

Indian Startups (2016–2021): What Lies Ahead?

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Startup India, which was launched in January 2016, completed five years in January 2022. To mark this occasion, January 16 has been declared as the National Startup Day, starting from 2022. Startup India has made a few significant strides in the preceding five years. We highlight 10 key features of the Indian startup ecosystem followed by a few grey areas where the startup community, academic fraternity, and policy making institutions could pay specific attention. These key features define the strengths of the Indian startup ecosystem. From the nascent stage, Indian startup ecosystem grew considerably to stand as the third largest startup ecosystem in the world after the United States and China (see discussion in Chaudhari & Sinha, 2021; Jha, 2018; Korreck, 2019; NASSCOM, 2019; Rault & Mathew, 2019; RBI, 2019; Singh et al. 2019; Tiwari et al., 2021). As of January 2022, *startupindia* website lists 185,000 startups, 783 incubators, and 167 accelerators. Even during the COVID-19 pandemic, Indian startups continued to showcase resilience though some startups suffered due to their contact-intensive activities. We refer to the works mentioned in the References of this editorial, which bring out an informed discussion on the topic and enable us to highlight the scope for further studies. Going forward, *BIMTECH Business Perspectives* will provide space to research studies pertaining to various facets of Indian startups.

The 10 key highlights of the Indian startup ecosystem (2016–2021)

1. **Creation of Unicorns:** India produced 42 unicorn startups during 2021, highest ever in a year since the Startup India program was launched. The cumulative number of unicorns reached 82 by the end of 2021. This positions India just behind the US (489 unicorns) and China (231 unicorns) in unicorn creation. These unicorns represent diverse sectors from insurance to payments, and from wealth management to social commerce. However, startups from manufacturing, agriculture, and agritech are still far from making a mark in the club. While unicorn represents dynamism in the ecosystem, a representation of diverse sectors is necessary for achieving the goal of inclusiveness and sustainability.
2. **IPO Bubble:** Financial capital is an important resource for the startup entrepreneurs. Startup entrepreneurs have a plethora of options to mobilise finance for operational and investment purposes. These include but are not limited to seed capital, grants from different agencies, private equity, non-equity assistance, angel investment, crowdfunding, debt financing, convertible notes, venture capital rounds, and initial public offerings (IPOs), among others. While many of these options are driven by private equity and venture capital funds, early-stage funding normally comes

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from angel investors and government and corporate-supported seed funds. The ability to raise venture capital funds depends, among others, on high growth potential and ability to make quick bucks. Startups go for an IPO when it has reached a relatively mature stage in terms of its market penetration and growth. In India, starting with the year 2021, several startups launched IPO. Nevertheless, a closer look at the startups launching IPOs suggests that out of all IPOs by startups in 2021 none represents sectors such as agriculture and manufacturing. While more IPOs from Indian startups are in the offing in 2022, the absence of agriculture and manufacturing sector startups will require a course correction, as the Indian startup ecosystem is prominently skewed in favour of services. Allowing startups from different sectors will have a positive impact on balanced development of the startup ecosystem.

3. **Quick and Convenient:** Startups are seen to compete with their offering that has the element of quickness and convenience, such as home delivery of products in 10 minutes compared to 30 minutes, or home saloons, medicines at the doorstep, etc. Although these are welcome innovations, the scope of such models remains restricted to large cities. Further, it leads to undue pressure on gig economy workers. Further innovation will be needed in underserved markets such as rural and semi-urban areas to improve reliability and convenience.
4. **Acquisitions and Exit:** As venture capital exits from the early investments, hundreds of startups have been acquired within five years of inception and both startups and established firms have emerged as acquirers. While acquisition is an exit strategy for many founders and venture capital funds (Arora et al., 2020; Mehta et al., 2021), there have been cases of hostile takeovers and threat strategies adopted by some of the acquirers. Regulatory watch will have to prevail to discourage anti-competitive threats and hostile takeovers.
5. **Venture Capital, Angel, Crowd Funding:** Funding is available for a variety of sectors; still, it is predominantly for digital, technology-embedded, and convenience enhancing startups. Sources of funds are found to vary based on purpose (Singh & Mungila Hillemane, 2021). Indian startups and their funding have prompted several research studies (Chaudhari & Sinha, 2021; Ghosh, 2021; Mehta et al., 2021; Panda & Dash, 2016; Panda & Dash, 2016; Sabarinathan, 2019; Singh & Bala Subrahmanya, 2021).
6. **Women Startups:** Women startups have made a mark in the Indian startup ecosystem both in terms of achievement of faster growth and creation of unicorn. However, challenges persist for women entrepreneurs (Kappal & Rastogi, 2020; Nair, 2020, Shukla et al. 2018; Tiwari et al., 2021). More research involving women entrepreneurship is required to understand its nuances and context specificities (Agarwal & Lenka, 2018).
7. **State-specific Startup Programmes:** Most of the state governments in the country have started promoting startups through state-specific startup programmes. A few states (Andhra Pradesh, Kerala) ran state-specific startup programmes even before the central Startup India scheme was launched. The state-specific ecosystems have a larger role to play in regional development. See DIPP (2018) for the evolution of state-specific startup programmes. Regional startup ecosystems in India are quite diverse as some of the regional centres are well ahead of other centres (Subrahmanya, 2017). To promote a competitive environment, Startup India has created guiding principles for ranking state-level startup ecosystems (see DPIIT, 2020).
8. **Startups and Educational Institutions:** Universities and academic institutions have started playing a dynamic role in the Indian startup ecosystem. Many successful founders have incubated their startups in the academic institution-based incubators. The entrepreneurial potential of graduates varies based on their stream of study, such as business or engineering. Nonetheless, these entrepreneurs from different academic streams have demonstrated differing advantages

leadership and achievement (Mukesh et al., 2021). Government policy of promoting incubators in academic institutions have started yielding results as entrepreneurs in the ideation and validation stages can use incubation support. The role of legislation in bringing out university-based startups has been noticed in academic studies too (Pattnaik & Pandey, 2017).

9. **Young Founders & Demographic Advantage:** While some founders have handsome industry experience, majority of founders come with a sojourn in the industry or directly after their higher studies in technology and/or management. The number of incubation centres saw an exponential growth during 2016-2021. By the end of 2021, the number of incubation centres in India was in excess of 775. Young entrepreneurs now have the option of availing these facilities through a competitive and credential-based entry process. As job creation in traditional industries lags behind the number of new entrants to the job market in the country, startups present an alternative even though its capacity still lags behind the job requirement in the economy. However, employment in startups is not under distress employment as these ventures present a significant potential to turn into a high growth enterprise. However, they need to be well nurtured.
10. **Foreign Market Entry and Internationalisation:** Several startups have already made their presence in the foreign markets as well either through acquisition or collaboration with foreign partners. However, there are also cases of setback in overseas operations in a number of cases. Startups aiming to internationalize early need to understand various internal and external factors to achieve success. The drivers of and success factors behind internationalization need a better understanding. Studies on startup internationalization point to several market entry challenges (Scillitoe & Birasnav, 2021). Still, more studies are needed to provide managerial and policy implications with respect to internationalization of Indian startups.

Grey Areas and Scope for Further Study

1. The encouraging trend of tech-driven startups leaves a protracted shadow over several lagging sectors. Several sectors still lag behind in new venture creation and growth generation. The dwarfed sectors include manufacturing, and agri-based ventures. Signs of dualism within and across sectors in terms of venture growth can be seen as agricultural startups face the challenge of logistics as it requires to travel a large distance for selling of the produce (Kulkarni et al., 2021). Investment in rural infrastructure and connectivity are important in creating a level playing field among startups operating out of large cities and small towns. The persistence of COVID-19 has further put a break on several other contact-heavy sector startups. Logistic startups have also faced sourcing risk during the pandemic (Sreenivasan & Suresh, 2021). However, some of the COVID-19 challenges could be mitigated through technology as the latter positively influences supply chain risk mitigation (Nayal et al., 2021).
2. Failure of startups is another concern. Startup failure is common across ecosystems (IBM, 2016), especially in the technology domain. A few studies have looked at the failure and survival of select startups in India (Kalyanasundaram et al., 2021; Satyanarayana et al., 2021), the role of entrepreneurial bricolage in sustainable performance of startups (Sivathanu & Pillai, 2020) and the challenges in talent acquisition (Mukul & Saini, 2021).
3. Collaboration assumes significance in maximising value in the startup ecosystem through innovation and value creation. Startups' collaboration with both domestic as well as multinational corporations can realise the potential of the new ventures (Prashantham & Kumar, 2019). There is a vast scope for collaboration among startup incumbents (Palmié et al. 2021).

4. Skewness in risk capital funding is another concern (e.g., Tiwari et al., 2021). Limited amount of funding by startup investors in agriculture and manufacturing sectors is noteworthy. Similarly, women and marginalised founders too need better resource accessibility.
5. Incubators can play a vibrant role in strengthening startups incubated outside the metro- and tier-one cities. Studies point to the important role of science, technology and innovation-based incubators (Surana et al., 2020). Moving beyond frugal innovation is also needed in sectors that have experienced rapid technological changes (see Krishnan, 2010 for an early discussion). Incubators differ in its ability to provide incubation services to the incubates. Capacity building will be the key, especially where incubators lack expertise and networking avenues. Evaluation of incubator success is another area where empirical evidence is needed to identify conditions necessary for effective incubation facilities.
6. In view of several failed internationalisation attempts by Indian startups, identification of the drivers and challenges of startup internationalization from emerging market into low income as well as high income countries is needed.
7. Ethical practices by a section of startups are another concern. Several cases have been noticed in the past about exploitative and unethical customer acquisition strategies by some of the startups. Such practices need to be discouraged by every quarter to retain the sanctity of the sector. Self-regulation in niche sectors, to protect interest of all parties, in line with microfinance sector, could also be practiced.
8. Regulatory challenges in raising fund and issuing IPOs have been a concern for the growth-stage startups. Several startups are also concerned about regulatory challenges to innovation. Ahluwalia et al. (2020) discuss transaction cost economics and innovation in technology that can aid startup financing. However, in the Indian context, regulatory uncertainty may limit the adoption of innovative financing options such as blockchain technology for startup financing. Several startups have moved abroad in search of better opportunities of fundraising and collaboration opportunities. Market has its limitation in channelling resources where there are externalities, and the goods and services have public good or merit good properties. While there will be many pro-business demands from startups, in framing the guidelines, regulators will need to keep an eye on social good and level playing field for all stakeholders.
9. Intellectual property protection has been a neglected issue in the startup space. Intellectual property protection is found to be low in Indian startups (CIRC, 2019). This might have a bearing on the dynamics of innovation.
10. Social entrepreneurship has grown but the scale and intensity remain subdued. Social enterprises assume importance in realizing Sustainable Development Goals (Ganesh et al., 2018). Aligning sustainability with business goals will require a comprehensive and co-ordinated effort from all stakeholders.

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