

WHY ENCOURAGING STUDENT START-UPS IS A PROMISING PATH AHEAD!**S. Pawar¹ and R. Mahabal²**¹PTVA's Institute of Management and PTVAIM's Centre of Entrepreneurship & Innovation
Faculty Co-ordinator,²PTVAIM's Centre of Entrepreneurship and Innovation.**ABSTRACT**

Pandemic has pushed global economy many steps back, India is no exception to it. However, overall economic growth doesn't get hampered by one or two problems however big those problems may be, if the country is taking strategically correct steps to build the economy over the period of time. The problems can create temporary setbacks however, the economy will bounce back relatively faster, regardless of whether it is a developing economy like India with large number of complex socio-economic problems or an advanced first world country.

*For India; its huge market, policies like 'Make in India', 'Start-up India', 'Stand-up India', increased government expenditure in building infrastructure, better ease-of-doing business and healthier international relations are some of the correct policy steps which are leading the country to self-reliance. Country is developing the positive start-up and entrepreneurship culture where problems are considered as **opportunities**. This is apparent from the fact that while many companies were struggling to survive, twenty-six Indian start-ups got the 'unicorn' status during eight months of 2021. A big boost to entrepreneurship in the country has come from structured efforts taken by the government to build entrepreneurial culture on educational campuses. Programs that start from basic entrepreneurial sensitization leading upto incubation of student businesses on campus has been undertaken on a large scale throughout the country. While this project is in a relatively nascent stage, one can already see its effects in changing campus culture. This illustrative case study explores a story of a boy who took advantages of small opportunities created at educational campus in the form of training-based business plan competition and the student-based incubation centre and became a start-up founder who has created jobs for over 20 people within the time span of two and half years, has started doing import substitution alongside pursuing his graduation and post-graduation. His good networking capabilities, useful 'idea', passion, risk taking appetite, perseverance and self-confidence helped him achieve so much despite many hurdles.*

Key words: Innovation, entrepreneurship, passion, perseverance, opportunity identification, start-up.

Introduction:

India stands today at a tipping point of a situation which is both its strength and challenge. Census data of 2011 suggests that India's youth population (age group of 15-24yrs) stands at 19.1% and projection data suggests that it will have reached 34.33% by 2020. Literacy rates among youth is also steadily increasing. (1) While a large young population is blessing, the youth is largely found to be under skilled and under employed. Promotion of skill development and entrepreneurial training at higher education campuses is one of the many positive steps that the government has taken to address this problem. This case explains at length the story of Mr. Ravi Ravariya a young under graduate student who decided to plunge in entrepreneurship based on the positive experience he had while participating in a business plan competition held at his college and how over the years, he has been able to build a very successful start-up. This case aims to present one example on how entrepreneurial culture on campus and diligent implementation

of entrepreneurial promotional activities, pre-incubation programs and incubation program that focuses on students can help build a thriving eco-system which at a larger scale can address some of the problems faced by the country and provide a productive solution for them.

Overview of the situation

The case speaks about how curiosity of young students if encouraged, can result into innovation and entrepreneurship. It narrates the story of a youth who became a start-up founder at very young age. The case takes readers through his journey as a start-up founder right from his curious ventures, his challenges and setbacks, his admission at student-based incubator established by his own educational trust to his setting up of his start-up:RCube Recycling Pvt. Ltd. The case highlights significance of innovation and entrepreneurship promotional activities at educational campuses in nurturing 'job creators' at campus as well as passion, patience and perseverance as essential qualities of every successful businessman.

Analysis

From a curious enquiry to innovation

Ravi belongs to a family of entrepreneurs, his father was in the business of importing printer cartridges and selling in Indian markets. While Ravi had an entrepreneurial background, his aim was to do his masters abroad and settle out of India. However, a small accident, a curious whim to be a part of business plan competition held at college and a sharp mind set, took Ravi's story on a different path. In the 2nd year of his under-graduation program, Ravi was at his father's workshop fiddling with the printer cartridges stored there. He dropped one by mistake and it broke. It was quite likely that his father would scold him and hence Ravi tried to fix the broken cartridge. What could have been a problem turned out to be a blessing. He discovered that he was able to fix the broken cartridge. He also identified 6 components which were a part of it. Some further research suggested that of these 6 components only 3 were largely recycled, the rest only added to heaps of unrecycled e-waste that was going into landfills, leading to soil pollution and many environmental hazards. Ravi set upon a curious journey to see if this problem could be resolved.

Role of on-campus activities nurturing innovation and entrepreneurship

In the same year, Centre of Entrepreneurship and Innovation (COEI), which was then an e-cell of Parle Tilak Vidyalaya Association's Institute of Management (PTVAIM) launched its flag-ship event – Wings2Vision: a training-based business plan competition for students of all colleges of parent trust PTVA. Ravi decided to grab the opportunity and participated in the competition and decided to work on the idea of whether the empty printer cartridge can be fully recycled and prevented from going to land fill. The competition was unique as it comprised of exhaustive entrepreneurial training elements. The one-to-one counselling and three days Entrepreneurship Development Programme organized by COEI helped Ravi in understanding how to explore the idea and understand its commercial feasibility. He optimized all the training and developed and presented a well-researched basic business basic model canvas in 2 selection rounds that were held as part of the competition. These

presentations were done in prescribed format and time limit in front of renowned industry stalwarts and domain experts. In the competition and training that stretched over a period of one and a half months, Ravi secured second prize which comprised of access to the COEI's incubation program and seed fund of Rs. 75,000/-.

Facing challenges of converting innovation into a start-up

Ravi faced a series of challenges of different types. His first challenge was at home. Ravi's family was of the opinion that he should focus on his studies and complete his graduation. Ravi was successful in convincing them to allow him to pursue his business idea and use his prize money for the same but only partially. His family agreed to this scheme on the condition that they would give him time frame of 2 months in which he should make decisive progress, else he would have to abandon his idea. His second challenge was of zero domain expertise. Though Ravi had preliminary training of developing a business model canvas, he was from commerce background and hence had no understanding of either plastics or their recycling. He lacked the knowledge of different components of cartridge, its uses, types of plastic and its uses as well as existing system of cartridge recycling. He worked relentlessly for next two months, spoke to many people, and did lots of experiments on the cartridges. He even spoke to many cartridge recyclers and convinced some to sell empty cartridges to him and experimented on those. He found out that the traditionally implemented recycling process was a jumbled mix of organized and unorganized sector, lack of awareness and interest in environment protection norms and poor profitability in recycling process. He started working towards his idea of finding out different ways through which each component will be reused and prevented from going to landfill. Along with learning accounting he started learning how to convert plastic parts in plastic granules, how to recover left over tonner powder from the cartridge, process it and reuse it. He could overcome all the challenges and converted his idea into range of marketable products. In this while Ravi was a part of COEI's pre-incubation program where

he got access to experts who could guide him in terms of domain expertise and other knowledge critical to establish successful proof of concept. Ravi managed to successfully launch his pilot. His family was more supportive this time and allowed him time of 1 more year in which he would be completing his graduation to also simultaneously convert his proof of concept to an early-stage start-up. Ravi joined the incubation programme in 2018-19. He took decisive steps such as formation & registration of his own company RCube Recycling Pvt Ltd. Ravi's conviction, progress, and the support, that he was getting from his college and incubation centre, convinced his family to let him continue with the business and in the due course of time, his family too gave him financial support and access to his father's clients. Ravi was successful yet again in transforming his proof of concept into an early-stage start-up. The 3rd challenge that Ravi faced at this time was that no one in the market was ready to believe the words of a freshly graduated boy. His very young age and lack of experience did not inspire lots of people to consider his proposition seriously and like every tenacious and creative entrepreneur, Ravi found a way to generate this confidence, at times with the help of his father, at times with help from COEI contacts, but he managed to meet, present to and convince many people and ultimately convert many of them to loyal clients. He started working in a small rental place at Andheri, Mumbai and eventually shifted his unit to Virar and expanded it from 500 sq.ft. workshop space to more than 3000 sq.ft workshop space.

Ravi's Business Model

Ravi's business model is B2B. In 2016, due to amendment in the E-waste Management rules all the e-waste producing individuals or corporates or institutions or government bodies were mandated to discard e-waste through the formal and organized government recognized recycling system. Ravi's research suggested the reach and length of the problem: Printer cartridge waste segment contributes about 12% of total electronic waste. In 2019, it was estimated to generate about 6.4 billion kgs of printer cartridge waste alone. (2) In India, there are 312 registered e-waste recyclers. Recyclers avoid recycling printer cartridge waste due to

uneconomical traditional recycling process. Today, India is dependent on other nations specifically China for its printing consumables. As per the traditional & prevalent recycling process, toner residue recycling required incineration which the recycler had to pay for. Therefore, most recyclers would divert their revenue earned from recycling metal and plastic components of a cartridge into incineration process thus leading to no profit no loss in most cases. Ravi's solution was ingenious. He innovated a process that could recycle 100% of printer cartridge waste without any use for the incineration process. In the traditional process, 85%-90% of components would lead to recovery, and the remaining 10%-15% was disposed of using the incineration process. Ravi's process enabled him to develop products from the waste discarded cartridges. Ravi's recycling process enables creation of up to 78 types of products which are in turn re-used without harming the environment.

India was dependent on China for printer consumables; however, these refurbished products were the perfect alternative to these imported products in terms of quality and price. The refurbished products were able to support the Indian cartridge consumable market during the COVID 19 induced pandemic when importing those from China was a problem. As per Ravi's model he paid recyclers to collect waste from them, this payment was necessarily more than what they received after traditional recycling process. He then recycled and refurbished the cartridge waste components, and these recycled components were then sold to individual business which required plastic granules etc as a part of their production process. This seemingly simple operation made recycling a profitable proposition. Additionally, it's a business that works on a large scale and has further scope for massive scalability. The business will provide 'Economies of Scale' as well as 'Economies of Scope' with a wide range of refurbished products. Ravi supplemented his strong product line with many other key factors which led to development of a stronger business proposition.

While importers use to pay in advance to the suppliers in China, blocking the free cash reserve RCube Recycling provided credit period of 30 days depending on the goodwill and reputation of the customer in the market. This freed up people's free cash reserve.

Many new importers faced problem of receiving defective products from China, making huge losses on particular consignment. Understanding the problem of importers, Ravi wisely decided to create a system where these importers were allowed to inspect the product quality first and take delivery from R-cube. This system reduced importers risk of getting defective product up to a greater extent.

Ravi noticed that importers are facing some other problems like –

Compulsion to buy in bulk while bringing products from other nations to bring down the logistics cost.

Due to heavy dependance on 'import' as the only source of supply, importers at times lost the opportunity for taking advantage of sudden increase in demand for the product.

Ravi supplied the material 'on-demand' & took advantage of the short-term business opportunities. Plus, the whole global movement on ban on Chinese goods which started in the pandemic period was greatly helpful to Ravi.

From May 2018 to December 2020, Ravi's team recycled 646,000 kgs of printer cartridge waste & diverted 335,700 kgs of plastic, 180,700 kgs of metals, and 129,000 kgs of refurbished products from going into landfills. Since commencing the operations in May 2018, RCube Recycling has grown by 37.75% in terms of revenue and 104.18% in terms of net profit in 2019. After the Indian market was hit by pandemic and complete country was under lockdown, Ravi's team connected with the intermediaries in the other domestic markets to grow customer base. After the lockdown was lifted and operations were given green signal to operate while ensuring proper safety measures, the business grew at triple pace. RCube was able to go from being a local solution provider to international solution provider. Ravi realized that e-waste management especially of printer cartridges was a challenge for small neighboring countries like Bhutan, Nepal and Sri Lanka and

hence he was able to establish necessary links to help them solve their problem the RCube way! Today Ravi is connected with above mentioned countries as well as Nigeria and Canada and is developing his network there.

In 2020, Ravi's revenue increased by 57.56% whereas the net profit increased by 307.5%. Necessary investments made on machinery and capital goods were paid off in the year 2020. Ravi's business grew large enough that he required larger processing space and hence shifted his operation to Virar; Palghar District. In times where people were losing their jobs, Ravi provided employment to 20 people and internships to many of his peers.

Recommendations

This case stands as a classic example of how student entrepreneurs are just as capable if not more of building a great enterprise. In fact, there are many benefits of encouraging young students to start-up viz. they have energy and passion. They have a higher risk-taking appetite. Students being in learning eco-system already and having a relatively blank slate in terms of industry experience are able to absorb new ideas and concepts faster and have the time-based bandwidth to implement the same. In most cases especially in urban spaces, parents don't have large monetary expectations from their children while they are still in schools and colleges. This gives them the required freedom to develop something new. Students in higher education are required to do many projects and assignments in their coursework. Enterprise building process; whether successful or otherwise, becomes ready material for them to create good projects based on hands-on approach. Today positive government policies in alignment with structured approach provided in educational campuses have shown to increase the possible success rate of start-ups. This becomes a big boost to individual lives of the students, serves as a model for their peers and ultimately helps in nation building.

Conclusion

Entrepreneurial culture on campus, its promotion and structured access to students is a win-win. Cases like Ravi help us to realise the scope of personal, social and national

contribution that entrepreneurial activities can lead to in terms of fruitfully engaging young people and solving to a certain extent; problems such as unemployment and under employment in youth. Ravi's enterprise stands today not just as a classic case of import substitution but the scope that entire plastic waste recycling process and industry world

over has. A boy with great potential who once had a dream of flying and settling abroad has due to timely intervention and entrepreneurial training become a successful job creator and has opened doors to a new industry that anyway puts him on a global scale but with India as its centre point.

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