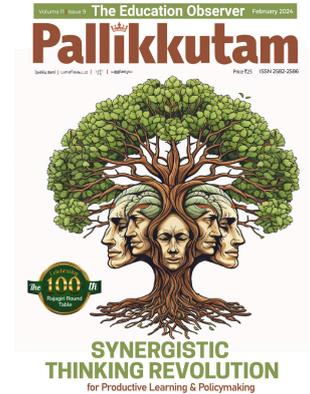


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### Horizons

#### Strengthening the Entrepreneurial Ecosystem



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The world population has crossed eight billion and will cross ten billion by the end of this century. This

necessitates the need for resources to feed, enhance health care, improve lifestyle, and protect the environment particularly in the case of India, which aims to achieve US\$ 7 trillion economy by 2030. Aspects such as innovation, investments in research, scaling up of manufacturing processes and productivity increase, are necessary. In addition to all these factors, emphasis is being placed globally on developing entrepreneurial culture that will drive growth forward and can enable nations to cater to the needs of the future.

### **Entrepreneurship Development**

More often startups fail than they succeed both at individual and societal level. In countries like India risk taking attitude must be strengthened as this is integral part of innovation ecosystem. “Learn to embrace failure, learn from your mistakes, and move on to success,” advised Dr. Ramesh Krishnan, President of Lubbock, USA-based Krams International. After obtaining a PhD in Chemical Engineering Krishnan followed his passion and has become a successful entrepreneur and a community leader. Startup systems need moral and financial support. Israel and the United States are leaders in this space as they have well established venture capital network such as those in San Francisco and Boston areas that rewards risks. Risk is part of the startup system as they are small business entities, when they begin, which spring up based on an idea by the founders who may or may not be the inventor of the idea. Founders believe in it and must persevere to take the idea forward. Many personal traits such as believing in oneself and technology, grit and determination, communication and leadership abilities are essential for these people to be successful. “Hard work is essential but smart work is critical. Develop grit, a never give up attitude, a willingness to go all the way to win,” stated Ramesh Krishnan.



**Ramesh Krishnan** Along the same line, Kumaren Anand, an 18-year-old freshman at Houston-based Rice University who aspires to be in biomedical field stated, “Effort and self-determination are key to success. More than raw talent, the amount of work you choose to put into your goals determines your success.” He added, “In all honesty, more than putting in tons of work and overstressing yourself, perseverance is the most important trait to have. Face challenges head-on, don't be afraid to get help from other people, and don't let failures dissuade you.”

One model of entrepreneurship is building a startup based on the founder and/or cofounder's idea. Another way is to collaborate with others by licensing proven technologies to commercialize. Both the models have risks associated with them and hence commitment and other personal traits as discussed above become valuable. While risks are part of the business, successful entrepreneur should be capable off minimizing risks, which is taught in business schools as “Risk Management.” contingencies and unexpected barriers should be

part of the business plan for an entrepreneur.

### **Holistic Education for Business Building**

In addition to one's own idea and positive personal attributes, society plays an important supportive role. Economic growth in the present times depends on "Innovation 360," involving product development, economics, marketing, and communications. Innovation and translation of ideas to marketplace need multiple skill sets, which can be groomed by regular and vocational academic training to some extent. Educational institutes in developed economies, particularly in the United States endeavor to impart holistic education and general understanding by being flexible. Students can choose their majors and other broadening courses that depend on their interest and personality even after being admitted in the first year of college. This flexibility in the education system helps students to go for majors they like, while career and professional courses can be picked as broadening courses or vice versa. This flexibility helps students to gain confidence and they do not drop out of the courses in their early years and build their confidence. Citing his own life Ramesh Krishnan briefed, "Most of our Indian children follow their parents' advice of going into Engineering or Medicine. I did the same. Went all the way to getting a PhD in Chemical Engineering. Later, I realized that my strengths lay not in research but in serving people. When I followed my passion of empowering people, I was able to establish myself obtain my income which I earned as a professor salary from my business activity in under 3 years and have been a successful entrepreneur mentoring people, how to succeed in life and in business." "Self-interest should be the biggest motivator for whatever field you choose. Though other aspects such as financial success, competition, and lifestyle should be considered, my strongest recommendation is that if you are not doing something that interests you, you will not be able to be successful," stated Kumaren Anand.

Successful completion of first degree provides opportunity for further growth in multiple disciplines as the students engage in different multidisciplinary courses during the college years. People skills, communication abilities and alumni connections build up, which are essential for businesses.



**Kumaren Anand**

### **Government Support as an Enabler**

Many governments have realized the need to nurture multiple talents in their citizens and build an innovative ecosystem. Government's mission should be a hand holding one that enables startups and existing companies to be successful. In the United States, innovation is promoted through schemes such as SBIR, STTR and Innovation Networks. These are supported by many federal agencies such as NSF, DOE, USDA, DOE, etc. In India, emphasis is given to enhance its research infrastructure and domestic manufacturing through programs such as "Make in India." The current government under the leadership of Prime Minister Modi, has realized the need to boost risk taking in research and business ecosystems. "Startup India" is a

timely and much needed initiative launched in 2016 to build a robust innovation and technology development ecosystem. As part of this initiative, supportive schemes are available such as income tax and capital gains waivers for startups that meet benchmarks. Startup India encourages collaboration with academia to translate laboratory ideas to marketplace. The current Indian government is encouraging central government's research agencies, academia, and business entities to create new knowledge and transfer them immediately to the society. In the case of textile sector, which is important towards job creation in India, new schemes such as Technology Upgradation, National Mission on Technical Textiles are funded through central budget to boost the growth of this sector. The government also supports exports by organization of major trade events and conferences in sectors such as advanced textiles, biomedical products, leather goods, and engineering products, etc.

### **Skill Upgradation and Innovation**

Recognizing the need to upskill the technical workforce to enhance productivity and knowledge transfer the Indian government is promoting "Skill India," initiative. It is in the best interest of existing businesses and budding entrepreneurs to utilize these schemes provided by their respective governments. In the case of the Indian textile industry which employs large population, next only to agriculture the stakeholders such as the industry and the government are working together through Textile Sector Skill Council to enhance the skillsets of the industrial workforce.

In summary, nations are allocating funds to boost industrial productivity and innovation. Developing SMEs, creating interest among entrepreneurs to grow the startup ecosystem, encouraging active contributions from the industry for R & D, supporting patenting processes are all timely and much needed for economic growth. As the economy grows with the building up of startup ecosystem, there will also be employment growth. This is particularly needed for nations such as India, Bangladesh, etc. India with 48% of its total population in the age group between 15 and 44, it is important to diversify its economy and support the growth of SMEs. Schools and colleges have tasks ahead to enhance broader skills in students so that they can contribute to the next phase of growth and development. Importantly, in addition to government, NGOs have a role to play in communicating the government schemes to the population particularly in rural areas so that the growth will be inclusive and spread out throughout the country. Image by Trang Le from Pixabay