



**SREE AYYAPPA COLLEGE FOR WOMEN**  
**(Re-accredited by NAAC with B Grade - 3rd cycle)**  
**Chunkankadai, Nagercoil**

**IIC NEWSLETTER** **MINDSPARK**

*"Ignite your infinite potential with Mindspark  
where learning meets innovation"*



**2019-2021**

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## OUR SECRETARY



ADV.SRI.SANGEETH KUMAR

## OUR PRINCIPAL



Dr.K.V.JAYASHREE



# THE TEAM



GUIDED AND SUPPORTED BY  
PRINCIPAL

"The best way to predict  
the future is to create it."

- Peter Drucker

Dr. K.V. JAYASHREE



DESIGNED AND EDITED BY

CHIEF EDITOR AND STARTUP  
ACTIVITY CO-ORDINATOR ,IIC

"A goal without a timeline is  
just a dream."

- Robert Herjavec

Dr. RADHA .R



PROOF READ AND COMPILED BY  
MANAGING EDITOR AND PRESIDENT, IIC

"The way to get started is to  
quit talking and begin doing."

- Walt Disney

Dr. SMITHA NAIR

# EDITORIAL TEAM

## DESIGN TEAM LEADS



Ms.NIRANJANA



Ms.H.S.LATHIKA

## TECHNICAL TEAM LEADS



Ms.VANDANA .J.G



Ms.M.RAKSHITHA

## ORGANISING TEAM LEADS



Ms.B.VARSHA



Ms.P.R KAVVA

# EDITOR'S DESKTOP

## Dear Readers,

Driving economic development through innovative and entrepreneurial efforts is the overwhelming need of the current changing global market. Balancing education with hand-on experience of solving problems faced by society is a core focus of the Institutional innovation Council of Sree Ayyappa College for Women. This e-newsletter highlights the contribution of IIC in creating entrepreneurial culture on the campus, nurturing skill and developing enterprising mindset among students, alumni and faculties and transmuted innovative ideas into ventures. This newsletter will serve to reinforce and allow increased awareness, improved interaction and integration among all of us. "Mind Spark" will be a medium to provide proper acknowledgement and respect to all those who work behind the scenes, overtime round the clock planning things and acquiring results. This inaugural issue is a brief account of all the events held from September 2019- June 2021. The editorial board accepts suggestions and comments to improve the quality of newsletter. This is just a small step towards a long journey. We would like to extend our sincere thanks to our Principal, Dr.K.V.Jayashree for her constant support and guidance that she has rendered in making this newsletter a reality. We extend our thanks to the management and faculty of IIC for their kind and continued support in the publication of newsletter .This maiden issue of newsletter should inspire all of us for a new beginning. Stay tuned to keep in touch with events conducted by IIC to make our College reach better heights.



## PRINCIPAL'S MESSAGE



It gives me immense pleasure to pen this message for the Annual Newsletter -“MINDSPARK” of IIC of our college. Our nation targets to become five trillion-dollar economy by 2024. United Nations Sustainable Development Goal-9 focuses on Innovation and Technological progress to find lasting solutions to both economic and environmental challenges. In order to achieve both the targets, it is time for India to harness the demographic potential of its population and look toward enabling the environment to achieve real economic growth. The youth of our country especially in HEIs have to play a vital role at every step to shape the innovation ecosystem by evolving mechanisms to convert the young minds into high quality technical human resource capable of doing cutting edge research, innovation and entrepreneurship to reach this benchmark.

In order to provide a comprehensive and functional ecosystem to foster innovation, research and entrepreneurship among the students, Institution Innovation Cell (IIC) of Sree Ayyappa College for Women moves forward to fulfil the Institutional Vision and Mission with the sole purpose of moulding our women students into competent, self-reliant and socially responsible empowered women by encouraging, inspiring and nurturing them to become innovators and entrepreneurs. This Newsletter “Mind Spark” is the reflection of our commitment and students participation towards achieving the goal. The activities of IIC are focussed to kindle and harness the innovative and entrepreneurial potentials of the young minds by way of organising various activities as seminars, workshops, industrial visits etc.

I sincerely hope the readers will be immensely benefitted after going through the newsletter and this will motivate all the faculty, students and upcoming batches to contribute more. I whole heartedly welcome you to another issue with inspiring contents.

I wish all the participants and Editorial Team the very Best!



# ABOUT SREE AYYAPPA COLLEGE FOR WOMEN

Sree Ayyappa College for Women was started in the year 1969 by Sree Ayyappa Educational Society, comprising some prominent members of the local Malayalam – speaking community in Kanyakumari District. Sree Ayyappa College for Women is affiliated to Manonmaniam Sundaranar University (MSU) reaccredited with 'B' grade by NAAC. The institution is established with the motto, 'Siksha Dharmena Shobathe' and serves as a dynamic institution of higher learning, set in a rural milieu of Southern Tamil Nadu.

## JOURNEY OF IIC ESTABLISHED IN OUR COLLEGE

Sree Ayyappa College has established Institution's Innovation Council (IIC) as per the guidelines of 'MoE's Innovation Cell (MIC)' in October 25, 2019. The initiative was to create a vibrant local innovation ecosystem, start-up supporting mechanism, establish function ecosystem for scouting ideas and pre-incubation of ideas and to develop better cognitive ability for students. The Institution Innovation Cell of Sree Ayyappa College for Women is actively involved in organizing and conducting seminars, workshops, field trips, project exhibitions, entrepreneurship bootcamps, Idea competitions etc. for the students and faculties. The major focus of IIC at Sree Ayyappa College for Women is to create a vibrant local innovation ecosystem, Start-up supporting Mechanism in HEIs, prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework, establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas and to develop better Cognitive Ability for Students.



## Vision

- To develop the institution as a platform committed to support, promote and provide infrastructure for entrepreneurship and innovation skills among the students and faculty by ensuring the participation of every one of them in the process, as envisioned by the National and State policy documents for the welfare of the society and the country.
- To encourage, facilitate and support emergence innovations, startups and concept ideas from among students and the faculty.
- To ensure cooperation ,assistance and funding from state, central governments, governmental agencies, NGO s, Private entrepreneurs, angel funding, corporate CSR funding and other sources for development , research and implementation of innovation and startup projects.
- To provide incubation facilities and get participation of public and private ventures to sponsor and avail such facilities in the institution.
- To conduct workshops, seminars, webinars, industrial visits, surveys and other interaction programs with students and faculty in collaboration with the university, governments, governmental agencies and private or public organizations on the various aspects of developing an entrepreneurial minded society.
- To ensure participation of the institution, students and faculty in the outreach programs organized by the National Institutional innovation council, Tamil Nadu Start up and Innovation Mission, Other central and state government bodies and the University and educational institutions for promotion of the goals of innovation and start-up ventures.
- To avail the assistance of TNSIM and other state and central agencies and governments and also assist the student and faculty innovators and start-up promoters in the matters of IPR registrations, permissions, licenses and legal issues which may arise from time to time.
- To ensure and avail the institutional funding as permitted by the National policy for the innovation and startup activities.

## Mission

- To develop a new culture of entrepreneurial thinking among the students.
- To visit and interact with successful women entrepreneurs.
- To identify,promote and provide support to students for scaling up their business ventures.
- To extend mentor support on regular basis.
- To create awareness among students about various Government initiatives for women empowerment and welfare of women population in the college.





# CORE COMMITTEE MEMBERS



PRINCIPAL

Dr. K.V. JAYASHREE



PRESIDENT

Dr. SMITHA NAIR



CONVENER

Dr.S.UMA DEVI



SOCIAL MEDIA  
CO-ORDINATOR

Dr.K.R.SOBHA

# FACULTY CO-ORDINATORS



STARTUP-ACTIVITY  
CO-ORDINATOR

Dr.RADHA.R



IPR-ACTIVITY  
CO-ORDINATOR

Dr.R.JANATHAKUMARI



ARIIA  
CO-ORDINATOR

Dr.J.PRASANNAKUMARI



INTERNSHIP  
CO-ORDINATOR

Dr.T.ANITHA



INNOVATION  
CO-ORDINATOR

Mrs.B.S.RAKHI



NISP  
CO-ORDINATOR

Dr.M.R.MEERA



SIH  
CO-ORDINATOR

Dr.V.R.ANJANA

# IIC FACULTY MEMBERS



Dr.SREEYA.G.NAIR



Dr.T.R.UDAYAKUMARI



Dr.T.S.ARCHANA



## STUDENT CO-ORDINATORS



START-UP ACTIVITY  
STUDENT CO-ORDINATOR

Ms.DIYA BABU



IPR ACTIVITY STUDENT  
CO-ORDINATOR

Ms.DEVIKA S.S



INTERNSHIP STUDENT  
CO-ORDINATOR

Ms.S.SABITHA



INNOVATION STUDENT  
CO-ORDINATOR

Ms.M.ANJANA



SOCIAL MEDIA STUDENT  
CO-ORDINATOR

Ms.J.L.APARNA

## EXTERNAL EXPERTS/MENTORS



Dr.MANOJ.M

Associate Professor,  
Marian Engineering College  
Trivandrum.



Dr.ARUN SURENDRAN

Strategic Director and Principal  
Trinity College of Engineering,  
Trivandrum



Mr.KRISHNAN UNNI

CEO,Acutro Technologies Pvt.  
Ltd.,Trivandrum



Dr.M.MENAGA

CEO, Bioneemtec India Pvt Ltd  
Womens Biotech Park, Siruseri,  
Chennai,Tamilnadu



# TESTIMONIALS

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The IIC at SAC have been making regular, sincere and effective measures to instill the spirit of innovation and entrepreneurship among students. I am certain that the faculty will also take interest in commercialising the intellectual property that they create in the labs through their research. Looking forward to the continuing success of the IIC programmes at the college.

**Dr. Arun Surendran**  
Strategic Director and Principal  
Trinity College of Engineering, Tvm.



The IIC at SAC is very well organising in developing the students skill. The coordinators are very enthusiastic in connecting mentors with the students. The guidance given by the mentors to the students is impeccable. I am glad to be one of the advisory board member in IIC-SAC.

**Dr. Menaga Magendran**  
Managing Director & CEO  
Bioneemtec India Pvt Ltd,  
Chennai.



# INNOVATION AMBASSADORS



**Dr. SMITHA NAIR**

Asst. Professor of Chemistry  
(Basic & Advanced Level)



**Dr. S. UMA DEVI**

Asst. Professor of Botany  
(Basic & Advanced Level)



**Dr. RADHA. R**

Asst. Professor of Zoology  
(Basic & Advanced Level)



**Dr. R. JANATHAKUMARI**

Asst. Professor of English  
(Basic & Advanced Level)



**Dr. J. PRASANNAKUMARI**

Asst. Professor of Economics  
(Basic & Advanced Level)



**Dr. T. ANITHA**

Asst. Professor of History  
(Basic & Advanced Level)



**Dr. K. R. SOBHA**

Asst. Professor of Mathematics  
(Basic Level)



**Mrs. RAKHI. B. S**

Asst. Professor of Botany  
(Basic Level)



**Dr. V. R. ANJANA**

Asst. Professor of Zoology  
(Basic Level)



**Dr. T. S. ARCHANA**

Asst. Professor of Commerce  
(Basic Level)



# ACTIVITIES 2019-20



Inauguration of IIC activities and Formulation of Institutional Innovation Council by Dr. P. Bhagavatheeswaran, Director, Centre for Social Development, Kanyakumari on 25/10/2019



Orientation Programme on Women in Entrepreneurship, Dr. Shyla Suganthi Assistant Professor of Zoology, Holycross College (Autonomous) Nagercoil on 30/12/2019



Exposure Visit to Pottery Unit at Thalkulam village, near Eraniel on 16/12/2019



Exposure visit to FABLAB TechnoPark Trivandrum on 30/12/2019



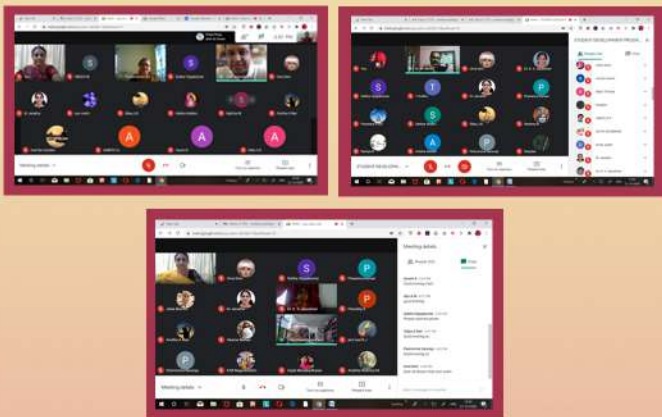
# ACTIVITIES 2020-21



Special lecture on Increasing role of women entrepreneurship in Higher Educational Institutions and impending factors – a national and global perspective by Mr. Dipan kumar Sahu, Assistant Innovation Director, Innovation Cell, MHRD, New Delhi on 31/07/2020

## RESOURCE PERSONS

1. Dr. Manoj.M, Associate Professor, Marian Engineering College, Trivandrum
2. Dr. Arun Surendran, Strategic Director and Principal, Trinity College of Engineering, Trivandrum
3. Dr. K.C.C Nair, Founder CFO, Technopark, Trivandrum



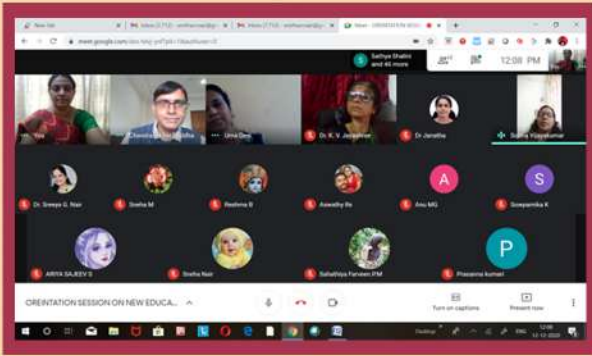
Three-day Student Development Programme (SDP) on Nurturing the Habit of Entrepreneurship among Arts and Science students from 21/10/2020 to 23/10/2020



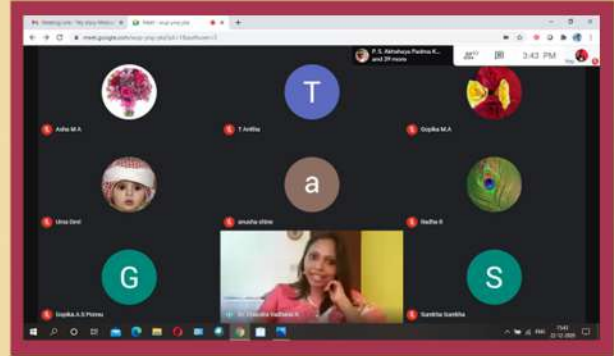
Session on NISP Expert Committee Meeting on adoption of National Innovation and Startup Policy (NISP) at HEI Level



Workshop on Entrepreneurship and Innovation as a Career Opportunity by Dr. D. Amutha, Associate Professor of Economics, St. Mary's College, Thoothukudi on 19/11/2020



Orientation session on National Education Policy (NEP) with focus on Innovation and Entrepreneurship by Dr. Buddha Chandrasekhar, Chief Co-ordinating Officer, AICTE, Ministry of Education on 12/12/2020



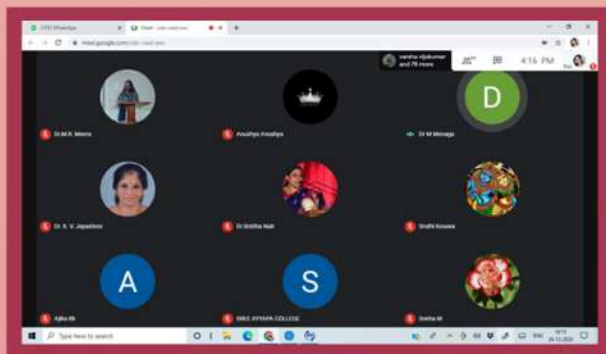
Session on 'My Story-Motivational Session by Successful Entrepreneur' by Dr. R. Chandra Vadhana, Founder & CEO, 4Tune Factory, Prayaana, Cochin on 22/12/2020



Session on Problem Solving and Ideation Workshop by Dr. S. Prakash, Chief Executive Officer, Nehru Group of Institutions, Coimbatore and Ms. B. Priyanka, Incubation Manager, Nehru Group of Institutions, Coimbatore on 23/12/2020



Session on identifying IP component at the early stage of Innovation by Dr. Bismi Gopalakrishnan, Prof. and Head, Dean, Faculty of Law, School of Indian Legal Thought, MG University, Kottayam on 24/12/2020



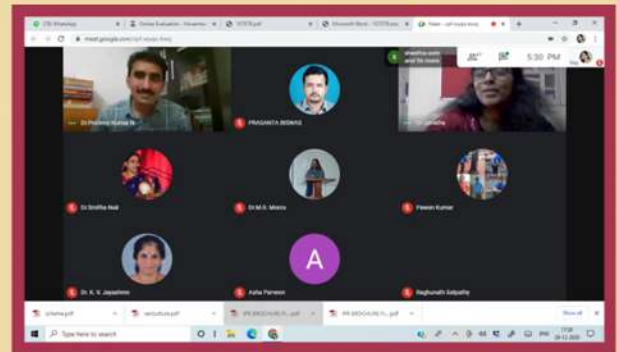
Session on My story- Motivational Session by Successful Entrepreneur/Start up founder by Dr. Menaga, Chief Executive Officer, Bioneemtec India Pvt Ltd, Women's Biotec Park, Chennai on 26/12/2020



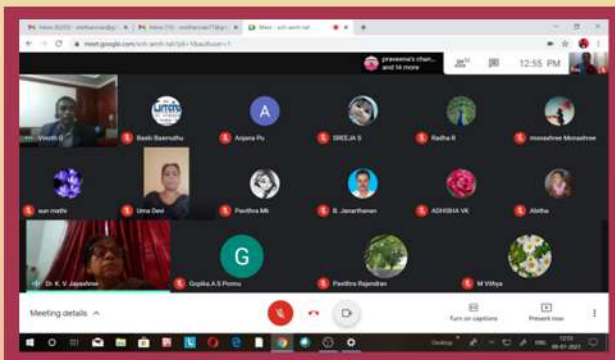
Workshop on Apparel Designing in collaboration with Pidilite (Fevicryl Products) by Dr. Parvati Menon, Associate Professor and Head (Retd), Department of Botany, NSS College for Women, Neeramankara, Trivandrum on 28/12/2020



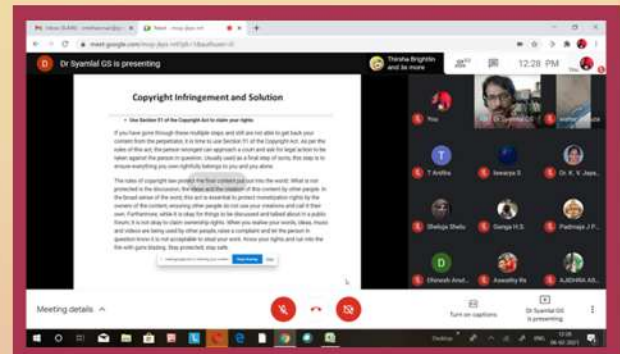
**Orientation session on National Innovation and Start up policy (NISP) by Dr.T.D .Subash , Dean, Academic and Research, Mangalam College of Engineering,Kottayam on 30/12/2020**



**Webinar on Intellectual Property Rights –Entrepreneurial Mindset for Innovative ideas by Dr.N.Pradeep Kumar, Assistant Professor of Commerce, Mahatma Gandhi College, Trivandrum on 29/12/2020**



**Workshop on Design thinking,Critical thinking and Innovation Design by Dr,Vinod.M.S, Chief Start up Designer,Pongu Ventures Pvt Ltd on 9/1/2021**



**Workshop on IPR and IP Management for Start ups by Dr. Syamlal.G.S, Assistant Professor of Economics, Mahatma Gandhi College, Trivandrum on 6/02/2021**

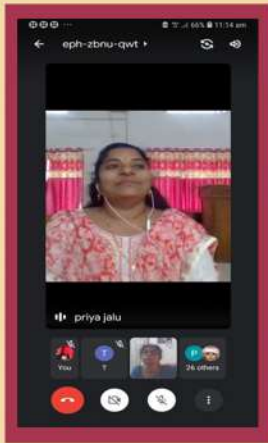


**Session on How to Plan for start up and legal and ethical steps by Dr.D.Abiya Chellam,Asst Prof of Botany,St.Johns College, Palayamkottai on 28/01/2021**

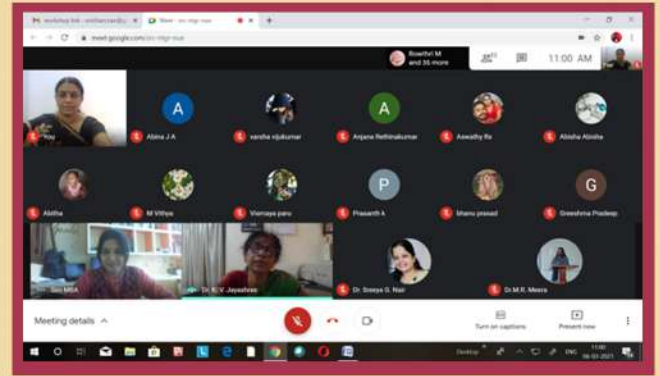


**Session on Prototype Validation –Converting Prototype into a Start up by Dr.Pal Pandian Programme co-ordinator, School of Engineering and Technology, Christ University, Bengaluru on 13/2/2021**

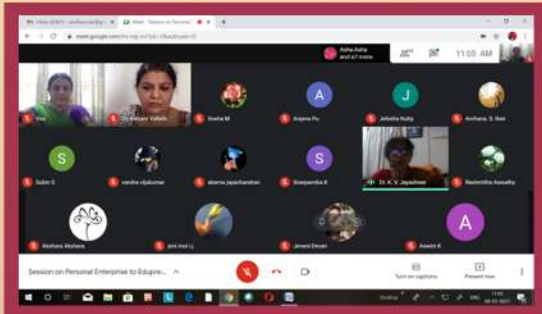




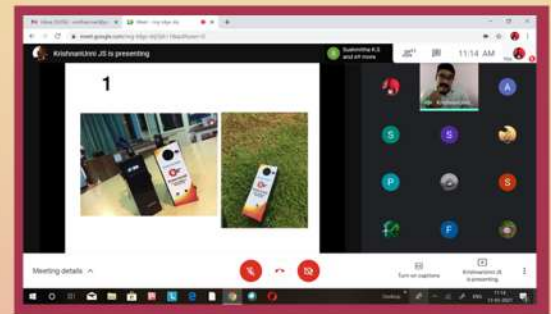
**Session on How to become a successful entrepreneur By S.Lt.Dr.S.Priya, Asst Prof of Commerce, PG Dept and Research Centre, MG College Trivandrum on 20/02/2021**



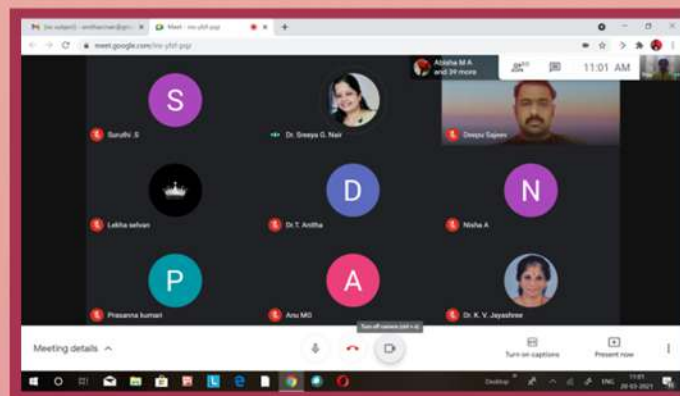
**Workshop on prototype/Process design and Development –Prototyping by Dr.Sini,V.Nair,Asst Professor,CET School of management, College of Engineering,Trivandrum on 6/3/2021**



**Session on Personal Enterprise to Edupreneurship – The Transforming Years by Dr.Kalyani Vallath, Founder, Director of TES ,Trivandrum on 8/3/2021**

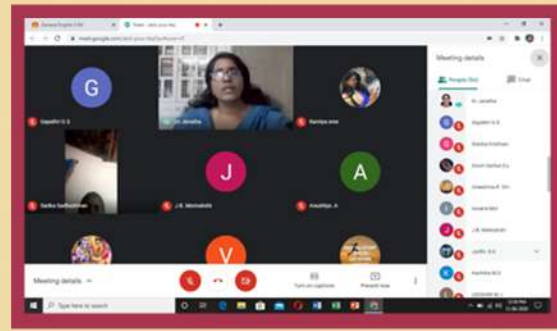
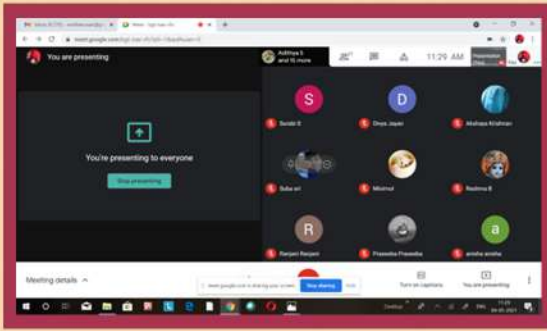


**Session on Building an Innovation /product fit for market by Mr.Krishnan Unni.J.S,CEO,Acutro Technologies, CTO Technolodge,Trivandrum on 13/3/2021**

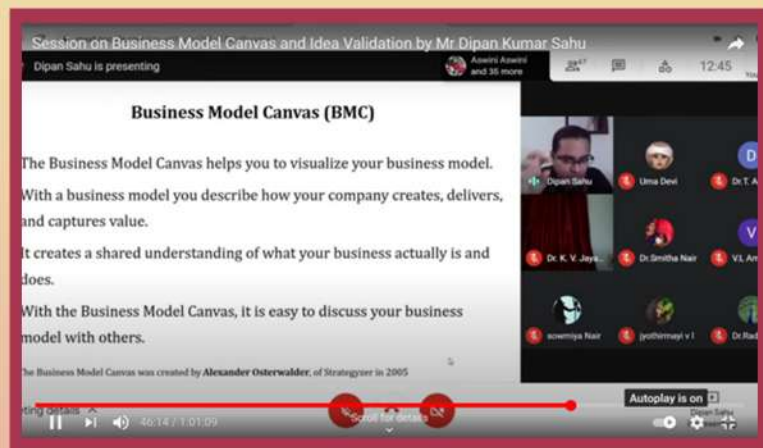


**Session on Acclerators /Incubation –Opportunities for students and faculties-Early stage Entrepreneurs by Mr.Deepu Sajeev, Corporate Relations and Placement Officer, Rajadhani Group of Institutions,Attingal on 20/3/2021**

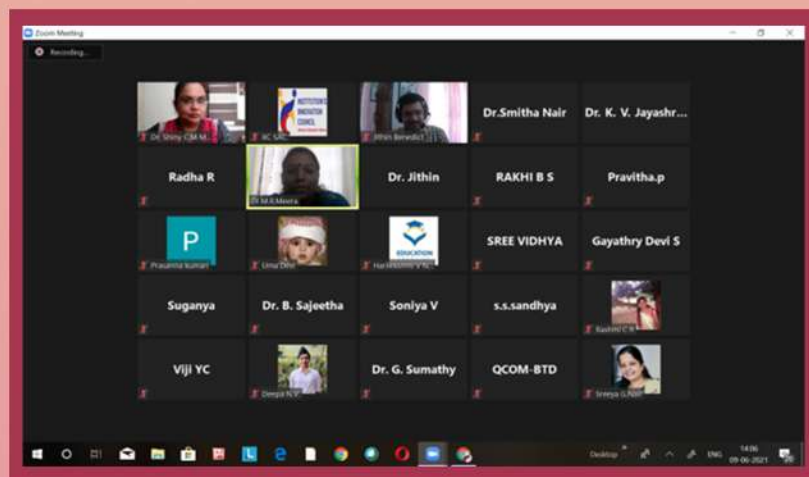




**Orientation Sessions for all Students and faculties of Institutions by Innovation Ambassadors by Dr.Smitha Nair – Ambassador- Incubation and Pre-incubation, Dr.R.Janathakumari , Ambassador- IPR and Technology Transfer, Dr.S.Umadevi, Ambassador- Design Thinking and Innovation and Dr.Radha.R - Ambassador- Entrepreneurship Development Programme on 29/4/21 and 12/08/21**



**Workshop on BMC and Idea Validation by Mr.Dipan Sahu, Asst.Innovation Officer, Ministry of Education Cell and AICTE, New Delhi on 1/05/2021**



**Faculty Development Programme on Fostering Innovation and Entrepreneurship among students-Needs and Necessities from 9/6/2021 -15/6/2021**



# ACHIEVEMENTS

## ACHIEVEMENTS AND IMPACTS

- Mentoring students by Innovation Ambassadors.
- National level Inter-collegiate meet on entrepreneurship.
- Workshops on Business model canvas, toymaking, design-thinking & Agri-entrepreneurship.
- Expert Talk on IPR, BMC, Prototyping etc.
- Faculty Development Programme for fostering innovation among students.
- Student development program on nurturing entrepreneurship among students.
- Awareness session on IPR, NEP, BMC, Design-thinking etc.
- Motivational session by successful entrepreneurs.
- Faculty Development Programme on fostering innovation and entrepreneurship.
- Field/Exposure visit to incubation centres.



ESTABLISHMENT OF IIC CERTIFICATE

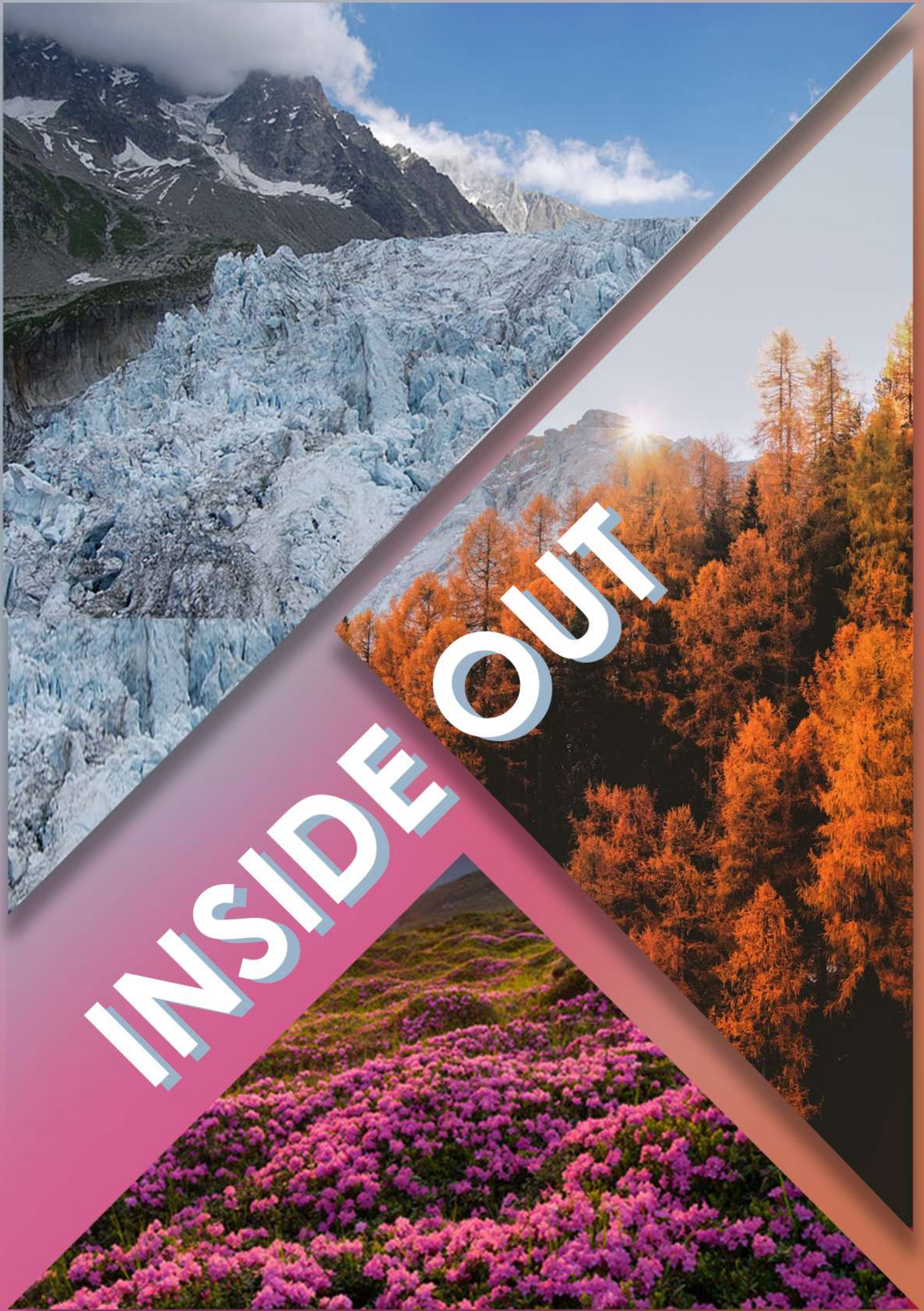


STAR RATING 2019-20



STAR RATING 2020-21





**INSIDE**  
**OUT**

# STUDENT ARTICLES

## ENTREPRENEURSHIP IN INDIA- GOAL TO SUSTAINABLE DEVELOPMENT

"Thirty crores of people share  
This commonwealth of ours;  
A marvel Republic  
Without an equal in the world".

-sings Bharathi about our great nation.

Our nation obtained independence by the bloodshed and sacrifices of freedom fighters. To preserve our liberty, we must be stronger in every way possible. Our country is developing swiftly in various aspects. Entrepreneurship and innovations are very important among them.

India is the second largest country in population moving to first place. Due to increased population, problems like poverty, economic instability, illiteracy and employment increased. If unemployment is solved, it will boost our economy and eradicate poverty and illiteracy.

"Entrepreneur is a job seeker turned into job provider". If there are more entrepreneurs, it will not only increase the personal income but also the national income. It is the most possible way to increase income, reduce unemployment, inspire young minds and develop our beloved nation.

If real development is to take place, people must involve.

- Julius Nyerere

India is the youngest country in the world, inspiring young minds ready to step forth courageously in entrepreneurship. There are many renowned entrepreneurs like Infosys Head, Sri. Narayana Murthy who had inspired the youth of this nation to become successful. The Government has undertaken many measures to develop entrepreneurship. Our government provides funds to budding entrepreneurs and provides funding for innovative ideas through Startup India. It also opened numerous ways for the development of entrepreneurship. Students are given education about them through separate councils like IIC. With support and courage, numerous job seekers have become job providers and they are creating so many job opportunities in India.

"The true sign of Intelligence is not knowledge it is imagination"

- Albert Einstein

Innovation can be defined as thinking out of the box or creating your thinking and developing of something new. Without innovation, there will be no business and without business no income. So innovation is very important in this competitive world. Innovative products attract customers easily. Only an innovative entrepreneur can become successful. Otherwise he/ she will become just a failed start-up.

"Planning and innovation are the eyes of a business". India have developed innovation not only in the field of business but also in medical agricultural, space and research, waste management, robotics etc. New medicines for untreatable diseases, equipments for handicapped people have developed. Seeding and harvesting equipments for agricultural practices were introduced. Technology in the field of defence like missiles and submarines were launched. Many innovations like Bio-napkins, coloured thermometer, Sensor walking stick, dustbin signalling, high degree incinerator have been developed that makes India stand proud in the world. In the field of infrastructure, we have grown immensely. All these happened because the innovative your minds which asked the question-Why not? For that everyone should develop their ideas in business with the help of supporting government. Like Smart India Hackathon so many programs should be developed to make our country progress and reach pinnacle of success.

"Yesterday is History; Tomorrow is mystery  
But today is a gift that's why we call it present."

So Act today. Make your innovations into inventions that could change the life of so many people in India which should innovate or find innovators or help them to become entrepreneurs to make a country developed nation.

-AGALJA.D II B.COM



## INDIA AND ITS INNOVATION JOURNEY

India has been tremendously growing in many sectors. Today it is one of the top five nations in the world. The growth of start-up ecosystems has been growing with numerous values. Promotion of entrepreneurship and startups will ensure an unprecedented growth of prosperity, well being of the people of nation and the spirit of new India. Creating a nation of job-providers and not just job seekers will make sustainable growth of the country.

It is noteworthy to understand that 72% of the entrepreneurs and startups are below the age of 35 that makes the unprecedented pool of young people. India ranks in the top five Nations solving social issues with innovative ideas.

Some of the innovations of India are:

1. Development of incubators and accelerators- India ranks in the top three countries after China and US for the high growth of incubators and accelerators. 40% of incubators are developed after independence by the Start-up India and Stand-up India initiative of the government.
2. Development of domestic satellite- Satellite communication technology has opened up a vast spectrum of opportunities which can transform entire societies. In order to establish satellite communication with the help of an artificial satellite, a domestic satellite communication earth station was established in 1967 at Jodhpur Tekra near Ahmedabad. This made it easy to train scientists and technicians in setting up and running an Earth Station within the country. The Indian National Satellite System (INSAT-I) possesses two multipurpose satellites in geostationary orbit, each of which has twelve 36 MHz-wide C-band channels, two 36 MHz-wide S-band channels, a Very High Resolution Radiometer for earth observation in the visible and IR bands, and a 200 kHz-wide Data Relay Transponder.. This great achievement made India to stand up on the top with some developed countries.
3. Development of a nuclear submarine- India is one of the few five Nations to own a nuclear submarine, INS Arihant India's or nuclear submarine system. It is a 500 km range submarine which acts a new feather to our cap of achievements. The Arihant-class is a class of Indian nuclear-powered ballistic missile submarines being built for the Indian Navy. They were developed under the ₹900 billion Advanced Technology Vessel (ATV) project to design and build nuclear-powered submarines. These vessels are classified as 'strategic strike nuclear submarines' by India. The lead vessel of the class, INS Arihant was laid down in 2004, launched in 2009 and after extensive sea trials was confirmed to be commissioned in August 2016. Arihant holds the distinction of being the first ballistic missile submarine to have been built by a country other than one of the five permanent members of the United Nations Security Council.
4. Development of smallest satellite- India is a land of Intelligence. India once again broke a global space record by launching the world's lightest satellite weighing a mere 64 grams, called Kalamsat, designed and developed not by professional space scientists and engineers, but by 18-year-old Tamil Nadu student Rifath Sharook and his team and named it after the former President of India Dr APJ Abdul Kalam. He wrote History with his innovative mind the same require some encouragement to do wonders.
5. Development of atomic clock- Atomic clock is a super duper invention from India atomic clock helps in marketing accurate location data. It is honorable to know that India produced it. In a significant development, ISRO has developed an atomic clock that will be used in navigation satellites to measure precise location data. The space agency currently imports atomic clocks from European aerospace manufacturer Astrium for its navigation satellites. With the development of the Desi atomic clock, ISRO has become one of the few space organisations in the world which have gained the capability to develop this highly sophisticated technology.
6. Mars Orbiter Mission- Mangalyaan was India's maiden mission to Mars. Nine years ago today, the Indian Space Research Organisation (ISRO) took a massive chance and made a huge leap. They launched the Mars Orbiter Mission, or 'Mangalyaan', a space probe designed to gather information on the Red Planet. It also made ISRO the first space organisation to achieve the feat in its first attempt. ISRO launched the Mars Orbiter on November 5, 2013, which placed itself into orbit around the red planet by September 24, 2014. Though the satellite was only designed for a six-month-long mission, it's continued to beam back data to the Indian space agency for four years.



7. Development of small entrepreneurs through MSME- Many of the innovative minds in India started small scale industrial jobs. Micro, Small and Medium Enterprises (MSMEs) sector is an important pillar of the Indian economy as it contributes greatly to growth of the Indian economy with a vast network contributing about 45% to manufacturing output. MSMEs provide about 110 million jobs which is 22-23% of the total employment in India. It is next highest to Agriculture. Formulation of targeted policies in the areas of infrastructure development, technology adoption, backward and forward linkage, can help MSMEs to achieve their full potential and propel the Indian economy in a higher growth trajectory.

India has numerous achievements in every field. India's achievement has a strong democracy, robust roots of secularism, nuclear power, higher education and the wisdom of tradition. India of 1947 is massively different from India 2020. We have developed tremendous progress in the industrial sector and in other fields. The achievements made possible through indigenous technologies have made India a global soft power. In the world there is an offer for Indian brain because Indians are very much innovative but we Indians need to create India a developed nation than working for other countries. We must not sell our Indian brain to the one who gives more money. India is among the fastest-growing economies globally and innovation has played a critical role in achieving this status. India has rightly identified innovation as a key priority and is committed to further influencing its innovative footprint across the globe. Though India still has a long way to go to become a leader in developing cutting-edge, path-breaking and innovative technologies, India has to carve a path towards an enabling environment by establishing an ecosystem that fosters innovation through young and creative minds of the youth.

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## THE REALITY OF BOOMING ENTREPRENEURSHIP IN INDIA

Entrepreneurship is the engine fuelling innovation, economic growth and employment generation. India is the world's largest democracy and its economy is growing rapidly over the past few decades. As a country it holds the second largest native population behind China. Not surprisingly, India has produced a number of billionaire entrepreneurs. Innovation is the specific instrument of entrepreneurship that act and endows resources with the new capacity to create well.

Over the years, Innovation has become central to the Indian government economic policy. This focus is paying off the countries rising performance in the Global Innovation Index (GII-2019). It is a showcase of how policy efforts can boost innovation capacity and outputs. India has been ranked the most innovative country in the Central and Southern Asian region every year since 2011. India has consistently outperformed on innovation relating to Gross Domestic Product (GDP) per capita for 8 years in a row - a record only matched by three other countries. India is consistently among the top in the world on innovation parameters such as Information Communication, Technology Services Exports, Economy wide Investments, creative good exports, Qualities of Universities and Scientific Publications graduate in Science and Engineering etc. India also stands out in the GI ranking of the world's top Science and Technology clusters, with Bombay, Bangalore and New Delhi featuring among the top 100 clusters.

Start-up India is a revolutionary scheme launched by Our Honorable Prime Minister Shri Narendra Modi. It is a flagship initiative that builds start ups and nurture innovation. The government plans to empower the start-ups to boost the innovation, entrepreneurship, economic growth and employment across India. Since the launch of this start up India initiative on January 16, 2016, the Indian start-up ecosystem have grown to become the third largest in the world with the over 60000 start-ups across 633 districts from all from all the 28 states and 8 Union Territories. Covid-19 was the black swan event of the 21st century and Indian entrepreneurs responded to it by re-imagining their businesses, bouncing back in the face of adversity, embodying the true spirit of self reliant India (Atma Nirbhar). Indian entrepreneurship, Innovation and Business firms have gone through a plethora of changes, particularly over the last three decades. The 1990s was the watershed decade for these revolutionary changes.



During the 1990s, India have made transition from an inward looking democratic socialist country, that often discourages the international trade or investments and allowing private businesses, but over regulated to it a set of market reforms that brought in foreign investments, connecting India with the Global market and creating the opportunities for the Indian companies to venture abroad. India's upward development curve in the entrepreneurship have jump-started the service sector, encouraged innovation, created Global Business leaders and institutionalized the 'jugaad' phenomenon, a characteristic unique to the Indians which motivated them to struggle and prosper. It is the way of dealing with the everyday problems for Indian and attempting to find solutions independent of any organisational support or intervention. In an over populated competitive market, it enabled the Indians not only to survive but also to innovate. As a consequence, the World Bank Report 2018, The Ease of Doing Business, India jumped ahead to the 77 th position from the 100 th place in 2017.

While the 1990s provided the major ground work for the entrepreneur development, the 21st century witnessed the Indian entrepreneurs scaling new heights in diverse trajectories. The new age Indian entrepreneurs were also provided with the process of digitalisation which has led to the platforms for the creation of the companies such as Ola Cabs, Paytm, Flipkart and Zomato. Digitalisation is a process which is closely related to the rising start-up culture in India. It is the technology driven business idea with a scalable business model that enables the start-up idea to transition into a company with professional management, investors, incubators and accelerators. The start-up journey in India had been inspired by the Indian Technology Firms of Silicon Valley, the growth of internet, a dotcom boom and availability of funds through venture capitalists. Without physically investing in a space to set up an enterprise or using the social capital of a traditional business networks, these businessmen have created an Enterprise by connecting the sources to the needs of the consumers. These companies have revolutionised the concept of traditional Indian Enterprise and business acumen similar to that of America but with the own Indian characteristics.

Indian entrepreneurs have come from a hardworking and humble beginnings and created conglomerates that passed down generation after generation as a Family Business. Some of the eminent Indian entrepreneurs include Tata, owner of Tata Airlines, Dilip Sanghvi, founder of Sun Pharmaceuticals, Siva Nadar, founder of HCL Infosystems, Ambani, founder of Reliance Industries etc.

India is a growing emerging market and the world's largest democracy. It has a number of prominent wealthy entrepreneurs and businessman. India has a long tradition of entrepreneurship and enterprise and has achieved a lot in the field of innovation and entrepreneurship. The country appears to be moving in the right direction with increased number of Indians being positive of their ecosystems and willing to pursue entrepreneurship. However the Indian ecosystem has a long way to go to foster the spirit of entrepreneurship across the country.

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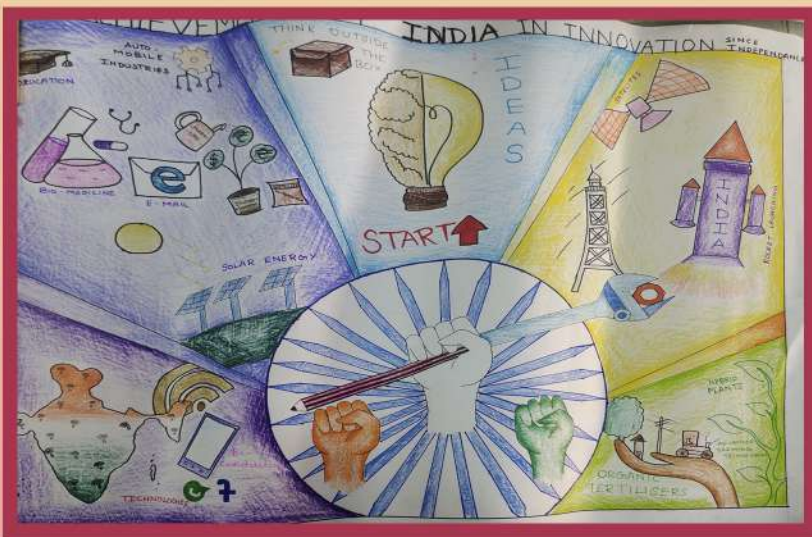




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