

³ All India Survey on Higher Education, AISHE, 2018-2019

⁴ 'Household Social Consumption: Education', NSO, 2018

⁵ 'E-Learning - Global Outlook & Forecast (2020-2025)' – Arizton Advisory & Intelligence

⁶ 'The Future of EdTech in India' - Inc42, 2020

Broadly, the EdTech market in India is classified as follows:

Primary and secondary supplementary education

Also called as K-12 segment, it mainly caters to the school curriculum for students up to grade 12. Most of the industry players in this segment operate on a Business-to-Consumer (B2C) or Customer-to-Customer (C2C) business model, in which the EdTech company prepares a platform providing content aligned with school curriculum on a subscription basis, which can be customised per the student's requirements. Content is either owned by the platform (B2C model) or aggregated through partnership with tutors (C2C model) with a revenue sharing between the tutors/content generators and the platform. Platforms also provide value-added services, such as process tracking, personalised assessments and career counselling, along with technology driven improvements (such as use of AI and Machine Learning [ML]) to enhance the learning process and outcomes.

Per various estimates, the market for K-12 segment is expected to increase from US\$ 1.2 billion in 2020 to US\$ 4.3 billion in 2025, 3.7 times improvement between 2020 and 2025. K-12 segment is also expected to remain as one of the largest segments in the overall EdTech market, accounting for more than 40 percent of the total market by 2025.⁷ The growth in this segment is expected to be driven by change in consumer behaviour towards online channels for supplementary learning, especially coming from Tier-II and Tier-III cities. Skill development focusing on coding, and other STEM-related skills are some of the emerging opportunities in the K-12 segment that's gaining traction in the recent times.

Test preparation

Online platforms in this segment provide content such as webinars, video lectures, and mock tests to help students prepare for competitive examinations for

admission to higher educational institutions (JEE, NEET, CLAT, CAT, etc.) and government jobs (bank PO, railways, etc.).

This segment is expected to reach US\$ 3.99 billion by 2025, expanding at a CAGR of 38 percent during 2020-2025, making the fastest growing segment due to the increase in career-focused population and improved internet infrastructure. The segment is also witnessing the emergence of the hybrid delivery models, with traditional online (and offline) players branching into offline centres (and online presence) to provide students with an integrated learning experience.

A shift in demand is also observed for content in vernacular languages, as the aspirants of government jobs, such as bank and insurance exams, prefer streaming content in local languages.

Reskilling (upskilling) and online certifications

Another important segment in the post K-12 market is reskilling, upskilling, and online certifications, which validate the defined skill sets of candidates with the help of live projects, case studies, assignments, and query resolutions. This segment is witnessing increasing growth due to the evolving business landscape and adoption of emerging technologies such as AI, ML, Internet of Things (IoT) and big data, which has widened the skill gap for the current crop of employees. Per various estimates, around 40 percent of the workforce would require reskilling as the market moves towards mainstream adoption of emerging technologies.

In 2020, the market size of this segment is estimated to be US\$ 0.58 billion, growing at CAGR of 19 percent to reach US\$ 1.38 billion by 2025. The surge in demand is witnessed due to the convenience and popularity of online platforms amongst the working professionals and increasing

⁷ 'The Future of EdTech in India' - Inc42, 2020

partnerships between industry and academia in providing market-ready courses and customised modules, focusing on reskilling and upskilling initiatives.

From vendor perspective, B2C players dominate the market; however, with corporates emphasising on employee training B2B segment is also gaining traction.

Higher education

It is an alternative to traditional higher education courses where universities provide online courses along with a degree/diploma as applicable. This is an evolution of the traditional distant education model with technology-based content and service delivery. Online delivery of post-graduate courses has witnessed increased adoption compared with graduate level and diploma courses, popular courses being Master of Business Administration (MBA) and Master of Computer Application (MCA). The market is driven by B2C players and aggregators.

The market was valued at US\$ 67 million in 2019 and is anticipated to increase to US\$ 547 million by 2024, growing at 40 percent CAGR during the period.⁸

Compared with other segments, higher education by its very own nature requires greater level of involvement and engagement from students as well as teachers, as the focus is on acquiring specialised knowledge and practical training. While digital tools can supplement the traditional learning environment in higher education, their applicability may be limited, if they lack in high-quality content at graduate/post-graduate level, as well as in enabling practical training as may be required. EdTech companies focusing on higher

education market would do well to keep the unique requirements of this segment in mind in designing the solutions, so that they remain relevant to the target segment.

Emerging trends and investment activity

Broadly, the growth of hybrid learning models, combining the best of online and offline delivery models; gamification/incentive-based learning to improve user experience; and the raise of value added services such as internships, live projects, group discussions, and career counselling as part of the learning platforms are some of the emerging trends in the online education market.

Venture capital and private equity investments in the EdTech sector have increased most 4x in the nine months of 2020 to reach US\$ 1.5 billion,⁹ compared with US\$ 409 million in the full year 2019, making EdTech the most funded sector in 2020 so far. The COVID-19 pandemic has provided a huge impetus to the sector.

The top players in the industry have managed to secure bulk of the fresh funds coming in, driven by the market leadership in growing segments, scale, and their competitive advantage to be able to capture the sudden demand generated due to the pandemic. Flush with this liquidity, the sector is also witnessing considerable consolidation activity, as the market moves towards the new equilibrium.

Government initiatives

In May 2020, the Ministry of Human Resources Development (MHRD) issued a comprehensive initiative called 'PM eVidya', which aims to unify efforts related to digital, online, on-air education, and enable equitable multi-mode access to education for the benefit of 250 million students.¹⁰

⁸ 'Online Education Market in India' – Netscribers, 2019

⁹ Venture Intelligence, Deloitte analysis

¹⁰ 'India Report – Digital Education', MHRD, June 2020

Digital infrastructure for knowledge sharing – DIKSHA

Launched in September 2017, DIKSHA is a national platform for school education for K-12 students, which can be accessed through a web portal and mobile applications. It provides numerous curricula linked e-content through QR coded Energized Textbooks (ETBs).

In April 2020, VidyaDaan was launched as a national content contribution programme that leverages the DIKSHA platform and tools to seek and allow contribution/donation of e-learning resources for school education by educational bodies, private bodies, and individual experts.

Swayam Prabha TV Channels

The initiative is meant to support and reach those who do not have access to internet. A total of 32 channels are devoted to telecast high-quality educational programmes earmarked separately for school and higher education.

To ensure coherent access through multi-modal delivery, the same content will be organised by chapters and topics on DIKSHA to ensure asynchronous usage by anyone, anytime, anywhere.

About 92 online MOOC courses related to grades 9 to 12 of open schooling are uploaded on SWAYAM portal where 1.5 crore students are enrolled.

On-air education

Radio broadcast is used for children in remote areas, especially grade 1-5 with the focus on activity-based learning and about 290 community radio stations are set up for grade 9-12 (open schooling). Shiksha Vani of Central Broad for Secondary Education (CBSE), a podcast containing 430 audio clips is also available for grades 9-12.

E-textbooks

ePathshala is a web portal and mobile application for e-textbooks, which contains more than 600 digital books and 3,500 audio and video content of NCERT in various languages such

as Hindi, English, Sanskrit, and Urdu. The National Repository of Open Educational Resources (NROER) is an open storehouse that holds 17,500 pieces of e-content of NCERT and other collaborative partners for all grades.

Key challenges of EdTech sector

Awareness and user engagement

User engagement is a key success factor for online education platforms. Unlike segments, such as e-commerce where value addition is evident from consumer perspective (in terms of low-cost pricing or convenience) the benefits of digital education accrue over a period of time, in terms of improved learning outcomes. Lack of engagement and outcomes result in customer churn, and EdTech companies look to improve engagement endeavour to bring holistic learning experience (in addition to content) including peer interaction, group learning, and feedback mechanisms that can improve the overall engagement in the platform.

Limitations in digital infrastructure

Online education platforms require sufficient bandwidth and devices such as laptop, desktop, tablets, or smartphones, which is not as penetrated in rural areas as it is in urban areas possibly creating a digital divide. Affordable devices and broadband connectivity remain key requirements, and we should look at solutions to ensure that the schools in the hinterland are equipped with necessary technology infrastructure, for realising the potential of EdTech.

Availability of free content

As more and more education resources are digitised, there is always a low-cost/free content available for consumers, and it's imperative for EdTech companies to provide quality services at affordable pricing to stay relevant.

Technology and skilled workforce

Online platforms require course developers, designers, technology experts, and subject matter experts to develop content, and lack of these professionals would affect the quality

of the courses and credibility of the solution offering in the long run.

Conclusion

The COVID-19 pandemic has forced digital adoption in the education sector and is heralding the next phase of digital first learning. India's nascent EdTech industry has an opportunity to move beyond the traditional segments, such as test preparation and supplemental learning to a more personalised and targeted learning solutions leveraging advanced technologies such as AI, ML, and big data to improve learning outcomes. As the country prepares for the paradigm shift in education through NEP 2020, technology is expected to be fully integrated in the education ecosystem, and EdTech companies have to find ways to improve engagement and learning outcomes by providing holistic learning experience for students at affordable pricing.



Future of digital for start-ups

The Indian start-up ecosystem is one of the fastest growing and the third largest in the world at present after China and the US. It has evolved over the years and this segment's growth has gathered momentum over the past few years aided by multiple factors.

- **Rising number of unicorns in India:** India is currently home to 21 unicorns valued at US\$73.2 billion.¹ While the number of unicorns is still low compared with the US (233) and China (227), the number of years taken by Indian forms to reach the unicorn league is almost comparable. This is a testimony to the strong entrepreneurial spirit and potential demand in the country.
- **Increasing focus of investors in India:** At present, 50+ start-ups have more than US\$50 million in funding, leading to emergence of unicorns. These unicorns, in turn, are investing in other start-ups. As the start-up ecosystem is maturing and average entrepreneur is becoming stronger, investors are gaining confidence in investing in India.
- **Government's focus on start-ups with 'Start-up India':** The government has taken several steps over the past few years to open up the economy, improve the ease-of-doing business, and make the nation more competitive on a global playing field. 'Start-up India' is amongst many initiatives by the government. It aims to build a strong, conducive, growth-oriented environment for Indian start-ups and thereby, help generate numerous job opportunities in the country.

¹ Hurun Research Institute

- Regulatory support:** Policymakers' support is needed to create a conducive environment for start-ups to explore new avenues without ambiguity. Since 2014, the pace of regulatory support has only accelerated with specific start-up policies to enable expansion of infrastructure, co-working spaces, and access to funding amongst others.
- Building on India's digital infrastructure:** The improvement in digital infrastructure is enabling start-ups to increase exponentially,

and reach markets and customers that were untapped otherwise. India has expanded the addressable market with growth in mobile internet users. Explosion of data consumption and pervasive 4G coverage is one major factor attracting investors to fund the start-up ecosystem.

This has led to rapid growth in the number of start-ups and the impact it has on the economy in terms of direct and indirect jobs created apart from the investment raised.

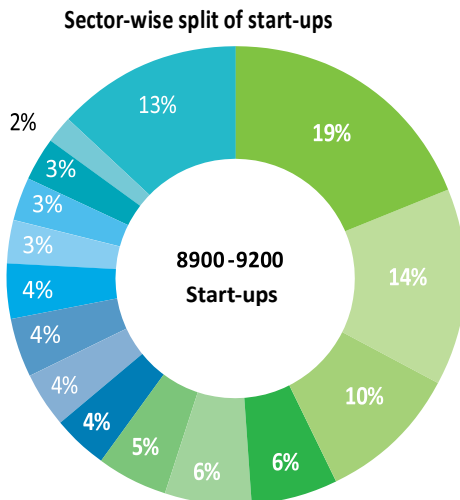
	2014 ⁶	2019 ⁶	2025 ²
# of Unicorns ⁵	5	24	95-105
Cumulative Valuation ³	\$ 10-20 Bn	\$ 95 - 101 Bn	\$ 350 - 390 Bn
# of Direct jobs ³	80-85k	390-430k	1100-125k
# of Indirect jobs ⁴	240-300k	1400-1600k	3900-4400k

Source: Report on Indian tech start-up ecosystem by NASSCOM and Zinnov, 2019

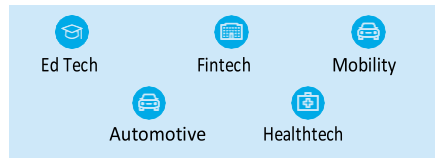
With about 8,900 start-ups, as of 2019 in India, growth in the start-up ecosystem has now touched myriad sectors with entrepreneurs using this opportunity across sectors and markets. Start-ups in edtech, fin-tech, mobility, and health-tech have registered the highest growth over the past five years. Indian start-

ups are increasingly using advanced technology across areas. While Artificial Intelligence (AI) and Internet of Things (IoT) had already seen applications across areas; blockchain, 3D printing, robotics, and drone start-ups continue to expand rapidly.

- Enterprise
- Healthtech
- FinTech HRTech
- Edtech
- Retail & Retail Tech Travel
- and Hospitality SCM &
- Logistic
- Real Estate and Construction
- Automotive
- Industrial & Manufacturing Food &
- Foodtech
- Mobility
- AgriTech
- Others



High Growth (CAGR >50%, since 2014)



Medium Growth (CAGR >35%, since 2014)



Note: Only sectors with 200+ active start-ups have been considered

Source: Report on Indian tech start-up ecosystem by NASSCOM and Zinnov, 2019

Start-ups in the high-growth segment have invariably focused their offerings on technology. This has been observed globally with e-commerce, fintech, AI, and SaaS being the top core competence sectors of the world's unicorns and make up 45.9 percent of the sectoral universe of these unicorns. In India, one-third of the unicorns conduct business in the e-commerce sector. Start-ups' operating models also witnessed a significant change driven by either a change in consumer behaviour or the need to operate efficiently in the post pandemic era. Given the

increasing adoption of digital, start-ups must reinvent solutions or use cases and the delivery models for the problems customers might face and ensure a superior customer experience.

Given the emerging trends, a few salient areas that will gain traction in the near to medium term have been highlighted across sectors. Sectors have been classified on the basis of their historical growth trends. Select use cases by a few successful start-ups in the respective sectors have also been highlighted.

Sector	New use cases emerging	Examples
High-growth start-ups		
Ed-tech	<ul style="list-style-type: none"> Digital and vernacular content Gamification and tracking 	<p>Byju'S, one of India's foremost edtech start-up, has improved adoption of online education through gamification and personalisation.</p> <p>Unacademy is providing an online learning platform with live course contents and videos in vernacular languages, helping in remote learning.</p>
Fin-tech	<ul style="list-style-type: none"> Credit score management Invoice reconciliation Fraud prevention AI-based wealth management Internet first banks 	<p>Khatabook offers a digital platform for small businesses to manage ledger accounts online.</p> <p>CRED provides a platform for credit card bill and payment management for retail customers.</p> <p>Lending Kart is an online platform that provides working capital for small and medium businesses in India.</p>
Mobility	<ul style="list-style-type: none"> Vehicle-as-a-service Fleet management V2X connectivity 	<p>Rapido offers an online platform to people to access affordable intra-city commute with bike taxis.</p> <p>LocoNav provides fleet management and vehicle tracking solutions for fleet owners, businesses owning vehicles, and transporters.</p>
Health-tech	<ul style="list-style-type: none"> Smart tools for e-prescription Low-cost devices AI-enabled diagnostic 	<p>Pharmeasy operates in a hyperlocal platform for ordering medicines and conducting diagnostic tests .</p> <p>Qure.ai operates on a deep learning algorithm that interprets radiology images, making healthcare accesible and affordable for people.</p>
Medium Growth Startup		
Retail	<ul style="list-style-type: none"> Cashless checkout Experiential commerce Fresh produce monitoring Just-in-time inventory 	<p>Vue.ai provides AI-based visual search and recommendation solution for fashion.</p> <p>Bulbul is a video shopping app that aims to make online shopping real via live streaming in a language the audience is most comfortable with.</p>

Sector	New use cases emerging	Examples
Enterprise	<ul style="list-style-type: none"> • Cloud optimization • Voice bots • Business process automation 	<p>Zappy.ai uses cognitive RPA software to help enterprises eliminate robotic tasks and automate their manual processes.</p> <p>Facilio provides a solution for facility management that includes managing building operations and maintenance through IoT and ML.</p>
Real estate and construction	<ul style="list-style-type: none"> • Virtualisation of real estates • Digitisation of contracting • Integration of banking facility to enable online payments 	<p>Square Yards is strengthening and building an integrated real estate ecosystem starting from virtual tours to payment settlement.</p> <p>Housing.com launched digital payment options in collaboration with Nobroker.com to help tenants in collaboration with HDFC PayZapp.</p>
SCM and logistics	<ul style="list-style-type: none"> • Route optimisation • Hypelocal delivery • Equipment and goods tracking 	<p>Shadowfax provides an integrated 3PL service, including last mile delivery for the B2B segment.</p> <p>Locus provides a logistics management software for optimisation of the supply chain that includes route and delivery optimisation.</p>

Source: Report on Indian tech Startup Ecosystem by NASSCOM and Zinnov, 2019

As highlighted above, traction is expected in areas such as edtech, fintech, mobility, and healthtech start-ups, which would see a marked improvement in the quality of use cases. Moreover, other emerging sectors, such as retail and retailtech, enterprise solution, real estate and construction, and agritech would observe a significant improvement.

With 18 percent of the base being deep-tech start-ups, applications have permeated across industrial sectors. Further, convergence of technologies is enabling start-ups to solve for more use-cases. With increasing global competition, adoption of deep-tech is essential to address many challenges that the industry and companies

currently face. The increasing adoption is also reflective of the improving technology skills in the Indian start-up ecosystem. The impact of India-specific technology stacks on market dynamics is expected to be a key growth driver of the Indian start-up ecosystem. It can potentially enable global disruption in industries such as Healthtech, edtech, and financial services.

Given the increasing focus and support from policymakers, the expanding base of talent with niche skills, and improving exposure to application and technologies, diffusion of deep-tech is expected to be a crucial enabler in creating a globally recognised innovation ecosystem in India.

Source:

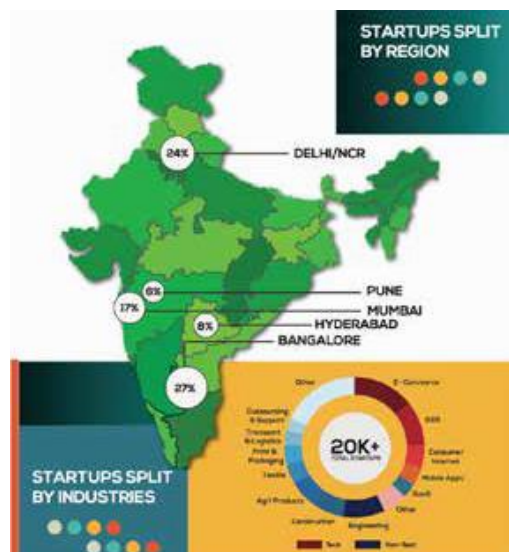
1. <https://www.orfonline.org/research/the-indian-startup-ecosystem-drivers-challenges-and-pillars-of-support-55387/#:~:text=Building%20and%20Scaling%20an%20Indian,background%20and%20I-ack%20business%20knowledge>
2. <http://10000startups.com/frontend/images/Indian-Tech-Start-up-Ecosystem-2019-report.pdf>



Innovations in start-ups

The world is changing at a breakneck speed, and so is the way we work and conduct business. Startups play a critical role in defining India’s business landscape. India’s start-up ecosystem has witnessed enormous growth in the past decade, and as of today, it is the second largest startup ecosystem in the world.ⁱ

Indian start-ups were deeply hit by the global pandemic, leading to the shutdown of about 15 percent of start-ups. However, the Indian startup ecosystem is recovering at an astounding speed. Currently, there are about 40,000 active startups in India, with 34 unicorn start-ups, and 52 soonicorns start-ups that demonstrate the potential to become unicorns by 2022.ⁱⁱ



Source: <https://www.startupindia.gov.in/content/sih/en/startup-scheme/International/indian-startup-ecosystem.html>

ⁱ <https://www.startupindia.gov.in/content/sih/en/startup-scheme/International/indian-startup-ecosystem.html>

ⁱⁱ <https://inc42.com/datalab/presenting-the-state-of-indian-startup-ecosystem-report-2020/>

According to a report by Inc.42,ⁱⁱⁱ from a funding point of view, the Indian start-up ecosystem has attracted over US\$63 billion of funding between 2016 and H1 2020. The e-commerce sector, followed by fintech and consumer services, has received the highest funding thus far in 2020. Further, the deeptech sector has also been witnessing growth—the majority of which are based out of Bengaluru and specialise in Artificial Intelligence/Machine Learning (AI/ML) solutions that can be leveraged across sectors. The figure below highlights the industry and location split for the Indian start-ups.

The Indian start-up ecosystem has been thriving and providing impressive business solutions that show strong results. A few examples of the remarkable work that various start-ups are undertaking are mentioned below:

1. **Yellow messenger:** This start-up provides a cognitive engagement platform cloud for internal and external automation. This solution, through a conversational AI, helps with customer engagement, customer support, employee automation, enterprise automation, and WhatsApp for business.
2. **PayAgri:** It offers an online platform to connect small and marginal farmers with stakeholders in the value chain, e.g., farm input suppliers, agronomists, banks, buyers, etc. It has helped about 2,000 farmers in Andhra Pradesh access farm inputs, crop insurance, and technical support at better prices.
3. **Disprz:** This is an HRtech and training start-up, which provides cloud-based learning management and engagement software with an AI-based skill and career acceleration suite. Its key features include employee progress tracking, behavioural skills assessment, customised employee analytics, rule-based employee engagement, and targeted workplace interactions.

How do we engage with start-ups?

We partner with different start-ups to solve our clients' most complex innovation challenges. We act as a catalyst and play a critical role in filtering the relevant technologies for our clients from a sea of technology hype. Similarly, we also offer services to start-ups to help them harness global market opportunities.

Our services for the corporate/government clients include immersion, scouting, proof of concept, and incubation. Some of our successful engagements enabled through start-up solutions include the following:

1. We have developed a cloud-based analytics solution in collaboration with an analytics start-up to help automotive Original Equipment Manufacturers (OEMs) manage, collate, and analyse dealership data to drive performance improvement. This platform enables users to draw business insights on a real-time basis while providing visibility on business performance. Additionally, its functionality includes customised reporting, benchmarking across peers, and deep analytics.
2. Deloitte worked with a large manufacturing company's financial controllers to implement Natural Language Generation (NLG) technology, the automation of narratives and derivation of insights from structured data. Leveraging a fintech solution, we were able to successfully provide the reports containing humanised and targeted narratives to the financial controllers of the firm in a language they required. Further, this created a cost-benefit for the company.
3. Deloitte worked with a large public sector bank in India to conduct a micro-market assessment using geo-spatial data analytics of retail and Small and Medium Enterprises (SME) markets in five metropolitan cities for the key asset, liability, and

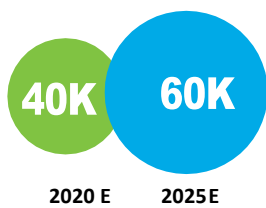
ⁱⁱⁱ <https://inc42.com/reports/the-state-of-indian-startup-ecosystem-report-2020/>

fee income products. The goal of this engagement was to help the bank create a strong marketing strategy and determine the relevant operating model changes.

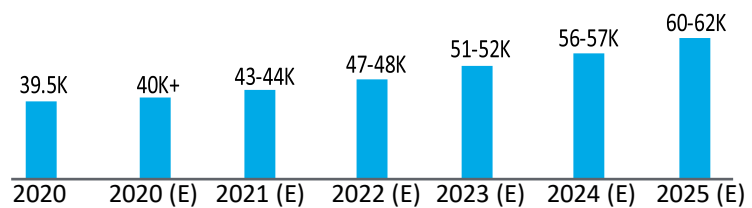
The way ahead

Indian start-up ecosystem will expand significantly by 2025

Estimated number of Active Start-ups in India (In thousands)



Estimated number of Start-ups year wise



Source: TiE-zinnov start-up report

The Indian start-up ecosystem has demonstrated resilience in the face of challenges posed by COVID-19. The start-ups are recovering at an incredible speed and are all poised to accelerate India’s economic recovery. According to a recent report by TiE and Zinnov on the Indian start-ups, the start-up ecosystem will grow at 8-9 percent Compound Annual Growth Rate (CAGR) over the next five years, and by 2025, we could have a pool of 100 unicorn start-ups. This growth will be primarily owing to increased policy support and adoption of digital technologies, along with a greater acceptance of entrepreneurship as a career by the youth.^{iv}

^{iv} https://fastq.in/tie_delhi.aspx

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