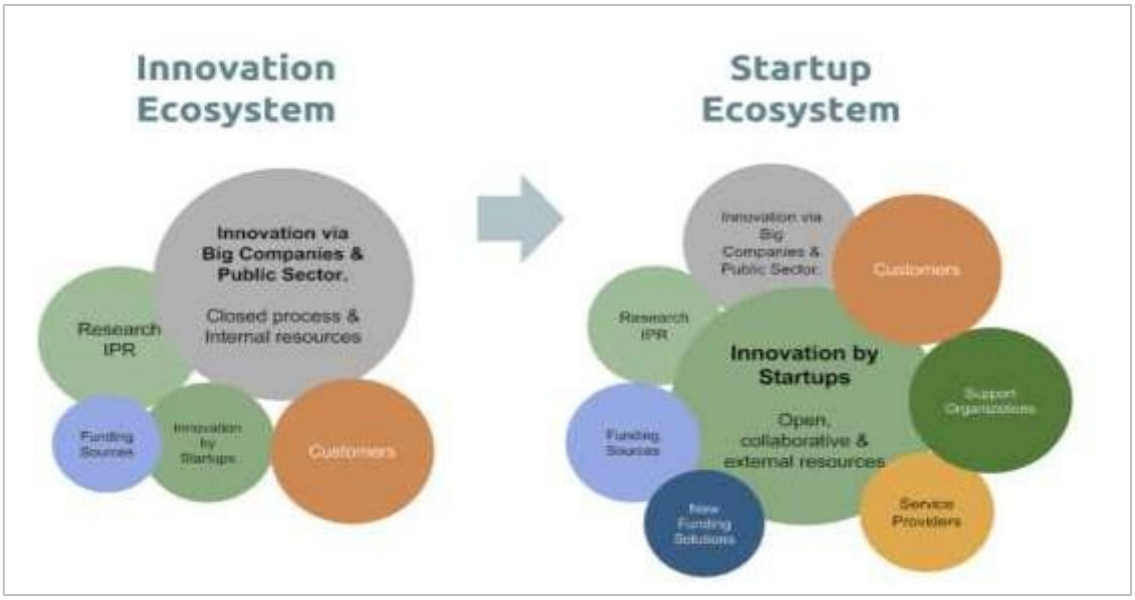
K.S.RANGASAMY COLLEGE OF TECHNOLOGY

(Autonomous)

TIRUCHENGODE, TAMIL NADU- 637215.

CENTRE FOR INCUBATION AND STARTUPS (CIS)

KSRCT INNOVATION AND STARTUP POLICY 2024-2027 FOR STUDENTS, FACULTY AND ALUMNI



JUNE 2024

ABSTRACT

KSRCT Innovation and Startup Policy 2024-2027 for students, faculty, alumni and public of nearby rural area.

A GUIDING FRAMEWORK FOR KSRCT

In accordance with 'The National Innovation and Startup Policy 2019' and 'Tamil Nadu Startup & Innovation Policy 2018-2023', K.S.Rangasamy College of Technology (KSRCT), Autonomous, Tiruchengode, Tamil Nadu, India has framed **'KSRCT Innovation and Startup Policy 2024-2027 for Students, Faculty and Alumni'** to actively engage students, faculty and staff in innovation and entrepreneurship related activities.

This framework will also facilitate the Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) in bringing uniformity across Higher Educational Institutions in terms of Intellectual Property Ownership Management, Technology Licensing and Institutional Startup Policy, and thus enabling the creation of a robust innovation and Startup ecosystem in KSRCT.

CHAIRMAN MESSAGE

Mr.R.SRINIVASAN
Chairman
K.S.R. EDUCATIONAL INSTITUTIONS
Tiruchengode, Namakkal District
Tamil Nadu, India.

K.S.Rangasamy College of Technology will become nationally recognized as an innovative, creative institution renowned for its focus on delivering to students with the ability and agile mindset to be innovative entrepreneurial, socially responsible global citizens who are able to navigate the complexities of a rapidly changing world.

Our institution provides transformative learning experiences to create enterprises through innovation and entrepreneurship culture in the campus, fosters an agile mindset and prepares budding engineers, techno crafts to contribute their skills to Indian and global economy.

The campus exudes a multicultural atmosphere with students from all corners of the globe. Experienced and dedicated teachers nurture the students to help them evolve as insightful individuals.

We develop our students as a socially responsible enterprise creates through the fail fast and learn quick culture through incubation center facility, which promotes academic excellence, inspires innovation and entrepreneur culture that is increasingly focused on change.

This Innovation and Startup policy 2024-2027 for students and faculty of K.S.Rangasamy College of Technology, definitely provides to kindle young mind in to budding business men.

With regards,

Mr.R.Srinivasan

PRINCIPAL MESSAGE

Dr.R.GOPALAKRISHNAN B.E., M.E., Ph.D.
Principal
K.S.Rangasamy College of Technology
(Autonomous)
Tiruchengode, Namakkal District
Tamil Nadu, India.

Greetings from the Institution which is striving to create socially responsible Engineers, Technologists, committed scientists and Entrepreneurs to the country with moral values.

"Children must be taught how to think, not what to think."
- Margaret Mead

Seen from this perspective, our commitment to impart quality education that empowers the young minds how to think along with our adherence to the core values of integrity and respect for each other will enable our students to emerge as innovative thinkers, creative problem solvers, inspired learners and truly trusted leaders of tomorrow.

Our traditional values aligned with the 21st century educational values nurture the impressionable minds of our students. The 13 UG programmes and the 9 PG programmes aim at providing holistic learning experience in the challenging academic environments that emphasize personal growth and social upliftment by solving societal problems through Science and Technology.

The milestones set in the past 26 years of our Institution's journey have lent a significant edge towards its promising future. The firm foundation thus laid with meticulous planning and 'tireless striving' of all stake holders will strengthen us to script remarkable pages in the annals of our Institution in the forthcoming years too. India has more youth population than any country. Hence, our motto is to make our youth to challenge the problems and become a job giver rather than job seeker. This will solve the unemployment issue in our country and increase the GDP too.

To have the transformation according to the current situation, Our Curricula and Syllabi are regularly reviewed to be commensurate with upcoming needs of Innovation, Startup and Entrepreneurship culture in the campus. Our Institution has established MHRD- Institution Innovation Council in November 2018 and scored three star rating out of five star during the

academic year 2018-19.

With our strong conviction on the importance of our teachers, parents, alumni entrepreneurs, researchers and administrators collaborating and communicating frequently, we welcome the fresh innovation and startups from students to walk into our portals of learning and create enterprises and join hands with us in opening yet another successful career.

With love and affection,

Dr.R.Gopalakrishnan., M.E., Ph.D.

COMMITTEE FOR "KSRCT INNOVATION AND STARTUP POLICY 2024-2026 FOR STUDENTS, FACULTY AND ALUMNI"

POLICY FRAMING TEAM

S.No	Name	Designation
1	**Mr.R.SRINIVASAN** Chairman, KSR Educational Institutions, Tiruchengode, Tamil Nadu.	Chief Patron
2	**Mr.K.S.SACHIN** Vice Chairman, KSR Educational Institutions, Tiruchengode, Tamil Nadu.	Patron
3	**Dr.R.GOPALAKRISHNAN** Principal, K. S. Rangasamy College of Technology (Autonomous), Tiruchengode, Tamil Nadu.	Chairman
4	**Dr.N.TIRUVENKADAM** Head – KSRCT MSME Business Incubator, KSRCT. Chief Coordinator, Entrepreneurship Development Cell, KSRCT. Professor of Mechatronics Engineering, KSRCT.	President
5	**Dr.B.MYTHILI GNANAMANGAI** CEO – ACIC KSRCTIF, KSRCT Associate Professor of Bio Technology, KSRCT.	Vice President
6	**Dr.A.MURUGESAN** Innovation Cell In charge and Research Head, KSRCT. Professor of Mechanical Engineering, KSRCT.	Member
7	**Dr. R.RADHAMANI** President IIC, KSRCT, Assistant Professor of Electrical and Electronics Engineering, KSRCT.	Member
8	**Mr.S.HARI PRASADH** Vice President IIC, KSRCT Assistant Professor of Mechatronics Engineering, KSRCT.	Member
9	**Mr.K.RAGUVARAN** Startup Cell In-charge, KSRCT. Assistant Professor of Electronics and Communication Engineering, KSRCT.	Member
10	**Dr.G.KARTHIKEYAN** NIDHI Incharge, KSRCT, Professor and Head of Textile Technology, KSRCT.	Member
11	**Dr.M.KATHIRSELVAM** Head - CFRD, KSRCT, Associate Professor of Mechanical Engineering, KSRCT.	Member
12	**Mr.P.BALAMURUGAN** EDC Coordinator, KSRCT, Assistant Professor of Electronics and Communication Engineering, KSRCT.	Member

13	**Ms.N.KAYALVIZHI** EDC Coordinator, KSRCT, Assistant Professor Electrical and Electronics Engineering, KSRCT.	Member
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15	**Dr.P.MOHANRAM** EDC Coordinator, KSRCT, Associate Professor of Mechatronics Engineering, KSRCT.	Member
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17	**Mr.T.RAJAVENKATESAN** EDC Coordinator, KSRCT, Assistant Professor of Electronics Engineering (VLSI Design and Technology), KSRCT.	Member
18	**Mr.S.RAJA** EDC Coordinator, KSRCT, Assistant Professor of Artificial Intelligence and Data Science, KSRCT.	Member
19	**Mr.S.INSOL RAJASEKAR** EDC Coordinator, KSRCT, Assistant Professor of Artificial Intelligence and Machine Learning, KSRCT.	Member
20	**Mr.K.KARTHIKEYAN** EDC Coordinator, KSRCT, Assistant Professor of Computer Science and Business System, KSRCT	Member
21	**Mr.K.C.MOHANRAJ** EDC Coordinator, KSRCT, Assistant Professor of Information Technology, KSRCT	Member
22	**Dr.K.R.NANDAGOPAL** EDC Coordinator, KSRCT, Assistant Professor of Textile Technology, KSRCT.	Member
23	**Dr.G.AYYAPPADASAN** EDC Coordinator, KSRCT, Associate Professor of Bio Technology, KSRCT.	Member
24	**Mr.P.Kalairajan** EDC Coordinator, KSRCT, Assistant Professor of Food Technology, KSRCT.	Member

25	**Dr.M.Ramakrishnan** EDC Coordinator, KSRCT, Professor of Master of Business Administration, KSRCT	Member
26	**Mr.S.RAJKUMAR** Convener, Smart India Hackathon, MHRD IIC, KSRCT Assistant Professor of Computer Science and Engineering, KSRCT.	Member
27	**Dr.M.KANTHABABU** Professor & Head (DoME), Director (CIPR), Anna University, Chennai.	Member
28	**Mr.G.P.SHRINIVASAN** 2016 Bio Techechnology, KSRCT Alumni Entrepreneur, Founder, Gift a Greenway, Gobichettipalayam	Member
29	**Mr.S.P.RAJA** 2012,Mechanical Engineering KSRCT Alumni Entrepreneur, Co Founder and CEO Pepper Learn Enlightenment Solutions Pvt. Ltd Salem.	Member
30	**Mr.N.NAVEENKUMAR** 2013 Mechanical Engineering KSRCT Alumni Entrepreneur, CEO, Nalls Export and Import, Salem.	Member
31	**Mr.P.ANAND** 2017,Mechatrinics Engineering KSRCT Alumni Entrepreneur, Founder, Autoboats, Erode.	Member
32	**Mr.K.GOMATHI SANKAR** 2017,Mechatrinics Engineering KSRCT Alumni Entrepreneur, Managing Director, Zhagaram Technologies, Erode.	Member

33	**Mr.D.MOHANKUMAR** 2009 Textile Technology, KSRCT Alumni Entrepreneur, Managing Director, Anandhkumar Tex, Vellode.	Member
34	**Mr.SANJAY GOPAL** 2009 Textile Technology, KSRCT Alumni Entrepreneur, Vice President, GS International, Delhi.	Member
35	**Mr.NAVINKUMAR** 2013, Civil Engineering, KSRCT Alumni Entrepreneur, Founder, Karpaga Vinayaka Builders, Erode.	Member
36	**Mr.S.JAISANKAR** Project Officer Entrepreneurship Development Institute of India (EDII) Salem Project Office, Salem. H.O : EDI of India, Ahmedabad.	Member

37	**Mr.BARATH VENKATESAN** 2020 Nano Science and Technology, KSRCT Alumni Entrepreneur, Founder and CEO, Tomorrow's Futurism Pvt. Ltd. Erode.	Member
38	**Dr.B.ANBUTHAMBI** President ICT Academy Chennai.	Member
39	**Mr. EZHILMARAN** Director AXIS Global Automation Chennai.	Member
40	**Mr.V.V.VIGINESH** Assistant Vice President – Branch AXIS BANK Erode.	Member

POLICY DRAFTING AND IMPLEMENTATION TEAM

S.No	Name	Designation
1	**Dr.R.GOPALAKRISHNAN**	Chairman
2	**Dr.N.TIRUVENKADAM**	President
3	**Dr.A.PALANIAPPAN**	Member

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PREAMBLE

"Studying entrepreneurship without doing it is like studying the appreciation of music without listening to it. Until you confront the fear and discomfort of being in the world and saying, "Here, I made this," it's impossible to understand anything at all about what it means to be an entrepreneur."

- Seth Godin-

The young population of India creates a massive demographic dividend. For the next 40 years, the country will have a youthful, dynamic and productive workforce when the rest of the world, including China, is aging. It is further estimated that the average age in India by the year 2020 will be 29 years as against 40 years in the USA, 46 years in Europe and 47 years in Japan. In fact, in 20 years the labour force in the industrialized world will decline by 4%, in China by 5%, while in India it will increase by 32%.

In November 2016, All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions, to address the need of inculcation of innovation and entrepreneurial culture in higher education institutions (HEIs). The policy primarily focused on guiding the AICTE approved institutions in implementing 'Startup Action Plan' of Government of India.

A 15 member committee was constituted by Ministry of Human Resource Development to formulate detailed guidelines for various aspects related to innovation, startup and entrepreneurship management. This committee deliberated on various facets for nurturing the innovation and Startup culture in Higher Educational Institutions (HEIs), which covered Intellectual Property ownership, revenue sharing mechanisms, norms for technology transfer and commercialization, equity sharing, etc. After multiple rounds of meetings, "**National Innovation and Startup Policy 2019"** for students and faculties of HEIs were released.

Consequently, Tamil Nadu State Government released **"Tamil Nadu Startup & Innovation policy 2018-2023"** with a mission of providing an enabling and innovative ecosystem for startups registered in the State and to make Tamil Nadu a 'Global Innovation hub for startups' by 2023. The mission aims for a minimum of 1,00,000 high skilled job creation, direct and indirect, in the startup ecosystem.

To implement the key factors of global, national and state policies in K.S.Rangasamy College of Technology (KSRCT), by inculcating Innovation and Startup eco system in the campus, **'KSRCT Innovation and Startup Policy 2024-2027 for Students, Faculty and Alumni'** was framed under Centre for Incubation and Startups at KSRCT.

1. About KSRCT

K.S.Rangasamy College of Technology (KSRCT) was started in the year 1994 and it is part of K.S.R Educational Institutions (KSREI) which comes under KSR Educational & Charitable Trust was founded in 1984 by Lion Dr. K. S. Rangasamy MJF, a well-known philanthropist. He hails from an agricultural family and started his career as milk vendor. In due course, he concentrated on textile business and later he developed KSR Textile Mills Pvt. Ltd, KSR Exports and a fleet of power looms. With the zeal to entrepreneurship and help the rural youth's pursuit in education, he ascended as the Chairman of K.S.R Educational Institutions which is one of the largest groups of educational institutions in Tamil Nadu.

Greetings from K.S.Rangasamy College of Technology (KSRCT), Autonomous!

The Institution is located in the idyllic vernal ambience of KSR Kalvi Nagar on Erode - Tiruchengode State Highway, Tiruchengode, Namakkal District, Tamil Nadu, India. KSRCT was started with the aim of imparting quality education to all with the motto of giving top priority to disciplined knowledge to the rural community. So, for more than Twenty three thousand graduated from KSRCT, at least 75 % from rural and 70 % are first graduates of the family. We at KSRCT produced Engineers, Scientists, Technologists, Managers, Entrepreneurs and Socially responsible citizens.

Recently, Mr.R.Srinivasan, Vice- Chairman, the son of Dr.K.S.Rangasamy, Chairman directing us to focus more on creating the entrepreneur, eco system for the start-up at our campus. Necessary steps already taken and we have dedicated G+5 storied building exclusively for this purpose.

In this perspective, our commitment to impart quality education that empowers the young minds how to think along with our adherence to the core values of integrity and respect for each other will enable our students to emerge as innovative thinkers, creative problem solvers, inspired learners and truly trusted leaders and Startup Enterprises generators of tomorrow.

Our traditional values aligned with the 21st century educational values nurture the impressionable minds of our students. The 13 UG programmes and 9 PG programmes aim at providing holistic learning experience in the challenging academic environments that emphasize personal and social growth by solving societal problems through innovative young entrepreneurs, Science and Technology.

The milestones set in the past 26 years of our Institution's journey have lent a significant edge towards its promising future. The firm foundation thus laid with meticulous planning and 'tireless striving' of all stake holders will strengthen us to script remarkable pages in the annals of our Institution in the forthcoming years too.

India aspires to become 5 trillion-dollar economy by 2024. To reach the mark, it needs to evolve systems and mechanisms to convert the present demographic dividend into high quality technical human resource capable of doing cutting edge research, innovation and deep-tech entrepreneurship. Namakkal, Karur, Salem, Erode, Tirupur and Coimbatore Zone in Tamil Nadu are the entrepreneur's power houses of India.

Entrepreneurship, social mobility, economic growth and technology innovation have defined the growth story of the State and Country. KSRCT has the potential to further enhance this by supporting the knowledge and capability of individuals to create new technology-driven enterprises to address challenges and take advantage of the opportunities present. The scope of the social enterprises for technical innovation and product development is ample.

KSRCT is the destination for students from various states, providing the highest number of skilled manpower and one among the best in terms of technically qualified manpower.

KSRCT Innovation and Startup Policy 2024-2027 for Students, Faculty and Alumni, aims to provide an enabling, innovative ecosystem in the Institution. Implementation of the policy will enable KSRCT to emerge as the global 'Innovation, Incubation and Startup Hub'. It will also attract entrepreneurs and investors across the globe.

The policy is presumed to nurture innovation, investment in R&D, infrastructure, knowledge creation, technological development and skilled manpower, resulting in high growth entrepreneurial ventures across the spectrum of sectors from agriculture, manufacturing, healthcare, education, logistics, social sector, urban development, environment, to Fintech and ICT.

The guidelines provide ways to KSRCT students and faculty for developing entrepreneurial agenda, managing Intellectual Property Rights (IPR) ownership, technology licensing and equity sharing in Startups or enterprises.

These guidelines will enable institutions to actively support KSRCT faculty, staff and students to participate in innovation and entrepreneurship (I&E) related activities, thus encouraging students and faculty to consider startups and entrepreneurship as a career option. These guidelines will also help emphasize that the entrepreneurship is all about creating a business, which is financially successful.

2. VISION 2024

To make KSRCT a Great Innovation, Incubation and Startup Centre/ Hub and the most preferred destination for Startups by 2024. Our main objective is that our Startups shall address the social issues / problem statements.

3. MISSION

To create, support and nurture a vibrant Innovation and Startup ecosystem within the campus culminating in students and public entrepreneurship driven employment, economic growth and increase Indian Intellectual Property Rights.

4. CORE POLICY OBJECTIVES

To facilitate development of an entrepreneurial ecosystem in KSRCT, specific objectives and associated performance indicators are as follows:

Encourage, facilitate and support emergence of at least 50 technology startups in the country.

India has more youth population than any country. Hence, our motto is to make our youth to challenge the problems and become a job giver rather than job seeker. This will solve the unemployment issue in our country and increase the GDP too.

Extend a dedicated support to at least 5 global high growth startups developing innovative technology solution for high social impact in sectors like Industry 4.0 technologies, sanitation, food, clean energy, healthcare, education, etc.

Establish support infrastructure and strengthen the existing mechanism in the thrust areas like Industrial Internet of Things (IIoT), Artificial Intelligence (AI), Machine Learning (ML), Deep Learning, Data Science and Data Analytics, Software as a Service (SaaS), Drug Development through Bio Technology & Nano Science and Technology, Additive Manufacturing, Smart and Digital Manufacturing, Industrial Automation, Robotics, Drones Technologies, Autonomous and Electric Vehicles, Big Data, 5G Technologies, Cloud and Edge Computing, Transportation & Logistics, Electrical & Electronics, Food Technology & HealthCare, Agriculture, Mechatronics, Renewable energy, Climate change, Textile, Information Technology (IT) are some of the core objectives of the 'KSRCT Innovation and Startup Policy 2024-2027 for Students, Faculty and Alumni.

- Network (Students, Alumni, public and private) stakeholders
- Collaborate with industries; Research Centres to promote entrepreneurship among the youth
- Maximize the engagement in industries, and social problem identification
- Provide adequate incentives and resources to startups, facilitators, mentors and investors to promote startup culture in the Campus
- Teach the government regulatory and tax details on startups
- Partnering with reputed investors across India and the globe to invest in KSRCT Incubation Centre startups
- Brand startup Hubs in Bio-Technology, Nano Technology, Industrial Internet of Things (IIoT), Smart Manufacturing, and all Industry 4.0 technology needs
- A sustainable **financial strategy** should be defined in order to reduce the organizational constraints to work on the entrepreneurial agenda
- For expediting the decision making, hierarchical barriers should be minimized and individual autonomy and ownership of initiatives should be promoted.
- Importance of innovation and entrepreneurial agenda should be known across the Institution, and should be promoted and highlighted at institutional programs such as conferences, convocations, workshops, etc.
- KSRCT startup policy action plan has framed with well-defined short-term and long-term goals with micro action plan which is in line with the current requirements
- KSRCT integrate MHRD-Institution's Innovation Council (IIC) activities and entrepreneurial activities across various centers, cells, departments, faculties, within the college, thus breaking the silos.
- Product to market strategy for startups should be developed by the Institution on case to case basis.
- Development of entrepreneurship culture should not be limited within the boundaries of the Institution, it will give extended support to regional, social and public community and aluminizes of KSRCT. This can include giving opportunity for regional startups, provision to

extend facilities for outsiders and active involvement of the institute in defining strategic direction for local development

- KSRCT be the driving force in developing entrepreneurship culture in its vicinity (regional, social and community level). This shall include giving opportunity for regional startups, provision to extend facilities for outsiders and active involvement of the Institution in defining strategic direction for local development
- Strategic international partnerships should be developed using bilateral and multilateral channels with international innovation clusters and other relevant organizations. Moreover, international exchange programs, internships, engaging the international faculties in teaching and research should also be promoted

5. DEFINITION

START-STEP

An aspiring entity or individual who develops an idea with a business model based on product/process/service innovation that is potentially scalable, replicable, and generate employment and wealth.

STARTUP

An entity working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.

An entity will be recognized as startup only if it satisfies the following conditions

The company/entity is registered in the State under Tamil Nadu Startup and Innovation Mission (TANSIM) for Tamil Nadu native candidate and similarly for other states registration as per the candidate native states.

If it is incorporated as a private limited company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India; and up to seven years from the date of its incorporation/ registration; however, in the case of startups in the Biotechnology, Artificial Intelligence (AI) & Machine Learning (ML) sectors, the period shall be up to ten years from the date of its incorporation/ registration.

If its turnover for any of the financial years since incorporation/ registration has not exceeded Rs. 25 crores as per Tamil Nadu State policy; provided that any such entity formed by splitting up or reconstruction of a business already in existence shall not be considered a ‘Startup’.

This broad definition of startups in KSRCT, Tamil Nadu is intended to be inclusive and facilitating to support entrepreneurship across the nation. The policy will encourage startups from KSRCT, Tamil Nadu to follow Government of India norms that define a startup to access Central level benefits and incentives.

6. STARTUPS ENABLING KSRCT INFRASTRUCTURE

Creation of pre-incubation and incubation facilities for nurturing innovations and startups in KSRCT through MSME is under progress. The management Incubation and Innovation need to be organically interlinked. Without innovation, new enterprises are unlikely to succeed. The goal of the effort should be to link INNOVATION to ENTREPRISES to FINANCIAL SUCCESS.

KSRCT created the facilities within the campus for supporting pre-incubation (e.g. IICs as per the guidelines by MHRD's Innovation Cell, EDC, IEDC, New-Gen IEDC, Innovation Cell, Startup Cell, Student Clubs, etc.) and Incubation/ acceleration by mobilizing resources from internal and external sources like MSME, DST etc.

This KSRCT Pre-Incubation/Incubation facility should be accessible 24x7 to students, staff and faculty of all disciplines and departments across the Institution.

KSRCT planning to registered separately for Pre-incubation facilities or Special Purpose Vehicle (SPV) or 'Incubation cum Technology Commercialization Unit' (ITCU) under Section-8 of Company Act 2013 or 'Society' registered under Society Registration Act with independent governance structure. This will allow more freedom to KSRCT Incubation center in decision making with less administrative hassles for executing the programs related to innovation, IPR and Startups and will have better accountability towards investors supporting the incubation facility.

KSRCT offer mentoring and other relevant services through Pre-incubation / Incubation units in-return for fees, equity sharing and (or) zero payment basis. The modalities regarding Equity Sharing in Startups supported through KSRCT will depend upon the nature of services offered by these units and are elaborately explained below.

7. NURTURING INNOVATIONS AND STARTUPS

KSRCT has established processes and mechanisms for easy creation and nurturing of Startups/enterprises by students (UG, PG, and Ph.D.), staff (including temporary or project staff), faculty, alumni and potential start up applicants even from outside the Institution through systematically developed curriculum and syllabus. While defining the processes, KSRCT will ensure to achieve following:

Incubation Support

Offer access to pre-incubation & Incubation facility to startups by students, staff and faculty for mutually acceptable time-frame. In case KSRCT does not have a dedicated facility/ infrastructure of its own, then it may reach out to nearest incubation facilities in other HEIs in order to facilitate access by our students, staff, faculty and our alumni.

Will allow licensing of IPR from institute to Startup

Ideally students and faculty members intending to initiate a startup based on the technology developed or co-developed by them or the technology owned by the Institution, should be allowed to take a license on the said-technology on easy terms, either in terms of equity in the venture and/ or license fees and/ or royalty to obviate the early stage financial burden.

Will allow setting up a Startup (including social Startups) and working part-time for the Startups while studying / working

KSRCT may allow their students / staff to work on their innovative projects and setting up startups (including Social Startups) or work as intern / part-time in startups (incubated in any recognized HEIs/Incubators) while studying / working. Student Entrepreneurs may earn credits for working on innovative prototypes/business models. Clear guidelines has been developed to formalize this mechanism.

Student inventors may also be allowed to opt for startup in place of their mini project/ major project, seminars, summer trainings. The area in which student wishes to initiate a startup of interdisciplinary or multi- disciplinary or trans-disciplinary in nature. However, the student must describe how they will separate and clearly distinguish their ongoing research activities from the work being conducted at the start up.

Students who are under incubation, but are pursuing some entrepreneurial ventures while studying should be allowed to use their address in the Institution to register their company with due permission from KSRCT.

Students entrepreneurs may be allowed to sit for the examination, even if their attendance is less than the minimum permissible percentage, with due permission from KSRCT.

KSRCT allows its students to take a semester/year break (or even more depending upon the decision of review committee/BoS committee constituted by the institute) to work on their startups and re-join academics to complete the course. Student entrepreneurs may earn academic credits for their efforts while establishing an enterprise. KSRCT has constituted a review committee to review startups by students, and based on the progress made, it may consider giving appropriate credits for academics.

KSRCT provides accommodation to the entrepreneurs within the campus for some period of time with nominal fee.

KSRCT allows faculty and staff to take off for a semester / year (or even more depending upon the decision of review committee constituted by the KSRCT) as sabbatical/ unpaid leave/ casual leave/ earned leave for working on startups and come back. Institution should consider allowing use of its resources to faculty/students/staff wishing to establish startups as a fulltime effort. The seniority and other academic benefits during such period may be preserved for such staff or faculty.

As per the AICTE guidelines, KSRCT has a plan to start a part-time/full time MS/ MBA/ PGDM (Innovation, Entrepreneurship and Venture Development) programme where one can earn a degree while incubating and nurturing a startup company.

KSRCT will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use Institution's infrastructure and facilities, as per the choice of the potential entrepreneur as Short-term/ six-month/ one-year part-time entrepreneurship training.

KSRCT will facilitate the startup activities/ technology development by allowing students/ faculty/ staff to use institute infrastructure and facilities, as per the choice of the potential entrepreneur as short-term/ six-month/ one-year part-time entrepreneurship training.

KSRCT Mentorship supports the budding entrepreneurs on regular basis. KSRCT will facilitate in a variety of areas including technology development, ideation, creativity, design thinking, fund raising, financial management, cash-flow management, new venture planning, business

development, product development, social entrepreneurship, product-costing, marketing, brand-development, human resource management as well as law and regulations impacting a business.

KSRCT may also link the start-ups to other seed-fund providers/ angel funds/ venture funds or itself may set up seed-fund once the incubation activities get matured.

License institute IPR as discussed in section 4 below

In return of the services and facilities, KSRCT may take 2% to 9.5% equity/ stake in the startup/ company, based on brand used, faculty contribution, support provided and use of KSRCT institute's IPR (a limit of 9.5% is suggested so that Institution has no legal liability arising out of Startup. The Institution should normally take much lower equity share, unless its full-time faculty/ staff have substantial shares). Other factors for consideration should be space, infrastructure, mentorship support, seed- funds, support for accounts, legal, patents etc.

For staff and faculty, KSRCT can take no-more than 20% of shares that staff / faculty takes while drawing full salary from the Institution; however, this share will be within the 9.5% cap of company shares, listed above.

No restriction on shares that KSRCT faculty / staff can take, as long as they do not spend more than 20% of office time on the startup in advisory or consultative role and do not compromise with their existing academic and administrative work / duties. In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, then they will go on sabbatical/ leave without pay/ earned leave.

In case of compulsory equity model, startups may be given a cooling period of 3 months to use incubation services on rental basis to take a final decision based on satisfaction of services offered by the KSRCT institute/incubator. In this case, during the cooling period, KSRCT cannot force startups to issue equity on the first day of granting incubation support.

KSRCT also provide services based on mixture of equity, fee-based and/ or zero payment model. So, a startup may choose to avail only the support, not seed funding, by the KSRCT on rental basis.

KSRCT could extend this startup facility to alumni of the institute as well as outsiders.

Participation in startup related activities needs to be considered as a legitimate activity of faculty in addition to teaching, R&D projects, industrial consultancy and management duties and must be considered while evaluating the annual performance of the KSRCT faculty. Every faculty may be encouraged to mentor at least one startup.

Product development and commercialization as well as participating and nurturing of startups would now be added to a bucket of faculty-duties and each faculty would choose a mix and match of these activities (in addition to minimum required teaching and guidance) and then respective KSRCT faculty are evaluated accordingly for their performance and promotion.

KSRCT has updated/changed/revised performance evaluation policies for faculty and staff as stated above.

KSRCT time to time should ensure that at no stage any liability accrue to it because of any activity of any startup.

8. PRODUCT OWNERSHIP RIGHTS FOR TECHNOLOGIES DEVELOPED AT KSRCT

KSRCT has considered the policy for student/ faculty/staff as per following guidelines:

When KSRCT facilities / funds are used substantially or when IPR is developed as a part of curriculum/ academic activity, IPR is to be jointly owned by the inventors and KSRCT.

Inventors and KSRCT could together license the product / IPR to any commercial organization, with inventors having the primary say. License fees could be either / or a mix of

- Upfront fees or one-time technology transfer fees
- Royalty as a percentage of sale-price
- Shares in the company licensing the product

KSRCT may not be allowed to hold the equity as per the current statute, so SPV may be requested to hold equity on their behalf.

If one or more of the inventors wish to incubate a company and license the product to this company, the royalties would be no more than 4% of sale price, preferably 1 to 2%, unless it is pure software product. If it has shares in the company, shares will again be 1% to 4%. For a pure software product licensing, there may be a revenue sharing to be mutually decided between KSRCT and the incubated company.

On the other hand, if product/ IPR is developed by innovators not using any facilities of the Institution, outside office hours (for staff and faculty) or not as a part of curriculum by student, then product/ IPR will be entirely owned by inventors in proportion to the contributions made by them. In this case, inventors can decide to license the technology to third parties or use the technology the way they deem fit.

If there is a dispute in ownership, a minimum 5 member committee consisting of two faculty members (having developed sufficient IPR and translated to commercialization), two of the Institution's alumni/ industry experts (having experience in technology commercialization) and one legal advisor with experience in IPR, will examine the issue after meeting the inventors and help them settle this, hopefully to everybody's satisfaction. KSRCT can use alumni/ faculty of other institutions as members, if they cannot find sufficiently experienced alumni / faculty of their own.

KSRCT IPR cell or incubation center will only be a coordinator and facilitator for providing services to faculty, staff and students. They will have no say on how the invention is carried out, how it is patented or how it is to be licensed. If KSRCT is to pay for patent filing, they can constitute a committee which can examine whether the IPR is worth patenting. The committee should consist of faculty who have experience and excelled in technology translation. If inventors are using their own funds or non- institute funds, then they alone should have a say in patenting.

Decision-making body with respect to incubation / IPR / technology-licensing will consist of KSRCT faculty and experts who have excelled in technology translation. Other faculty in the department / institute will have no say, including heads of departments, heads of institutes, deans or registrars.

KSRCT promotes interdisciplinary research and publication on startup and entrepreneurship.

9. ORGANIZATIONAL CAPACITY, HUMAN RESOURCES AND INCENTIVES

KSRCT should recruit staff that have a strong innovation and entrepreneurial/ industrial experience, behavior and attitude. This will help in fostering the I&E culture. Some of the relevant faculty members with prior exposure and interest should be deputed for training to promote I&E.

To achieve better engagement of staff in entrepreneurial activities, institutional policy on career development of staff should be developed with constant up skilling.

Faculty and departments of the institutes have to work in coherence and cross-departmental linkages should be strengthened through shared faculty, cross-faculty teaching and research in order to gain maximum utilization of internal resources and knowledge.

Periodically some external subject matter experts such as guest lecturers or alumni can be engaged for strategic advice and bringing in skills which are not available internally.

Faculty and staff should be encouraged to do courses on innovation, entrepreneurship management and venture development.

In order to attract and retain right people, KSRCT should develop academic and non-academic incentives and reward mechanisms for all staff and stakeholders that actively contribute and support entrepreneurship agenda and activities.

The reward system for the staff may include sabbaticals, office and lab space for entrepreneurial activities, reduced teaching loads, awards, trainings, etc.

The recognition of the stakeholders may include offering use of facilities and services, strategy for shared risk, as guest teachers, fellowships, associates, etc.

A performance matrix should be developed and used for evaluation of annual performance.

10. CREATING INNOVATION PIPELINE AND PATHWAYS FOR ENTREPRENEURS AT KSRCT

To ensure exposure of maximum students to innovation and pre incubation activities at their early stage and to support the pathway from ideation to innovation to market, appropriate mechanisms should be devised at KSRCT.

Spreading awareness among students, faculty and staff about the value of entrepreneurship and its role in career development or employability should be a part of the KSRCT entrepreneurial agenda.

Students/ staff should be taught that innovation (technology, process or business innovation) is a mechanism to solve the problems of the society and consumers. Entrepreneurs should innovate with focus on the market niche.

Students should be encouraged to develop entrepreneurial mindset through experiential learning by exposing them to training in cognitive skills (e.g. design thinking, critical thinking, etc.), by inviting first generation local entrepreneurs or experts to address young minds. Initiatives like idea and innovation competitions, hackathons, workshops, bootcamps, seminars, conferences, exhibitions, mentoring by academic and industry personnel, throwing real life challenges, awards and recognition should be routinely organized by KSRCT.

To prepare the students for creating the startup through the education, integration of education activities with enterprise-related activities should be done at KSRCT.

KSRCT should link their startups and companies with wider entrepreneurial ecosystem and by providing support to students who show potential, in pre-startup phase. Connecting student entrepreneurs with real life entrepreneurs will help the students in understanding real challenges which may be faced by them while going through the innovation funnel and will increase the probability of success.

KSRCT established Institution's Innovation Councils (IICs) in November 2018, as per the guidelines of MHRD's Innovation Cell and allocate appropriate budget for its activities. IIC should guide the Institution in conducting various activities related to innovation, startup and entrepreneurship development. Collective and concentrated efforts should be undertaken to identify, scout, acknowledge, support and reward proven student ideas and innovations and to further facilitate their entrepreneurial journey.

For strengthening the innovation funnel of the institute, access to financing must be opened for the potential entrepreneurs.

Networking events must be organized to create a platform for the budding entrepreneurs to meet investors and pitch their ideas. Provide business incubation facilities: premises at subsidized cost, Laboratories, research facilities, IT services, training, mentoring, etc. should be accessible to the new startups.

A culture needs to be promoted to understand that money is not FREE and is risk capital. The entrepreneur must utilize these funds and return. While funding is taking risk on the entrepreneur, it is an obligation of the entrepreneur to make every effort possible to prove that the funding agency did right in funding him/ her.

KSRCT will develop a ready reckoner of Innovation Tool Kit, which must be kept on the homepage of the Institution's website to answer the doubts and queries of the innovators and enlisting the facilities available at the Institution.

11. NORMS FOR FACULTY STARTUPS

For better coordination of the entrepreneurial activities, norms for faculty to do startups have been evolved by KSRCT. Only those technologies should be taken for faculty startups which originate from within the institute.

Role of faculty may vary from being an owner/ direct promoter, mentor, consultant or as on-board member of the startup.

KSRCT should work on developing a policy on 'conflict of interests' to ensure that the regular duties of the faculty do not suffer owing to his/her involvement in the startup activities.

Faculty startup may consist of faculty members alone or with students or with faculty of other institutions or with alumni or with other entrepreneurs.

In case the faculty/ staff holds the executive or managerial position for more than three months in a startup, they will go on sabbatical/ leave without pay/ utilize existing leave.

Faculty must clearly separate and distinguish on-going research at the Institution from the work conducted at the startup/ company.

In case of selection of a faculty start up by an outside national or international accelerator, a maximum leave (as sabbatical/ existing leave/ unpaid leave/ casual leave/ earned leave) of one semester/ year (or even more depending upon the decision of review committee constituted by the institute) may be permitted to the faculty.

Faculty must not accept gifts from the startup. Faculty must not involve research staff or other staff of institute in activities at the startup and vice-versa.

Human subject related research in startup should get clearance from ethics committee of the Institution.

12. PEDAGOGY AND LEARNING INTERVENTIONS FOR ENTREPRENEURSHIP DEVELOPMENT

KSRCT has been adopted diversified approach to produce desirable learning outcomes, which should include cross disciplinary learning using mentors, labs, case studies, games, etc. in place of traditional lecture-based delivery.

Student clubs/ bodies/ departments must be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies should be involved in Institutional strategy planning to ensure enhancement of the student's thinking and responding ability.

KSRCT starts annual **'INNOVATION & ENTREPRENEURSHIP AWARD'** to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the Institution.

For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.

Tolerating and encouraging failures: Our systems are not designed for tolerating and encouraging failure. Failures need to be elaborately discussed and debated to imbibe that failure is a part of life, thus helping in reducing the social stigma associated with it. Very importantly, this should be a part of Institution's philosophy and culture.

Innovation champions should be nominated from within the students/ faculty/ staff for each department/ stream of study.

Entrepreneurship education should be imparted to students at curricular/ co-curricular/ extra-curricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development. Validated learning outcomes should be made available to the students.

Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment (Example: Salem Productivity Council, Salem, MoUs with Startups etc.)

In the beginning of every academic session, the Institution should conduct an induction programme about the importance of I&E so that freshly inducted students are made aware about the entrepreneurial agenda of the Institution and available support systems. KSRCT Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes. This should also include case studies on failures.

Industry linkages should be leveraged for conducting research and survey on trends in technology, research, innovation, and market intelligence.

Sensitization of students should be done for their understanding on expected learning outcomes.

Student innovators, startups, experts must be engaged in the dialogue process while developing the strategy so that it becomes need based.

Customized teaching and training materials should be developed for startups.

It must be noted that not everyone can become an entrepreneur. The entrepreneur is a leader, who would convert an innovation successfully into a product, others may join the leader and work for the startup. It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take risk.

Pedagogical changes need to be done to ensure that maximum number of student projects and innovations are based around real life challenges. Learning interventions developed by KSRCT for inculcating entrepreneurial culture should be constantly reviewed and updated.

13. NORMS FOR ALUMNI

Creating an engaged, supportive alumni network is crucial to an institution's success. KSRCT is supporting and collaborating with alumni in many ways. Alumni network of KSRCT is very strong and they are located across the globe with high positions. We are approaching the Alumni and sharing the information about incubation facilities at our campus and support for the start-ups. Already few alumni collaborated with us for the joint venture, start-up activities.

KSRCT offer a range of services to support alumni to build from idea to start-up and to thriving business. Alumni can access the following services up to two years after graduating:

- Mentor
- Guest speaker on technical domains
- Jury for the Ideathon and Hackathon
- Workshops on Innovation and Startups
- One-to-one business advice
- Access to free start-up office space (limited availability)

Alumni entrepreneurs also can help to share their experience to the budding students like failure is part of the entrepreneurial process, fail fast is a key tool for entrepreneurs, learning by doing etc. Experienced and trusted alumni entrepreneurs can offer guidance, mentors and support students, faculty and public entrepreneur to navigate the pitfalls of business development and ownership.

14. COLLABORATION, CO-CREATION, BUSINESS RELATIONSHIPS AND KNOWLEDGE EXCHANGE

Stakeholder engagement should be given prime importance in the entrepreneurial agenda of KSRCT. Institution should find potential partners, resource organizations, micro, small and medium-

sized enterprises (MSMEs), social enterprises, schools, alumni, professional bodies and entrepreneurs to support entrepreneurship and co-design the programmes.

To encourage co-creation, bi-directional flow/ exchange of knowledge and people should be ensured between institutions such as incubators, science parks, etc.

KSRCT will organize networking events for better engagement of collaborators and should open up the opportunities for staff, faculty and students to allow constant flow of ideas and knowledge through meetings, workshops, space for collaboration, lectures, etc.

Mechanism should be developed by KSRCT to capitalize on the knowledge gained through these collaborations.

Care must be taken to ensure that events DON'T BECOME an end goal. First focus of the incubator should be to create successful ventures.

KSRCT has developed policy and guidelines for forming and managing the relationships with external stakeholders including private industries.

Knowledge exchange through collaboration and partnership has been made as a part of KSRCT institute policy and we must provide support mechanisms and guidance for creating, managing and coordinating these relationships.

Through formal and informal mechanisms such as internships, teaching and research exchange programmes, clubs, social gatherings, etc., faculty, staff and students of KSRCT should be given the opportunities to connect with their external environment.

KSRCT connects with the external environment must be leveraged in form of absorbing information and experience from the external ecosystem into the Institution's environment.

Single Point of Contact (SPoC) mechanism has been created in the Institution for the students, faculty, collaborators, partners and other stakeholders to ensure access to information.

Devised mechanisms has been adopted by KSRCT, to ensure maximum exploitation of entrepreneurial opportunities with industrial and commercial collaborators.

KSRCT has been developed knowledge management system (Moodle, Research Repository, E learning tools etc.,) to enhance innovation knowledge using in-house Information & Communication Technology (ICT) capabilities.

15. NODAL AGENCY

KSRCT, Centre for Incubation and Startups (CIS) shall act as nodal agency to promote and facilitate startups in the campus. CIS headed by a fulltime Officer In-charge, shall be created which will function as One-Stop-Shop to advocate Institution policies and programmes for promoting startups.

KSRCT, MHRD Institution Innovation Council (IIC) with senior faculty and researchers, various stakeholders, including startups, venture funds, institutions, incubators etc being headed by The Principal, KSRCT shall be constituted to review and advice to CIS.

16. ACTION PLAN

KSRCT Innovation and Startup Policy shall focus on driving entrepreneurship and innovation in the campus through five priority actions:

- Creating conducive ecosystem for encouraging entrepreneurship and innovations.
- Ensuring adequate resources channeled to the startup ecosystem.
- Enabling skill development and inclusive job creation.
- Extending support to social entrepreneurship for a positive social impact and inclusion.
- Establishing global accessibility, connections and partnerships.

Creating conducive ecosystem for encouraging entrepreneurship and innovations

KSRCT is well endowed with engineering and technology talent pool. This indigenous intellectual capital would be strengthened and leveraged to create entrepreneurial ventures through the following plan of action:

Ease of doing Innovation/ Startup registration

A 'One-Stop-Shop' guided by KSRCT portal and ably supported with a help-desk will be set up to facilitate registration and compliances.

17. RESOURCE CENTRE AND REGISTRY

A centralized registry-cum-repository on venture firms, incubators, intellectual property support centers, mentors, database of different talents for Startups to hire, stakeholders and other activities supported by Government of Tamil Nadu and Government of India, will be communicated time to time by KSRCT.

18. HELP CENTRE

A help centre to address queries related to registration, compliance and accessing benefits for Startups will be housed in KSRCT website.

The help centre will also provide promotional and PR platform to startups for dissemination of information related to startup conferences and events.

19. POLICY SIMPLIFICATION

KSRCT, CIS instructed that all the stakeholders must follow the point indicated in this Chapter.

Current/existing labour laws and technical regulations will be reviewed and simplified.

Self-certification to be accepted from startups where there are no technical regulations which need to be complied with, such as compliance with EPFO, ESIC, Minimum Wages, Bonus, Gratuity etc.

Third Party Certification alone will be required where technical regulations had to be complied with such as Boilers Act, Factories Act, the Tamil Nadu Lifts Act, etc.

For Tamil Nadu, TANSIM will engage with the Government in policy advocacy in emerging and

disruptive areas as well as in regulatory dismantling for outdated regulations.

Suitable regulations/orders will be notified under applicable state laws and codes to enable faster exits for startups that shut down in tandem with Government of India notifications.

20. POLICY RESEARCH GROUP & REGULATION

KSRCT Policy Research Cell shall be set up to carry out research on startup eco- system. The group will prioritize working with startups operating in disruptive areas/ technologies to access Government, institutions and other stakeholders like KSRCT Alumni, students and public to share required information and encourage innovation and facilitate market & policy adoption.

21. INCUBATORS / ACCELERATORS

Industrial organizations and private commercial organizations will be encouraged to setup incubators/accelerators at KSRCT using funds allocated under schemes of NITI Aayog, DST, DBT, DEITY and MSME-DO of Government of India. The State and Central Government will provide necessary matching grants as per scheme guidelines. Incubators in KSRCT shall be encouraged to open up to general public.

Corporate Social Responsibility (CSR) funding will be targeted to promote corporate and private incubators. State PSUs and CPSUs shall be encouraged to adopt Incubators and channelize CSR funds. Proposed KSRCT Incubators shall also serve as an innovation sandbox to solve problems faced by PSUs and CPSUs which in turn, shall support startups with access to platform, test bed, data, handholding etc.

KSRCT-CIS provides support to facilitators, Incubates, etc. to develop a concept/idea into a prototype/product.

Establish a Learning & Development team through KSRCT Autonomous Curriculum.

Private institutions/entities will be encouraged to support KSRCT initiatives for supporting entrepreneurship development by hosting fellows, conducting programmes in conjunction with KSRCT policies and furthering the mission of entrepreneurship development at a large scale. They will also be given special status by allowing ease of doing business to accommodate startups in their premises (address registration) and other such requirements to facilitate and increase the number of Startups in the State/country.

The Mission shall ensure that KSRCT proposed Incubator is open for public access at least 16 hours a day and are open throughout the year except National/State holidays (i.e. 16X7).

KSRCT encourage entrepreneurs by giving access to relevant data/information for the purpose of creating apps and technologies for public-good.

22. FUNDING

KSRCT will ensure adequate budget for entrepreneurship development and startups.

Innovative ideas shall be nurtured by special innovation programs with appreciation funds such as Innovation Voucher Program through TN EDII and MHRD IIC activities like Smart India Hackathan (SIH) events, Proof of Concept (PoC) events etc.,

Efforts will also be made by KSRCT to attract NRI/PIO/angel investors/Ventures and Private Equity investors to fund startups.

23. A SUSTAINABLE FINANCIAL STRATEGY

Investment in the entrepreneurial activities should be a part of the KSRCT financial strategy. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation Fund'.

The strategy should also involve raising funds from diverse sources to reduce dependency on the public funding. Bringing in external funding through government (state and central) such as DST, DBT, MHRD, AICTE, TDB, TIFAC, DSIR, CSIR, BIRAC, NSTEDB, NRDC, Startup India, Invest India, MEITY, MSDE, MSME, etc. and non-government sources should be encouraged.

To support technology incubators, academic institutes may approach private and corporate sectors to generate funds, under CSR as per Section 135 of the Company Act 2013.

KSRCT may also raise funding through sponsorships and donations, and also actively engage alumni network for promoting Innovation & Entrepreneurship (I&E).

24. GRANTS

KSRCT will conduct outreach programmes in partnership with reputed agencies, colleges, Incubators and approved private entities across the State/country.

KSRCT will be assisted in future to tapping research grants from BIRAC, DST/NSTEDB, CSIR, DEITY and GITA in collaboration with industry, generating product or process innovations.

Corporate groups, CPSUs and SPSUs will be motivated to fund KSRCT Incubators and startup programmes using CSR regulations in force.

KSRCT will organize orientation programmes to sensitize the managers so as to facilitate startups in marketing and R&D activities.

25. ENABLING SKILL DEVELOPMENT AND INCLUSIVE JOB CREATION

Skill Development and Job Creation

- To provide impetus for fostering innovation in the Campus, KSRCT aims to augment academic research, innovation and startup environment through structured programmes and incentives to students, faculty, innovators and entrepreneurs. University spin outs academic and research institutions.
- Private and public sector organizations involved in entrepreneurship development.
- The mission shall aim for a minimum of 1,000 high skilled direct and indirect job creations in the startup ecosystem available in the Campus.

The Following Key Points will be supported at KSRCT to ensure that youth of the Nation are industry/ startup ready

KSRCT facilitating industry-academia interaction.

Instituting a window for demand-based modern courses / programmes to help the ever evolving startup/industry.

Channelizing programmes/funds from Central and State agencies/departments by applying various proposals.

Introducing entrepreneurship as part of curriculum in KSRCT as per AICTE, MHRD policy.

Encouraging Entrepreneurship Development & Institution Innovation Council (IIC)

headed by a willing and qualified faculty member and student led Entrepreneurship Cell (E-Cell) to promote startups, entrepreneurship & innovation activities in the Campus.

Decentralizing innovation by establishing fabrication labs/tinkering labs/maker-spaces that will serve as a bridge between innovators and incubators.

Introducing academic credits for students who choose entrepreneurship related learning activity at KSRCT in line with AICTE policy.

Internship and apprenticeship for students in graduate courses in science, engineering & technology or professional courses shall be introduced for a minimum period of 6 months in any industry, in one stretch or in two stretches of minimum of 3 months, through reworking of the apprenticeship policy of Government of Tamil Nadu.

Special grace marks and attendance relaxation shall be allowed to students, if their project work is converted into a startup in the Incubator.

KSRCT will encourage as many startups with inter-departmental and inter-institutional participation, taking note of the fact that startup planning and management requires inter-disciplinary skills.

A deferred placement support system will be introduced in all KSRCT in consultation with industry as a measure of risk mitigation against failure of student startups.

KSRCT students shall be allowed to undertake a maximum of 2 years as entrepreneurship break with attachment to an Incubator, after completion of the third year, on application to the college. This break would not be counted towards the number of years for graduation, subject to appraisal by the incubator along with documents of entrepreneurship or product development.

Permitting faculty to transform their/student research projects developed at KSRCT to become startups and also to hold equity in such startups.

KSRCT shall promote translational / applied R &D/ Collaborative industrial R&D.

KSRCT also shall provide training programmes for both startups as well as startup/industry ready employees to bridge the gap between industry requirement and current curriculum.

26. INTRODUCING ENTREPRENEURSHIP COMPETENCIES IN SCHOOLS

The world view of economic development has completely changed. It is increasingly knowledge-driven. This mandates a new approach to inculcate innovation & entrepreneurship from high-school level. The following will be fostered:

KSRCT will be organized School level entrepreneurship programmes to inculcate entrepreneurship as a career choice and provide basic foundational understanding.

State/National wide competitions and challenges around innovation and entrepreneurship for school students will be arranged by KSRCT. Winners of competitions and challenges will be offered access to interesting startups and E-cell run fab-lab facilities in KSRCT to explore their winning ideas.

27. SUPPORTING SOCIAL ENTREPRENEURSHIP FOR A POSITIVE SOCIAL IMPACT AND INCLUSION

Social inclusion has been one of the key factors for sustained growth of nation. There is always a need to provide an equitable platform for women, economically disenfranchised, differently-abled and transgender for greater social stability. While Tamil Nadu is emerging as a

global economic power house, there is still a considerable income gap among different strata of the society. Rural and social enterprises could play a huge role in bridging this gap.

KSRCT aims to offer the following support:

The Mission shall

- extend additional support for startups that are eco-friendly green startups.
- provide special focus to the startups creating social impact in areas like water, waste management, health, food, education, climate change, etc. by dedicating a portion of the venture fund.
- encourage student participation in social impact centric activities.
- encourage rural entrepreneurship through KSRCT venture funding and support rural-based startups and Incubators.
- organize grand challenges on specific social, rural and environmental problems under hackathons programme. Selected innovative solutions shall be awarded an initial grant and follow-on funding for piloting the idea.
- create a mechanism to adopt technologies/models developed by rural/social entrepreneurs.

Women

- Prioritize by and for women startups.
- Training and sensitization programmes for women entrepreneurs.
- Startups with a women founders or co-founders shall be supported for product development and marketing/publicity/participation in KSRCT fairs and exhibitions.

Transgender

- Promote and assist startups where the founder or co-founder is transgender.
- Training and sensitization programmes on entrepreneurship for transgender entrepreneurs at KSRCT Campus.
- Priority in procurement & marketing assistance.

Differently-abled

- Promote and assist startups where the founder or co-founder is differently-abled.
- Training and sensitization programmes on entrepreneurship for differently-abled entrepreneurs at KSRCT campus.
- Priority in procurement & marketing assistance.
- Startups working in the field of differently-abled shall also be eligible for support.

28. ESTABLISHING GLOBAL ACCESSIBILITY, CONNECTIONS AND PARTNERSHIPS

KSRCT Startup Mission will organize meets, webinars and video conferences on startup/entrepreneurship with, NRI/PIO, Indian startup experts, global investors, other leading ecosystems to create a global connect for the local startups to identify and adopt best practices. Efforts will also be made to attract NRI/PIO investors to set up local VCs and angel funds.

The Mission shall partner with International Governments and global networks to promote exchange programmes. 50 outstanding startup entrepreneurs will be exposed to global best practices with the help of global accelerators/startup hubs/academic & research institutions/ Central and State government supports.

'KSRCT Startup Summits' will be organised every year at regional and State level to showcase startups and business innovations and to provide a platform to stakeholders for collaboration in the startup ecosystem. 'KSRCT Innovation Awards' for high growth startups and stakeholders making outstanding contribution to the startup ecosystem.

Regional level innovation contests/hackathons/grand challenges will be organized/financially supported with final culmination events in the KSRCT Campus every year.

Support shall be extended for startup focused programmes, workshops and internship drives organised by KSRCT Incubators, startup networks/communities/groups, organisations and other reputed startup ecosystem partners.

An Open Innovation KSRCT Portal shall be set up by Mission for posting governance, societal and industrial challenges needing innovative solutions in public domain to find solutions. Funding support shall be given to the crowd sourced innovative solution for further refining and development.

KSRCT will partner with leading organizations such as TCS, WIPRO, INFOSYS, TVS and government agencies etc. to fund and support projects with social impact.

KSRCT shall also be marketed as an ideal test-bed for students, youth and social entrepreneurs across the world to come and work on live projects in the State.

KSRCT will take measures to attract global talent and resources to foster innovation and enrich the local ecosystem with events, job opportunities, courses, exchanges, etc.

29. GENERAL SUPPORT

KSRCT support for services like IPR, legal, auditing, accounting etc., through free credits.

30. EXCLUSIONS

An entity in order to qualify as a startup under this KSRCT –CIS policy should not have been:

- Formed by a demerger or reconstitution of a business already in existence.
- A subsidiary of a firm in the State, except subsidiary of a startup itself which also qualifies as startup and the combined entity also satisfies the startup criteria.
- A franchisee of an existing business in the State.
- Promoted or sponsored by or related to an Industrial group in the State whose group turnover exceeds Rs. 300 crores.
- The holding company deriving more than 50% of its income from investments and loans.

31. IMPLEMENTATION

- Operational guidelines and clarifications will be issued from time to time.
- The performance of this policy will be reviewed by the KSRCT-CIS every six months

based on experts to be fixed by the KSRCT-CIS.

- The Mission will also arrange for annual evaluation of the policy and the report shall be placed before the Budget committee and Annual Board meeting in KSRCT.
- This policy is valid for a period of 4 years from the date of its notification or till a new policy is formulated. However, amendments in this policy could be made with the approval of the Chairman, Vice Chairman, and Principal of KSRCT without affecting the beneficiaries already covered under the policy. The policy shall be reviewed every four years.

32. ENTREPRENEURIAL IMPACT ASSESSMENT

Impact assessment of KSRCT entrepreneurial initiatives such as pre-incubation, incubation, entrepreneurship education should be performed regularly using well defined evaluation parameters.

Monitoring and evaluation of knowledge exchange initiatives, engagement of all departments and faculty in the entrepreneurial teaching and learning should be assessed.

Number of startups created, support system provided at the institutional level and satisfaction of participants, new business relationships created by the Institution should be recorded and used for impact assessment.

Impact should also be measured for the support system provided by the Institution to the student entrepreneurs, faculty and staff for pre-incubation, incubation, IPR protection, industry linkages, exposure to entrepreneurial ecosystem, etc.

Formulation of strategy and impact assessment should go hand in hand. The information on the impact of the activities should be actively used while developing and reviewing the entrepreneurial strategy.

Impact assessment for measuring the success should be in terms of sustainable social, financial and technological impact in the market. For innovations at pre-commercial stage, development of sustainable enterprise model is critical. COMMERCIAL success is the ONLY measure in long run.

33. GLOSSARY

Accelerators: Startup Accelerators design programs in batches and transform promising business ideas into reality under the guidance of mentors and several other available resources.

Angel Fund: An angel investor is a wealthyindividual who invests his or her personal capital and shares experiences, contacts, and mentors (as possible and required by the startup in exchange for equity in that startup). Angels are usually accredited investors. Since their funds are involved, they are equally desirous in making the startup successful.

Cash flow Management: Cash flow management is the process of tracking how much money is coming into and going out of your business.

Co-Creation: Co-creation is the act of creating together. When applied in business, it can be used as is an economic strategy to develop new business models, products and services with customers, clients, trading partner or other parts of the same enterprise or venture.

Compulsory Equity: An equity share, commonly referred to as ordinary share also, represents the form of fractional or part ownership in which a shareholder, as a fractional owner, undertakes the

maximum entrepreneurial risk associated with a business venture. The holders of such shares are members of the company and have voting rights.

CSR: Corporate social responsibility (CSR) is a self-regulating business model that helps Responsibility a company be socially accountable – to itself, its stakeholders, and the public.

Cross-disciplinary: Cross-disciplinary practices refer to teaching, learning, and scholarship activities that cut across disciplinary boundaries.

Entrepreneurial culture: A culture/ society that enhance the exhibition of the attributes, values, beliefs and behaviors that are related to entrepreneurs.

Entrepreneurial: An Individual who has an entrepreneurial mindset and wants to make his/her idea Individuals successful.

Entrepreneurship: Entrepreneurship education seeks to provide students with the knowledge, skills education and motivation to encourage entrepreneurial success in a variety of settings.

Experiential learning: Experiential learning is the process of learning through experience, and is more specifically defined as learning through reflection on doing.

Financial Management: Financial Management is the application of general principles of management to the financial possessions of an enterprise.

Hackathon: A hackathon is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including domain experts, collaborate intensively on software projects.

Host Institution: Host institutions refer to well-known technology, management and R&D Institutions working for developing startups and contributing towards developing a favorable entrepreneurial ecosystem.

Incubation: Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through the early stages of development.

Intellectual Property Rights Licensing: A licensing is a partnership between an intellectual property rights owner (licensor) and another who is authorized to use such rights (licensee) in exchange for an agreed payment (fee or royalty).

Knowledge Exchange: Knowledge exchange is a process which brings together academic staff, users of research and wider groups and communities to exchange ideas, evidence and expertise.

Pedagogy and Experiential: It refers to specific methods and teaching practices (as an academic subject or learning theoretical concept) which would be applied for students working on startups. The experiential learning method will be used for teaching 'startup related concepts and contents' to introduce a positive influence on the thought processes of students. Courses like 'business idea generation' and 'soft skills for startups' would demand experiential learning rather than traditional class room lecturing. Business cases and teaching cases will be used to discuss practical business situations that can help students to arrive at a decision while facing business dilemma(s). Field based interactions with prospective customers; support institutions will also form a part of the pedagogy which will orient the students as they acquire field knowledge.

Pre-incubation: It typically represents the process which works with entrepreneurs who are in the very early stages of setting up their company. Usually, entrepreneurs come into such programs with just and idea of early prototype of their product or service. Such companies can the graduate into full-

fledged incubation programs.

Prototype: A prototype is an early sample, model, or release of a product built to test a concept or process.

Science parks: A science park, also known as a research park, technology park or innovation Centre, is a purpose-built cluster of office spaces, labs, workrooms and meeting areas designed to support research and development in science and technology.

Seed fund: Seed fund is a form of securities offering in which an investor invests capital in a startup company in exchange for an equity stake in the company.

Special Purpose Vehicle: Special purpose vehicle, also called a special purpose entity, is a subsidiary created by a parent company to isolate financial risk. Its legal status as a separate company makes its obligations secure even if the parent company goes bankrupt.

Startup: An entity that develops a business model based on either product innovation or service innovation and makes it scalable, replicable and self-reliant and as defined in Gazette Notification No. G.S.R. 127(E) dated February 19, 2019.

Technology Business Technology Business incubator (TBI): It is an entity, which helps technology-based Incubator startup businesses with all the necessary resources/support that the startup needs to evolve and grow into a mature business.

Technology: Technology commercialization is the process of transitioning technologies from Commercialization the research lab to the marketplace.

Technology licensing: Agreement whereby an owner of a technological intellectual property (the licensor) allows another party (the licensee) to use, modify, and/or resell that propertyin exchange for a compensation.

Technology management: Technology management is the integrated planning, design, optimization, operation and control of technological products, processes and services.

Venture Capital: It is the most well-known form of Startup funding. Venture Capitalists (VCs) typically reserve additional capital for follow-up investment rounds. Another huge value that VCs provide is access to their networks for employees or clients for products or services of the startup.

34. ACKNOWLEDGEMENTS

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35. CONTACT

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37. APPENDIX

Messages from Some of KSRCT Alumni Entrepreneurs

SANJEEVI. V

CEO & Sales Manager – Instrumentation VSAN GROUPSNo-10, RajaRajan Nagar Extension, Krishna Industrial Estate Vanagaram, Chennai, Tamil Nadu 600095, Mob: +91 9751475618, +91-9962098274 Email: sales@vsansensors.com web: www.vsansensors.in

VSAN ELECTRICALS AND SENSORS

Incorporated in the year 2017 at Chennai, Tamil Nadu, We VSAN Electricals and sensors are a sister concern of VSAN groups engaged as the manufacturer Wholesaler, exporter, importer & service provider of flow meter, Level transmitter, float switch and many more. In order to keep pace with the never ending demands of customers, we are involved in offering a wide range of these products. Our offered products are widely known for their impeccable quality, seamless finish and best-grade material. We are also providing installation service and flow meter repairing service.

VSAN AGRO & DAIRY

Incorporated in the year 2016 at Chennai, Tamil Nadu, we **"**VSAN Agro & Dairy" is professional manufacturer and supplier of Agriculture & Dairy equipment's, fertilizers, pesticides, Organic fertilizers, Natural quality seeds, Cow Medicines...Etc. We have a strong supply chain network in all over India; we have a strong supply chain network in all over India; we have more than 10000 + customers in All over India.

HARISH KUMAR
13/22, Ramoorthi Nagar,
Tirupur – 641602 Mail: hello@thehk.online, Ph: 9566415958

THE HK ONLINE

I Harish Kumar did BE (EIE) in K S Rangasamy College of Technology, Tiruchengode. I started my company THE HK ONLINE in the year 2016.

The HK Online is a product based company. We are a group of 15 members. The company has 4 partners including me. I am the CEO of the company.

We create and run news, review and "how to" websites. We make money from monetizing our websites using Google Ads and Affiliate networks.

Later on we expanded our field and started an ecommerce site Indianaurochs.com, where we manufacture and sell t-shirts online.

In the corona pandemic period I and my team decided to work on a new Android project. After few months of hard work we launched our first Social media application "CHILL5" on June 5 2020. CHILL5 is a bite-sized video sharing app available for Android.

Last year we made 1.5 Crore in overall revenue.

Mr.R.Rakesh - B.E Computer Science Engineering

I love computers and programming languages. After a lot of talks with my parents and relations I convinced them and took B.E Computer Science Engineering in K.S.Rangasamy College of Technology. Me and my friends spend most of the classes with chit chats and Half Sleep in last bench.

After the first semester, department related subjects came out and interest towards the software and programming opened up deeply. I started torturing my staffs with doubts during the class hours.

During the second year of my college days, our department organized a workshop related to Android App Development which is a starting point. After attending that workshop, I started developing the apps for my own needs and used to share it with my friends. Days ran out and second year got over.

I got my first opportunity in the third year CSI Symposium. One of our staff offered that opportunity which is to handle the workshop to other college students in Android App Development. Me and my friends handled that workshop and I have received the payment of Rs.2000/- which is my first income.

After few researches I have a plan of releasing my apps to Google Play Store. Fees to publish the application in Google Play costs $25 roughly around Rs.1600/- on that day. But a fear came to me that there is a chance I may get cheated out with the online payment. I have discussed the things with my department staffs and they told me to make the payment. I have opened a bank account with the help of my cousin and Grandpa where my Grandpa helped me to maintain the minimum balance of Rs.5000.

After little thinking I have successfully opened my Play Store Account and published my first app. My first app got published in my first hour of one college day. My friend who sits beside me shared that info to my lecturer who handled my class that hour. She immediately pulled me out to my Class Advisor and HOD. They told that information to my whole department. My first app got around

200 installs and more than Fifty 5 Star Reviews within few hours of publish time which motivated me to do more.

After this motivation I have created many apps and published around 20 apps in Play Store. I started earning and bought my car when my fourth year ends. With a Job Offer in Wipro my side hustle as an Entrepreneur started running out in my final year.

Those apps gave me enough amount to start my company and filled my bank account with US dollars. While working in Wipro I got trained in Full Stack Development and my Mentor Motivated that this is a right age to start your things which you dreamed out.

After working in Wipro for 2 Years I quit my job and started the Startup **Strackit Private Limited.** Now it has 3 Full Time Employees and 2 Part Time Employees. It's been 1.5 years and gaining real world experience. I am sure and confident one day **Strackit** will offer a good product to the people and to the businesses.

Hi guys my name is **N. NAVEEN KUMAR from Mechanical department 2013 passed out** batch. I started an **NALLS EXPORT AND IMPORT** company as first entrepreneur in my family after working as contract engineer in BEL Company as design engineer. About KSRCT which consist of friendly staff and natural environment which makes me to grow high in knowledge. Proudly telling I am a KSRCTian. About my company which runs with quotes "**QUALITY IS OUR FIRST PRIORITY**".

We are merchandize Export Company dealing cargo like grocery items, coco eat, rice, turmeric, sesame oil, ETC... The experience gained is totally different from starting the company. The knowledge gets brief and make me much brave than past. It motivates me a lot in development of company as well as in life. Many good qualities developed as being an entrepreneur like getting courage, sharing knowledge and more.

We are proud to tell that we are doing business in four countries. Started my company in 2018 as struggled in starting period but self-belief I forwarded with one quote "I CAN I WILL". QUALITY speaks which makes me to do in four countries with different products. With being an entrepreneur which makes us to think and achieve high. Personally telling it's a different world which makes me attain in high level in knowledge.

I am **Sanjay Gopal (B. Tech Textile Technology 2005-2009 batch),** currently based in Delhi. I am working in an export consultancy GS International as Vice President currently from Oct 2014 onwards.

After doing my schooling from Delhi, I reached KSRCT at the age of 17. My plan was get some work experience in a good company before I get into entrepreneurship. But how do I go about it? How do I get through a good company? How do I get know what is right for me. The key I followed and I still follow is "one step at a time".

With the aim of being an entrepreneur, I made smaller short time goals for myself. First one to be utmost sincere to education, the main work as a student is just to study. KSRCT had such a good platform with eminent professors, regular industrial visits, guest lectures by industrial experts, and the most important part- a wonderful library. After 4 ideal years at KSRCT, I was placed with a garment export factory- Texport Garments, Bangalore. My next goal was to learn as much and as quickly as possible.

I worked there for a year but I felt I need more international experience and hence I though internationally known school of NIFT could give me that. I also studied for NIFT entrance exams for Masters of Fashion Management while working. My next goal was to get through the test. I got selected and I did my MFM from NIFT, Bangalore. I still was aspiring for international experience and I applied for twining program at US which allows one semester to be studied there. I got selected for that as well but the best part was that they awarded me scholarship because of my good score in my engineering. I never thought that would come handy. After my post graduation at NIFT and US, I got placed with Tommy Hilfiger which helped to learn more and add to skills. By 2014 I was sure now I am ready to take the risk and start entrepreneurship.

Only with knowledge and experience you can make an informed decision. This is something one always needs to take the right decision in life or entrepreneurship. I currently work with a company in Norway which sell home goods inn their country. They sell furniture, textiles, home décor, some jewellery etc. The contacts I acquired during all the years helped me to connect with them and slowly it converted to a work relationship. Swami Vivekanda had said that the secret of life is not enjoyment but education through experience. The fault all budding engineers do is that they either don't keep a long term goal or with time forget the goal. My first salary was. Rs. 6000 and I also had an option of Rs. 30000 job in IT field, but it would not have helped my long term goal. Try to learn from experience and this automatically improves your value. For our country to grow we need more and more entrepreneurs. This boosts the economy and now we need the same thing. I hope all the engineers can set their long term goal today and work on short term goals to achieve them.

I am **D.Mohankumar (B. Tech Textile Technology 2005-2009 batch),** currently based in vellode, Erode district. I am **Managing Director M/s.Anandhkumar Tex, Vellode** currently from Oct 2014 onwards.

After doing my schooling from vellode, I am joined in Textile Technology department at K.S.Rangasamy College of Technology. My plan was to work in good garment industry and I get experience in that particular industry before I start the own garment industry.

Being an aim of entrepreneur, I have goals for myself and first one to be utmost sincere to learning, K.S.Rangasamy College of Technology had such a good platform with professors, regular industrial visits, alumni interaction, in-plant training, guest lectures by industrial experts, and the most important part was they motivated to take part in the seminar, conference and project exhibition. After four years at K.S.Rangasamy College of Technology, I thing I am in need more administrative skills so, I join in Post Graduate Diploma in Marketing Management (PGDMM) in Sardar Vallabhbhai Patel International School of Textiles & Management, Coimbatore In 2009 to 2010 one year course. After completing my one year course I was worked as a Lecturer in Erode Institute of Chemical Technology (EICT) in Textile Chemical Processing Department, Uttukulai for three years 2010 to 2013 and my next goal was to become an entrepreneur for that learn as much and as quickly as possible. I worked there for a one year in garment industry in Tirupur but I felt I need to start a own business and become an entrepreneur. I am ready to take the risk and start entrepreneurship in Oct'2014.

With experience gain from industry. I want to take right decision in life to enter into the entrepreneur. I currently work with a company in domestic companies which retail home goods in local and north in our country. The contacts I acquired during all the years helped me to connect with them and slowly it converted to a work relationship with them. The fault all budding engineers do is that they either don't keep a long term goal or with time forget the goal. Try to learn from experience and this automatically improves your value. For our country to grow we need more and more entrepreneurs to increase the economy. I hope all the engineering students can set their long term goal and work on short term goals to achieve a successful entrepreneur in their life.