

Start-ups Take-off

The first article on Start-ups in the previous issue of *Invention Intelligence* provided a bird's eye view about the need to encourage start-ups, ground rules, skill-leveraging, and business assistance schemes. The second article in this series, explores further the opportunities in the Indian Start-up ecosystem, the funding trends among sectors and evolving roadmaps of start-ups.

Getting Ready to Ride the Start-up Wave!

DR. SWATI SUBODH

The advent of the start-up revolution has seen an upswing in the number of people willing to test the waters and ride the proverbial wave. One can never be too prepared; it's a plunge into possibilities and opportunities, where the journey is as unique as the outcome. Let's take a closer look into this ever-evolving landscape and deep dive into some facts and perceptions that hold key to meeting our nation's entrepreneurial appetite.

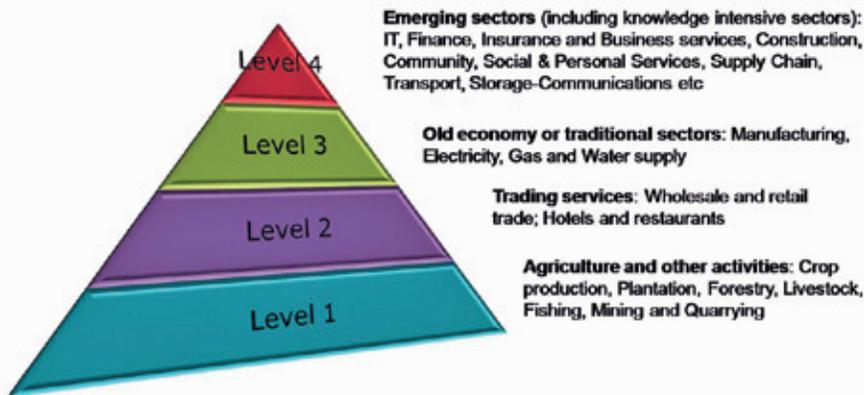
Opportunities galore!

India is shining and the time is ripe to convert opportunities to action. A recent report by the National Knowledge Commission (NKC), an Entrepreneurship Pyramid based on the number of people engaged in each sector indicated that although emerging sectors (Level 4) have the least number of people, it is poised for the highest growth rate. It also accounts for the highest number of start-up registrations. Going further, a broadening of Level 3 and 4 is expected with activities from Levels 1 and 2 migrating to other levels. Depending on which angle from which viewed; this could portray both concern and promise.

Many sectors are in focus for thrust and growth. This includes Fin Tech, Energy, Water, Manufacturing, Health Care, Cyber-security, and Internet of Things (IoT), according to Mr. Harkesh Mittal, Head, National S&T Entrepreneurship Development Board. Niche investors are giving thrust to specific sectors. For example, the Chinese Hax Accelerator is investing \$100k each in 10 start-ups which focus on hardware, and IoT by 2017. A corpus of 100 Cr has been set up by ONGC to nurture and incubate new ideas related to the oil & gas sector reveals Chaitanya Kumar, Head of Marketing at 91Spring Board.

Speaking of sector-wise growth and opportunities, investments were high in B2C start-ups in 2015. This was driven by higher smart phone & internet penetration, customer convenience, and the ability of e-commerce companies to offer competitive pricing because of elimination of middle men etc. Serial entrepreneur, start-up mentor, investor and Forbes Under 30 Asia'16, Dr. Ritesh Malik believes in the India Shining story. He says, "What we're seeing is just the tip of the iceberg. We're in a country with more digital literacy than alphabetic literacy, this is bound to increase".





Entrepreneurship Pyramid Adapted from the Entrepreneurship report (2008) by the National Knowledge Commission

to grow safe food with efficient water management systems has lead to an upswing in areas such as composting, drip irrigation, plant and soil sensors, hydroponic farming, marketplace etc. and most recently deployment of drones and robots for crop data analytics. These areas of agribusinesses, which is a \$370 billion market in India, engages the largest number of people but uses very little technology making it a non-lucrative sector. Now with technology this is one of the sunrise sectors of India.

Green Technology: The threat of climate change has propelled serious efforts to generate sustainable green technologies. CleanTechs, as these start-ups are called, have a mandate of generating responsible and eco-friendly methods and practices. These range from recyclable waste management, geothermal technologies for air conditioning, grids for solar and other renewable sources of energy, to efficient air and water purification systems. With the government's Smart Cities initiatives many of these CleanTechs will see an upswing. According to a projection by the Indian Green Building Council, 70% of the buildings projected to be built in India by 2030 translating to a market potential of €72.43 billion!! This reflects immense opportunities in this sector.

The Unicorns are Here!

A unicorn is a mythical beast but a unicorn start-up is not mythical. It holds limitless possibilities. In the context of start-ups, a unicorn is a start-up company valued at over \$1 billion. Once this was considered almost impossible; hence the name. Since 2014, India has had 8 so-called unicorns! InMobi, Snapdeal, Ola, PayTM, Zomato, Qikr, ShopClues and Hike, to name the great eight. All of these are consumer-internet start-ups. Urban Ladder, Oyo Rooms, Gofers and Portea Medical are expected to join the Unicorn club soon. An interesting entry to the unicorn club is Mu-sigma. It is the world's largest decision sciences and

The smart phone market grew by 23% in India in 2016. One factor for this growth is the government's Digital India initiative, which aims at ensuring easy access to technology infrastructure and government services to citizens. Other factors include 4G tariffs being similar to 3G tariffs which translates to faster internet services at similar cost. The most recent announcement on demonetization, which led to a severe cash crunch, propelled the use of digital wallets and online payment methods. This also fuelled the demand for 4G enabled phones.

As of June 2016, there were 371 million new internet users in India. This is more than the US population; and there is still an untapped potential of 1 billion people who have not been included in the list of internet users. It is thus not surprising that the major trend-blazers in the start-up world have concentrated on this niche. Govt. too has enhanced its infrastructural and logistic capacities to drive this sector which is set to treble its GDP contribution. The National Fibre Optic Network and the Aadhar card linked to basic and value added services are just a few among the many steps taken in this direction.

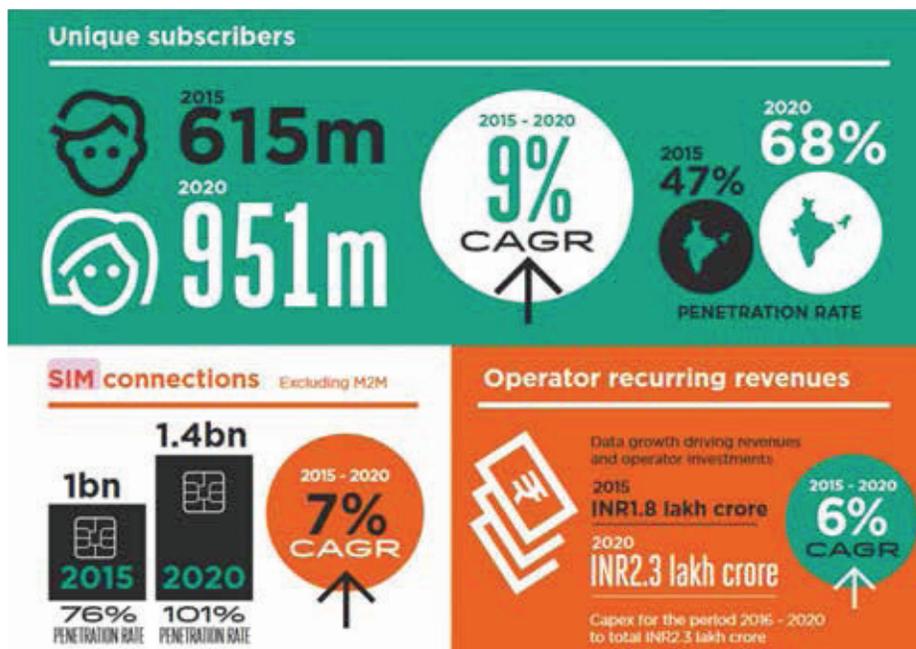
Another beneficiary of the internet and digital wave is the Media and

entertainment industry which is pegged to reach a \$35 billion market by 2018. The healthcare and pharma industry, which is a \$280 billion market in India, has also benefitted from the digital expansion. Now healthcare delivery services and medicine distribution network has eased the inconvenience for patients and their families while engaging them in add-on healthcare and fitness programs and regimes.

Traditional sectors of education and travel continue to as lucrative fields for start-ups with the added backend infrastructure of digitization to add to its efficiency and reach.

Fintech sector is burgeoning too with the shift to cashless transactions and value-added services. With the recent advent of financial inclusion initiatives by the government, this sector has found a new customer base among people in small towns and villages as well.

Agri-business: In India, 67% of the retail spending is on food and groceries. Organized retail accounts for only 15% of the present start-ups. Thus investors see this as a big buck sector with a projected \$20 billion market by 2020. Going a layer deeper, the need



Source: <https://i2.wp.com/www.medianama.com>

analytics firm which helps companies institutionalize data-driven decision making and harness big data...and big data is where the future is!

The last 3-4 years did not just see a lot of start-ups emerge in India. However, many start-ups sustained splendidly. Many merged or acquired other start-ups to gain market shares or to diversify. A few also finally closed the loop by investing in other start-ups. For example, Flipkart founders who created ripples in the e-commerce segment 3 years back are now active investors in other start-ups. Snapdeal acquired FreeCharge to become the most impactful digital commerce ecosystem in India.

The Angels are Watching!

Rule Number One in any business is simple: A business needs capital. An entrepreneur contemplating a start-up may not always have access to requisite funds. This is where an angel comes in. An angel investor or angel is an individual who provides capital for a business start-up, usually in exchange for convertible debt or ownership equity. The equation is simple too. Now if an entrepreneur has strong fundamentals, chances are that

investment firms will be quick to spot the opportunity. Additionally to expand their reach to lesser known start-ups or those in non-metro areas, it's not unusual to see online pitch sessions on social media.

One such was hosted recently on Twitter by the Indian Angel Network. There are also, initiatives such as IBM Global Entrepreneur's SmartCamp which challenge innovators in healthcare, finance and technology to scale their start-ups by presenting to VCs and gaining traction through media exposure. Intel, has been teaming up with Department of Science and Technology, Govt. of India, to invite young innovators to use their technology to provide solutions. Under the aegis of Intel, The Intel Challenge series provides fertile ground for mentorship, plus collaborative & networking opportunities. Entrepreneurs are able to showcase their work to potential investors. The promising ones stand a chance of making successful exits or to become the extended arms of operations for the sponsors. These happen by means of mergers and acquisitions. This is a win-win scenario for both parties.

Ms. Debjani Ghosh, Vice President, Sales and Marketing Group, Managing

Director, South Asia, Intel Technology India Pvt. Ltd., feels that Digital India initiative has defined the vision for India. In her words, "A steady community of Indian makers has emerged to accelerate innovation and entrepreneurship in the country. These home-bred thinkers are best suited to develop solutions that address the pressing needs of our population because they see reality at the grassroots level." She further points out, "... as India is poised for digitization, we see a very clear alignment between our business strategy and the value addition we can create here. Though technology has been adopted very well in silos, the entire nervous system of the country's technology ecosystem needs to be connected for a real Digital India to take shape."

Ground Reality

However, even though the start-up ecosystem is favorable; to survive and grow in this market, incumbents have to continuously innovate and expand with workable and sustainable solutions. Entrepreneurship is thus, not just for start-ups, it is now an imperative for big ticket players as well. Mr. Manav Subodh, Senior Fellow, UC Berkeley, Haas School of Business and Founding Board, 1M1B, has studied well this situation that is ripe with potential for tension. According to him, "It's hard for medium and large companies to work with entrepreneurs as companies are in an execution model, have a path to revenue and are scaling their business model, whereas entrepreneurs are in a search model, discovering their path to revenue and are looking for a business model that can scale. This typically can cause stress if these sides don't understand each other. A perfect match has been where start-ups have innovated and companies have scaled". He adds that large companies have a huge execution engine and can scale very fast. On the other hand, it is this same structure which can often make innovation difficult for big corporates. It is the start-ups that can plug the gap.



There are many examples of this interface. Social networking giant, Facebook, acquired the Bengaluru-based software start-up, Little Eye Labs, in 2014 when it wanted to expand its Android-based analytics to take its mobile penetration to the next level. In 2015, Twitter acquired Bengaluru-based ZipDial, a “missed call marketing” platform to enhance its content delivery by SMS to reach the billion or so, non-internet users in India.

Making Friends with Failure

While the story of start-ups is necessarily fueled with optimism and enthusiasm, it is difficult to talk about entrepreneurship and start-ups without the mention of failures. In India, nearly one out of every two new start-ups fails! Nearly 44% of all start-ups initiated since 2014, have failed. According to an article published online in Quartz India, about 2,281 Indian start-ups had begun operations since June 2014. Their activities cut across a range of sectors, including e-commerce,

health technology, robotics, logistics, business intelligence and analytics, food technology, and online recruitment. However, Delhi-based research firm Xeler8, found that close to a 1000 had already failed. Yet, this is no cause for pessimism. Failure is an integral part of starting-up. Entrepreneurs are encouraged to embrace this rather than be overwhelmed by it. Dissecting failures offer clues that teach a lot.

Indian start-up ecosystem is still evolving and is in a nascent stage. Till recently there were many challenges to start-ups becoming money-spinners. Some start-ups were wiped out because theirs were copycat ideas in a saturating market and they could not compete with giant companies backed by a crowd of investors. Some others failed because they lacked the right talent or did not have enough money to hire talented staff.

Well-known veteran start-up entrepreneur and venture capitalist, Steve Blank,

Stanford Professor is the person behind the Lean Start up movement that helps entrepreneurs build their businesses more efficiently. He often points out that, “Entrepreneurship is a calling... not a job”. This sentiment is echoed by Manav who says, “You need to fall in love with the problem first, not your idea. Often people, especially young people, fall in love with their idea and but the problem they are trying to solve. This creates a big barrier to their success. It’s important to constantly learn, iterate and pivot.”

Many brilliant ideas don’t see the light of the day or else, meet with limited success. Market execution strategies could be a factor. However, Manav feels that often this might also be due to limited on-ground vetting of the idea. “The only thing I suggest is co-innovate with your customers or the person you are trying to solve a problem for. It makes no sense to innovate and create a solution in a lab without getting out of the lab and involving your customers in your development process. People often land up developing a ‘vitamin’ when the customer might actually be in need of a ‘painkiller.”

Dr. Ritesh, an entrepreneur who has invested in 30 start-ups over the past 3 years, and who mentors young aspiring entrepreneurs through Innov8, feels that failures are great learning experiences in the entrepreneurial world and that these contribute to the intellectual skill development of the aspiring and seasoned entrepreneurs alike. In his words, “I think everything is working, even what’s not working. There is nothing known as failure in the start-up ecosystem. You either win or learn; (there is), no losing! What you learn defines your success”.

It is difficult to better this attitude when dealing with failures of start-ups.

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