



SRiSHTI

SSSIHL Research

in

Scientific, Humanitarian, & Technological Innovations



A publication of
Institution's Innovation Council
Sri Sathya Sai Institute of Higher Learning

SRiSHTI

SSSIHL Research in Scientific, Humanitarian, and Technological Innovations



SRiSHTI

SSSIHL Research in Scientific, Humanitarian, and Technological Innovations

=====

Vol. I Issue 2

May 2024

Editor-in-Chief

Prof. Rani P. L.
Department of Languages & Literature,
SSSIHL, India

Editorial Team

Dr. Arun K. Behera
Dr. Maitali Khanna
Dr. Siddhartha R.
Sri Sai Govardhan Jagadeeswaran

Send your feedback to:

iicmag@sssihl.edu.in

IIC MEMBERS

President - Prof. Pallav Kumar Baruah,
Department of Mathematics and
Computer Science

Convener - Dr. K. Sayee Manohar,
Head, Department of Management
and Commerce

Innovation Activity Coordinator -
Dr. (Mrs.) Swetha Thiruchanuru,
Assistant Professor, Department of
Management and Commerce

Startup Activity Coordinator - Sri
Vivek Kapoor, Associate Professor,
Department of Management and
Commerce

Internship Coordinator - Sri
Vaidyanathan R Iyer, Placement
Officer

IPR Activity Coordinator - Dr. B. E.
Pradeep, Associate Professor,
Department of Biosciences

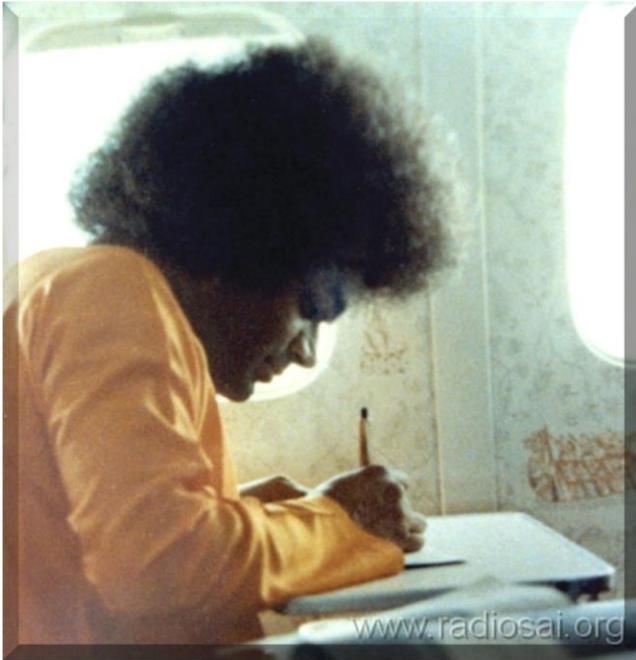
Social Media Coordinator - Sri C V
Venu Gopal, Deputy Manager
(Administration)

NIRF - Innovation Coordinator - Dr.
Muralikrishna Molli, Assistant
Professor, Department of Physics

Table of Contents

1	Founder Chancellor's Message		1
2	True Vikasit Bharat – A Divine Model for Transforming Bharat	Prof. N. Sivakumar	3
3	Lessons from India's Digital Public Infrastructure Journey	NS Ramnath	7
4	The Credit Conundrum of Viksit Bharat	Ram Ramdas	12
5	The Startup Syndrome	Venkatesh Iyer	16
6	An Entrepreneur in the Making	Dr T Usha Rani	20
7	Interview with Mr. Gunaranjan	By Sri J. Sai Govardhan	22
8	Detecting Financial Fraud	Himavardhan	27
9	Innovation in Our Daily Lives	Ch. Rahul	30
10	Events: December 2023 to April 2024	SSSIHL – IIC	32

VISION OF THE REVERED FOUNDER CHANCELLOR



“Today’s education comprises only bookish knowledge. It is only superficial knowledge and it changes every moment. So we must add ‘Educare’ to this bookish knowledge. Educare is practical knowledge. There are a few steps between the superficial knowledge and practical knowledge. From superficial knowledge we must proceed to general knowledge. After analysing this general knowledge one gains discrimination knowledge and knows the difference between good and evil. From this

discrimination knowledge we proceed to practical knowledge. This practical knowledge is changeless. True and eternal education never changes when the heart is filled with compassion; it becomes sacred and aspires for the welfare of one and all. An educated person should not have bad qualities and must not indulge in bad deeds. Today’s education imparts only bookish knowledge, which really degrades a person. How long will this bookish knowledge last? It lasts as long as we keep it in our mind. It is not possible to put bookish knowledge into practice. We fill our heads with bookish knowledge, go to the examination hall, fill our answer paper with it and return with empty heads! In effect, the head always remains empty.

To acquire discrimination knowledge one requires general knowledge, which consists of ordinary cleverness and intelligence. Discrimination knowledge also has in it common sense. Both are essential for life in this world.

Students and Teachers!

What we need today is not bookish knowledge though we require it to a certain extent to cope up with life in this world. But what is essential to us is the knowledge of the Atma. Spiritual education is the highest education, says the Bhagawadgita. It starts with discrimination knowledge, which is like a perennial river. In perennial rivers the quantity of water may vary but not the quality. Thus students should understand that quality of education is more important than its quantity. Degrees are not important, but the knowledge accomplished out of education is important. ”

Sri Sathya Sai Baba

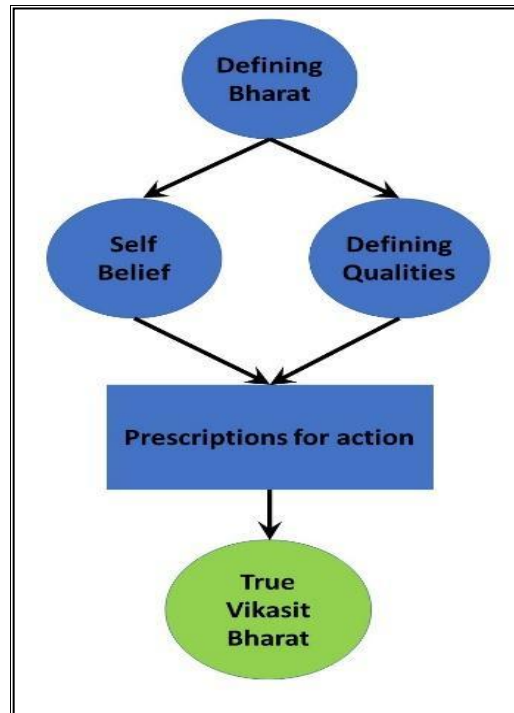
20 November 2001

Sri Sathya Sai Speaks, Vol 34 (2001)



True Vikasit Bharat – A Divine Model for Transforming Bharat

Prof. N. Sivakumar
Director, Sri Sathya Sai Institute of Higher Learning,
Brindavan Campus, Kadugodi,
Bengaluru, Karnataka, India



Sri Sathya Sai Baba, the avatar of the age, has on innumerable occasions explained the greatness of Bharat. He also gave a comprehensive model of true Vikasit Bharat starting from defining Bharat to describing the achievement of true Vikasit Bharat. This article is a humble endeavor to understand this model in the words of Bhagawan Himself.

Defining Bharat: According to Baba, “The term Bharat is applicable to the entire human family. ‘Bha’ refers to the principle represented by Divine Knowledge. Self-knowledge is ‘Bha’. Bharatas are those who take delight in Self-knowledge¹. The epithet Bharatiya does not mean a person born in the land of Bharat. Whoever follows the culture of Bharat is a Bharatiya”. It is important

¹ All quotations of Sri Sathya Sai Baba cited in this article are from the various discourses mentioned in the references.

to note from what Bhagawan expounds that the term Bharat is more of an attitude than a geographical identity.

Based on this definition of Bharat, Baba explains the important aspect of self-belief and the defining qualities of Bharat.

Self-belief

The idea of Vikasit Bharat must start with a belief that India *can* achieve the status of a developed nation. One of the major concerns in this regard is a lack of self-belief about this possibility by Indians themselves. A recent report of Economic Times stated that India may not become a developed country in the next 15 years². This lack of belief is one of the stumbling blocks in development. Sri Sathya Sai Baba wanted people to have the belief that Bharat is a developed country: “Bharat is a naturally well-endowed country. It is Annapoorna - a land of plenty. No country is so well endowed with resources as Bharat. Why, then, should we call ourselves a poor nation? Bharat is not at all a poor country. It is because this fact is not realised that the country is riddled with strife and disorder”. With the self-belief that Bharat is a well-endowed country, it would be useful to understand the defining qualities of Bharat as stated by Baba.

Defining qualities of Bharat

According to Gyesaw (2023)³, there is a growing body of research in behavioural economics which acknowledges the relevance of moral growth as a prerequisite for economic development. This is because, trust is at the centre of all economic transactions and a lack of trust can ruin all development. Thus, ethical values play an important role towards taking a country developed.

Bhagawan Baba emphasized the central role played by dharma in Bharat. “Bharat has upheld moral and ethical values and has set an ideal to the rest of the world. Bharat is the centre of righteousness. It lays great emphasis on the practise of truth and righteousness - *Sathyam vada*

² ‘India can be a developed country, but not in the next 10-15 years’, Economic Times, Aug 15, 2022.

³ Gyesaw, S (2023). <https://www.modernghana.com/news/1240610/how-morality-affects-economic-growth-and-developme.html>

dharmam chara. The code of conduct as prescribed by the culture of Bharat is most ideal and should be practised by one and all. But today people have lost regard for truth and righteousness". Thus, Bhagawan Baba emphasized the need for morality as the foundation for all development. This leads to the next aspect of the model – prescriptions or action points that need to be taken for development, based on morality.

Prescriptions for action

Sri Sathya Sai Baba gives simple prescriptions for morality-based development for Bharat. These include:

- Wherever you go, you should feel proud to proclaim that you are a Bharatiya.
- Whatever you do, bear in mind the welfare of the society and the nation.
- There is no greater sacrifice than sacrificing for one's own nation.
- The tradition of Bharat is to offer food free to every hungry person and water to every thirsty person.
- Render service to others till your last breath.
- All Bharatiyas should join hands to make Bharat a land of prosperity. It is possible only through love.

True Vikasit Bharat

According to Sri Sathya Sai Baba, the true Vikasit Bharat is a prosperous Bharat which is a spiritual leader to the world. Baba's words in this regard proclaim:

"Bharat exemplifies the combination of worldly prosperity and spiritual progress. Bharat is the leader and an ideal to the rest of the world in the field of spirituality. So, all Bharatiyas should foster broad feelings. Bharat is the crest jewel among all nations. It rests on the strong foundation of love. Very soon, the world itself will become "Bharat". Everyone will call themselves a Bharatiya".

The framework discussed in this article gives a broad overview of the Divine vision of a True Vikasit Bharat. The Bharat based on this framework will help the country to be a *Vishwa Guru* in the spirit of *Vasudhaiva Kutumbakam*.

References

The Discourses of Sri Sathya Sai Baba on the basis of which this article has been written are:

1. Restore the glory of Bharat, 23 November 1990, Sri Sathya Sai Speaks, Vol 23
2. Fuse spirituality with education, 22 November 1998, Sri Sathya Sai Speaks, Vol 31
3. Give up enmity, develop unity, 12 March 1999, Sri Sathya Sai Speaks, Vol 32
4. Start New Year with spirit of love, 18 March 1999, Sri Sathya Sai Speaks, Vol 32
5. Convocation Discourse, 22 November 2003, Sri Sathya Sai Speaks, Vol 36
6. Uphold the Dignity and Honour of Bharat Matha, 22 October 2004, Sri Sathya Sai Speaks, Vol 37
7. The youth should follow the path of sathya and dharma, 27 May 2006, Sri Sathya Sai Speaks, Vol 39
8. All Parties Should Unite to Make Bharat Strong, 21 January 2007, Sri Sathya Sai Speaks, Vol 40



Lessons from India's Digital Public Infrastructure Journey

NS Ramnath

Business Journalist, Author & Alumnus of SSSIHL

India's journey in harnessing digital technology to tackle complex societal challenges at an unprecedented scale has captured the attention of the world, notably in the G20 Summit in New Delhi last year. Its unique approach, epitomized by the creation of digital public infrastructure offers useful lessons for countries grappling with similar issues of inclusion, empowerment, and service delivery.

At the heart of Digital Public Infrastructure (DPI) lies a group of technology platforms and protocols that facilitate essential functions such as identity authentication (Aadhaar and eKYC), document signing and sharing (eSign and DigiLocker), digital payments (UPI), and secure data sharing (Data Empowerment and Protection Architecture or DEPA). "No country has built a more comprehensive digital infrastructure than India," Bill Gates, co-founder of Microsoft, said last year.

The vision behind this infrastructure was to lay a foundation upon which government, businesses and civil society could build innovative solutions to serve the diverse needs of India's billion-plus population. Its impact has been transformative.

Aadhaar, the biometric identity system, now encompasses over 1.25 billion people, making it the largest platform of its kind worldwide. It has played a pivotal role in driving financial inclusion, making it easy for banks to open accounts, and for the government to make direct cash transfers to the needy during critical times, such as the recent coronavirus pandemic. For marginalized communities, such as the homeless, Aadhaar happened to be the first official proof of identity, unlocking access to vital services and benefits.

Similarly, UPI, the mobile payments interface, has changed financial transactions. Over 117 billion transactions happened over UPI in 2023, many of them by small vendors who could not have afforded point of sale (PoS) terminals earlier.

However, India's technological journey has not been smooth; this brings to light the challenges of implementing digital solutions at this scale in a society marked by vast diversity and deep-rooted inequalities. Bringing a billion people into the digital world inevitably exposes them to risks such as fraud, data breaches, privacy infringements, and exclusion due to system failures or inadequate digital literacy. Navigating these challenges has been a constant learning process for India, one that holds valuable lessons for other nations.

India's approach offers five key and inter-related lessons for those seeking to emulate its model:

1. Empower local problem-solvers:

DPI's philosophy is rooted in the belief that the best solutions emerge from those closest to the problems. Rather than imposing top-down, one-size-fits-all approaches, the focus is on providing a foundational infrastructure enabling local actors – governments, established businesses, startups, or non-profits – to build contextually relevant solutions. Such decentralization fosters innovation, adaptability, and responsiveness to the diverse needs of communities across the country. Dr Pramod Varma, Aadhaar's architect and one of the key brains behind DPIs, likens it to Lego blocks, using which people who understand the problem build an appropriate solution. Over time, this also builds technological capacity.

2. Foster multi-stakeholder collaboration:

The development and evolution of DPI have been shaped by the complex interplay of forces across civil society, government and markets, or *Samaaj, Sarkar* and *Bazaar*, as Infosys chairman Nandan Nilekani terms it. (He was responsible for the rollout of Aadhaar, and kickstarting DPI). Each of these stakeholders brings unique perspectives, capabilities, and

incentives to the table. Aligning these diverse interests and fostering collaboration is crucial for the success and sustainability of digital initiatives. Creating platforms for dialogue, coordination, and partnership among these stakeholders is not easy, due to the sometimes conflicting goals of various players. India pulled it off in some areas by starting with a coalition of like-minded people, however small.

3. Protect core principles:

As the applications built on DPI evolve and expand, it is crucial to ensure that the core principles underlying the platform remain intact. For example, one of the core principles in the digital economy (and digital public infrastructure) is the idea that individuals should have control over their personal data. (Think of it as data capital). It is hard, but staying true to this foundational value is essential to maintain trust and prevent misuse. This will need robust governance frameworks and accountability mechanisms. DPI is not just about building technology, but also about building institutions.

4. Drive systemic change:

India's journey has shown that digitalizing isolated elements is insufficient to create lasting impact. True transformation requires a holistic approach that cuts across sectors and silos. The identity, payments, and data-sharing layers of DPI work in unison, complemented by enabling laws and regulations, to drive systemic change. This integrated approach has unlocked new possibilities, such as using digital identity to streamline welfare delivery or leveraging digital payments to expand financial inclusion. Pursuing such systemic change requires a long-term vision, sustained commitment, and the ability to navigate complex ecosystems.

5. Balance long-term vision with immediate needs:

India's approach to digital transformation is guided by a vision of an inclusive, empowered, and digitally enabled future. However, this long-term aspiration needs to be balanced with a pragmatic focus on solving real problems for real people today. DPI's design is modular and incrementally expandable, allowing for the creation of value-adding applications even

as the larger vision unfolds, dictated by evolving societal needs and technology. For example, in the light of recent developments in Artificial Intelligence, India can use the tech capabilities from the innovations on the top of DPI to create use cases for India, which in turn could contribute to the data capital, a key element in DPIs. The additional layers of technology, such as AI, can potentially reinforce the benefits of DPI, by building on it. Nandan Nilekani calls this phenomenon “digital public intelligence”.

As India's digital journey continues to unfold, three overarching principles emerge.

- First, technology is merely a tool; it is the choices made by people and institutions in deploying these tools that shape outcomes.
- Second, inclusion is not an afterthought but a central design principle in the creation of digital public infrastructure. Ensuring that the benefits of technology reach the most marginalized is both a moral imperative and a strategic necessity.
- Finally, the process of digital transformation is an iterative one, requiring a willingness to experiment, learn, and adapt continuously.

For nations seeking to harness the potential of digital technologies to address their unique challenges, India's experience offers many lessons. It highlights the possibilities of innovation and leapfrogging, but also underscores the complex challenges of implementation at scale. As countries chart their digital journeys, they must navigate the tensions between standardization and customization, between speed and deliberation, and between efficiency and equity.

India's digital story is still being written, but the lessons it offers are already shaping the global conversation on technology for development. In 2019, speaking at the Centre for Global Development in Washington, Nandan Nilekani offered a succinct piece of advice to the countries that wanted to adopt DPIs. He said: "Start small, start anywhere, start today." The insights from India's journey can help illuminate the path for others, making that first step a little less daunting and a little more promising.

(NS Ramnath is a business journalist based in Bangalore. He has written for The Economic

Times and Forbes India among others. He is the coauthor of *The Aadhaar Effect*, published in 2018 by the Oxford University Press. He is currently working on a book on how Sridhar Vembu and his team built Zoho, India's bootstrapped Unicorn. He is an alumnus of Sri Sathya Institute of Higher Learning, Prasanthi Nilayam.)



The Credit Conundrum of Viksit Bharat

(And lessons from first principles from a millennium-old money lender business model)

Ram Ramdas

Founder @ WonderLend Hubs & Herald Logic

Alumnus, SSSIHL

Imagine you get a call from your bank: “Hey, we have a new credit product in the market. You can get the funds immediately with zero paperwork. But you will have to pay a slightly higher interest rate. Nothing much, just about 1825% per annum.”

You and I would laugh at that offer. But this is what Manjula – a flower seller in Mysore Devararaja’s market pays every day to run her micro flower seller business.

After completing my PhD in Mathematics from the Sri Sathya Sai Institute of Higher Learning (Deemed University) in the early 90s, while on a sabbatical in Mysore, I would often visit the quite famous Devaraja market. I came across Manjula, started chatting with her, and followed her life quite regularly. She was one of the numerous flower sellers of Mysore, who would borrow Rs 200 on most ordinary days, and sometimes maybe 250-300 rupees on special festival days - **at a usurious 5% DAILY interest rate** – to buy flowers and sell them to her clientele during the day. At the end of which, she would net about Rs 100-125 after repaying the principal and interest to the local money lender.

Thousands of the money lenders of “**Bharat**”, have mastered this art (*and science!*) of charging **1825% interest pa on a daily or weekly lending frequency**, “fleecing” ordinary traders, hawkers and micro businesses. Yet, they address a humongous Credit Gap. They address the liquidity requirements of tens of millions of households.

Welcome to the “**Bharat Credit Market**”! **100 Million households, and 64 million MSMEs – and counting!** India’s MSMEs account for more than 110 million in employment (in non-agricultural sectors alone), 30% of GDP and 48% of exports! Even within this, “Micro” enterprises account for 97% of the total employment generated.

[The MSME Credit Gap is estimated to be a humongous 25 LAC CRORES or maybe even more.](#)

These are not just cold statistics and numbers. I have personally experienced credit starvation

first hand as well at my first startup – founded and run by first generation technology entrepreneurs. Since 2006, ever since we started generating some steady revenues, I was on a pretty elusive hunt for working capital to grow our business. For 10 long years, this eluded us. Finally in 2016 we were able to get some basic limits from a private sector bank – much less than what we needed, and asked for. But in less than 2 years, these limits were increased by **FIVE times**. And we have been able to grow our business at a **Compounded Annual Growth Rate (CAGR) in excess of 35%** – ***much, much higher than the infamous “Hindu rate of growth”***. But Manjula and her ilk, despite their exemplary repayment record over years and decades, are not considered creditworthy by our RBI regulated banks and NBFCs. They do not have credit bureau history. Of the 64 million MSMEs in India, barely 5% get the credit they need, **despite** sound business models and viable cash flows. There are government schemes like CGTMSE that have been around for decades, aimed at solving this problem, but they do not work very effectively.

While you may be shocked by the usurious interest rates of the money lenders of Mysore, I believe that we can learn a lot from them! They understand their customers and their business models and cash flows really, really well. And, despite these ridiculous rates of interest they charge, their numerous customers like Manjula, keep coming back to them, day after day, for years and maybe decades!

Today, the industry has coined a fancy term for this – **“Fintech Digital (Paperless) Lending”**. The moneylenders of Bharat have been practising this for decades and more! *Customised credit products. Sustainable relationship driven credit assessment. And flexibility of credit processes.* When Manjula has a bad day, she knows she can rely on her Devaraja Market moneylender to “restructure” her debt. And even occasionally on family occasions – both happy and sad – the moneylender would pitch in with an extra advance – knowing fully well that it will be repaid. Eight years ago, my co-founders and I asked ourselves these fundamental questions:

- Why cannot the Manjulas of Mysore get seamless and convenient access to their regular credit needs – to run and grow their micro businesses?

- Why cannot mass customized micro-credit products be delivered through a “Credit Gateway” at the scale of Bharat – as seamlessly as payment transactions through a payment gateway?

This fundamental question led us to the founding of WonderLend Hubs.

*When studying this problem deeply, we realised that while there are numerous and growing number of players that want to address this large Bharat Credit Market, there is Huge Friction that prevents this **free flow of Credit to Bharat**.*

- Poverty of data
- Rigidity of processes
- One-size-fits-all credit assessment and underwriting templates
- Inflexible distribution and delivery models for credit

All of these drivers of Credit Friction make it operationally difficult, technologically challenging, and financially unviable for most participants to operate in this market.

We hold a strong conviction that **democratization of Credit at Bharat Scale is only possible through democratization of Credit-Processing Infrastructure.**

And that is what we have been working hard and passionately on, over the last few years - building this Bharat Credit Infrastructure - for both business and consumer credit. We call this **the Credit Gateway Platform**. Our Mission that keeps us awake through the days and nights, is to be the “Credit Gateway to Bharat”.

The **Bharat Credit Gateway** that we have been building, **is basically a collection of credit processing services** – available via easy plug and play APIs that our clients, **on both the demand (organizations with a variety of relationships with the borrowers), and supply sides (lenders) of credit** – that can be easily configured and orchestrated **without CODE**, for their numerous micro segments and unique use cases.

We try to make it very, very easy for our clients to plug into this **Bharat Credit Gateway - operationally, technically and financially**. Lending can now be embedded within many different businesses. Many different businesses and organisations can use our Credit Gateway to simply & seamlessly, embed Lending & Credit as a feature into their products and services.

The emergence of **India Stack** and acceleration of adoption of digital services – which is increasingly becoming popular as “**DPI**” - **Digital Public Infrastructure** – is a great foundation for Viksit Bharat, coupled with the momentum in the Account Aggregator ecosystem and the launch of OCEN open protocols for seamless connectivity. These have further energised us and strengthened our vision.

Through the Bharat Credit Gateway, we wish to create a large ecosystem of lending service providers and lenders who are as excited and passionate about delivering customized micro credit to Bharat, at scale. Making this Bharat Credit Gateway easily available and accessible to them is core to our mission to democratize the credit infrastructure that Viksit Bharat needs.

The future of Viksit Bharat beckons us all.

#BharatCreditGateway #IndiaStack #Next500MillionIndians #ViksitBharat

Author Bio: <https://www.linkedin.com/in/ramramdas/>



The Startup Syndrome

Venkatesh Iyer
Head of Commercial Excellence – Latin America
Pharma company – Viatris

In today's world, the career paths of students are much wider and varied than it was a decade ago or earlier when choices were limited to professional paths like doctors, engineers, chartered accountants or lawyers.

In the world at large and India in particular, this is very evident in the number of students opting for entrepreneurship as a career. This is reflective of the societal values today as well as the opportunities available for the youth to chart their future with much more certainty than before. Unlike earlier times, when only children of businessmen would start new / continue existing businesses, in today's world, entrepreneurship is open to all irrespective of their monetary position. There is a thriving ecosystem of angel investors, venture capitalists and private equity funds who actively look to support good business ideas and invest the required capital. This, of course, also brings its own set of challenges for a startup. For every one venture that succeeds, there are a hundred that fail. That should not deter us from becoming entrepreneurs. We hear so many businesses fail due to various factors like not having a comprehensive and sustainable business plan, lack of good team members or execution skills.

Our students at SSSIHL have a unique advantage because of the ecosystem available. Credibility or Trust, which is one of the most important ingredients for a startup, comes naturally to our students having been brought up in a values-based education system. When a student of SSSIHL wants to do a startup, other things remaining equal, he/she has a fair chance of success because of the credibility that the name SSSIHL bestows. However, it is important to have an understanding of the fundamentals of doing a startup in order to succeed. I give below a few points a startup entrepreneur must keep in mind while starting a business.

Identify unmet need – It is important for the promoter to start a business to fulfill an unmet

need rather than for the sake of starting up. This requires a rigor in assessing the market, the current options of products / services available and where the unmet need gap exists. This is the single most important keystone to build the foundation for the business. It is also important to quantify the unmet need. Just identifying the need is not enough.

Building a team – This is another critical success factor. It is rare to find a startup that has succeeded without a founding team which is driven by the same passion for the business. Ideally, the team members should have complementary skill sets so that they are able to add up their skills to achieve a common outcome. Here, shared value system of the team members is very important.

Creating a business case – Having identified an unmet need, the next step is a deep dive into the quantification of the business. This would require data collection and analyses both from primary and secondary sources on the size of the market, the competition, the critical success factors etc. It is important for the promoter to go into all aspects of the costs of getting the product / service to the market and have detailed cashflow analysis for at least five years. Profitability is the cornerstone for business and it is important not to forget this fact. While sales are important, it is only profits that sustain and help grow the business. Till such time the promoter has a clear idea of all aspects of the costs and the revenues and therefore the profitability, it is better not to start putting resources in the business. This is the uninteresting or boring but the most critical aspect of a startup that promoters have to be careful about before getting carried away by excitement of the business prospects.

Key qualities of the promoter and the core team – This is what differentiates a good business from a great business. The following are key attributes for success

- Patience
- Persistence
- High level of motivation not just of the promoter but also of the entire team
- Trust amongst the team
- Networking skills

All the above factors contribute towards the success or failure of a startup.

Let's look at a couple of startups – one that succeeded and one that has failed spectacularly. Uber – the most valuable ride-hailing app company in the world started just 15 years back meeting an unmet need which disrupted the entire passenger vehicle industry and also the way people used to perceive ownership of cars. The promoters identified an unmet need, divided responsibilities among themselves and hired a good team to run the business. The novelty of the idea helped them raise funds in various rounds, including through an IPO in 2019, which has resulted in the company having a market cap in excess of \$100 billion today even though the company is yet to make a profit. With the market being robustly set and growing, it is a matter of time before the company starts making profits. Of course, there have been controversies within the company, including the bad work culture and run-ins with government agencies on tax laws. But with its current size and growth, there seems ample scope to make course corrections to get back to a healthy culture.

On the other hand, Byju's, which revolutionized the edtech industry during the pandemic, failed spectacularly. Though it met an unmet need and started off very well, the lack of professionalism of the promoters, disregard for the customer as well as the toxic work culture coupled with sharp business practices have brought the company down from a \$22 billion valuation to less than \$220 million recently, with rumors of likely bankruptcy soon.

A startup company can succeed or fail depending on all or many of the factors mentioned above. But the most important aspect of the company is the promoter and the core team – what values they believe in and percolate in the system creating a culture. This is where the emphasis of Swami's teaching on Man Management comes handy. Students of SSSIHL have a unique ecosystem that enables them to increase the chances of success as compared to many others.

Our integrated system of education helps the personality development of the student in developing the key qualities that a successful promoter requires. It helps us to work as a team with people from various backgrounds, respecting their individual differences and at the same

time fostering common values that unite the team. These qualities are ingrained in every student in all the routine that we go through in the college, hostel and mandir day in, day-out. The ecosystem of SSSIHL-alumni as well as Sri Sathya Sai Seva Organisations provides a natural ground for startup entrepreneurs to reach out to and engage with – whether in terms of ideas or teaming up or finances (many of our alumni occupy senior positions in the investment banking industry). Therefore, innovators of SSSIHL do have an advantage of the fact that they are blessed to be in an ecosystem which they can make the most of.

(Venkatesh Iyer joined the Sri Sathya Sai Secondary School in 1982 in the first batch of CBSE. From 1984 to 1989, he did his B. Com. and MBA from PSN campus. Having worked for the last 35 years across the Textile, Petrochemical and Pharmaceutical industries in various roles, he is now working as the Head of Commercial Excellence in MNC Pharma company Viatrix responsible for the Latin America region.)



An Entrepreneur in the Making

(Part II - Business and Life lessons)

Dr T Usha Rani

Founder/Director, TFF-The Food Formula, TFF Labs Pvt. Ltd.

While it is true that the journey of a thousand miles begins with a single step, it is also true that the journey itself is an elaborate saga. So, while I did finally get over my inertia and start my entrepreneurial journey, there were many stumbling stones that kept turning into useful lessons and of course, eventually into stepping stones to success. These stones are, to me, like my customized course in Business Management, my very own “B-school”. Sharing three most valuable lessons here seems worthwhile to help any emerging entrepreneur who may relate to similar situations as mine.

Initial challenges – finding the viable products

Like every other enthusiastic entrepreneur, when I decided to start a packaged food business, I was bustling with ideas. I wrote down every idea that came to my mind and wanted to launch each and every one of it. I worked for months on their curation- starting from getting the recipe right, shelf life, packaging as well as logistics. I quickly launched them for online sales and was excited to see them all on the supermarket shelves at the earliest possible! But my co-founder and other peers reminded me that it would be good to be open to all kind of responses.

The initial response and sales were very encouraging and I became more and more confident of my decisions. Soon we started encountering challenges from several planes – logistics, appropriate choice of packaging, etc., which affected the sales. I was reluctant to acknowledge them as challenges initially. I was of the opinion that these products just needed more time to “catch on”. But soon the challenges became clearer with time. That’s when I realized that not all ideas are meant to become viable products. I had learnt a very valuable lesson – that all products needed a “floor test” (MVP in the business jargon!) before they hit the sales.

Getting caught up in the game of perfection

While procrastination is a big hurdle on the pathway to success for an entrepreneur, or any person for that matter, on the other end of the spectrum lies perfection. I have observed that in my endeavor to achieve perfection, many a time I have missed my mark. It could be waiting for the perfect packaging design or the perfect vendor or that perfect time to launch a product, to name a few. But I realized that sometimes, finishing the task at hand is more important than postponing it striving to achieve perfection. There is always scope for improvement, but getting the first draft ready makes the process of improvement much easier.

Learning from mistakes

In this short journey as an entrepreneur, there have been many instances when I have made terrible mistakes. I have made some poor choices as well as wrong decisions. At the moment of impact, I definitely did beat myself, but upon retrospection, I realized that it was another lesson learnt. It is imperative that we allow ourselves to make mistakes, instead of becoming apprehensive of taking decisions over the fear of making mistakes.

While my journey is still on and I keep learning, un-learning and re-learning principles, the one constant feeling that stays on, is the feeling of gratitude: that I have been able to chase my dream, that I get to learn from my mistakes, that I have the luxury to feel happy, busy, stressed and fulfilled through my business.

So, once again, at the risk of sounding cliché, I would use the quote that aptly sums up my journey so far:

“All our dreams can come true if we have the courage to pursue them.” – Walt Disney.



Interview with Mr. Gunaranjan, Founder, UC
(Part II on the concept of *Chaar Daan* and the role SSSIHL played in shaping his career)

(Interview conducted by Sri J. Sai Govardhan, Asst. Prof. of English, SSSIHL)

Interviewer: I came across a report by the Global Lens, the case study section of the University of Michigan. And in that, it has been mentioned that since January 2013, you've been apprehensive about undertaking new projects. So, what is the situation now, and how did you overcome this problem?

Mr. Gunaranjan: I believe that our approach to projects has been measured, with a hesitation to take on many projects due to a strong sense of responsibility. Nevertheless, I think it has always been a stretch goal to do more, but in a measured way.

However, we maintain that our goal is to expand our scope of work in a measured manner, ensuring that our current projects are doing well and not being stretched too thin. The scale of our projects over the past ten years demonstrates that we have expanded our scope of work while ensuring that we are doing well and not just expanding for the sake of expansion.

Interviewer: In your website, you talked about the *Chaar Daan*: so Vastu Daan, I understand is the donation of clothes; Shram Daan, the donation of time; and Dhan Daan, the donation of money. But what is Kachra Daan? How does that work? That is something new to me.

Mr. Gunaranjan: The idea behind the initiative was to promote the concept of waste segregation, which is crucial for better reuse and recycling. Engaging with volunteers, the initiative aimed to spread the idea of segregation of waste, which can generate significant value. By educating communities about the financial value of segregating and accumulating neatly segregated waste, they can use it to support healthcare and education-related activities. So, as I said, we continue to do it in a passive manner; we're not going all out to talk too much about it, but within the community of volunteers we engage with, we continue to encourage that idea. And I would say the resources generated from that are a trickle overall within the financial resources we have received and applied. But the environmental impact is measured not just in

terms of rupees, but more. You can't really measure environmental impact just in terms of rupees. We get the satisfaction that the community, instead of dumping tons of waste into landfills, have their waste neatly segregated and put away for recycling. The initiative is not only passive; it has a significant impact on the environment. Overall, the initiative aims to promote the importance of waste segregation and recycling in environmental-related services.

Interviewer: Do you believe that people have actually understood segregation and are practicing it? Have they reciprocated your efforts?

Mr. Gunaranjan: With our small-scale efforts, which have been done in collaboration with larger volunteer networks in cities like Hyderabad and with Indian Grameen Services in Indore, the impact of our work is not solely due to the efforts of one individual or organization but rather the collective efforts of many people. I believe that positive results motivate us to continue working in this direction. However, we emphasize the importance of working diligently and sharing ideas to ensure a thorough and limited application.

And scale: I believe that sustainable scale can come from aggregating small efforts rather than delivering them all through one institution. I think that a clear understanding and acceptance of our efforts and openness to sharing experience and information can motivate others to do the same and collaborate. The magic here has been collaboration.

Interviewer: You have now undertaken so many projects, such as Health4All, Palliative Care Center, and many others. Which was your most challenging or favourite project?

Mr. Gunaranjan: I won't put anything in that order. I think the more we want to do things on a larger scale, especially things that are yet to be grounded, any new effort will have its challenges. So, we have to define the scope of the challenge we want to undertake. If we want to take on a small challenge, we'll accomplish it quickly, and we can say we are done. But if we take things that are unlikely to be accomplished soon, without getting disheartened, can we work on really long-term goals that will need not just our effort but where eventually we may have to pass on the baton to somebody? Because what is, I think, necessary is that sustainability comes not because of one person's effort. Sustainability is the act of nurturing something and then handing it over to others. Handing it over -- that's the key thing. It's all just

about whatever we have done; be deeply involved in it and accept the fact that you are one component in the larger scheme of things. And I think when we take that approach, we are neither overly odd with our accomplishments nor are we dejected by the small challenges we have. We know we're working with everybody, and things will make progress.

Interviewer: Over time, you would have come across experiences where you would have felt this: So how do we proceed from here? You do not see any light at the end of the tunnel. So, any such experiences?

Mr. Gunaranjan: I do not remember a standard textbook answer to what drives me. There are two aspects. One is, how do you replenish your energy drive every day? That's a very internal thing. The other is the execution aspect, which needs knowledge, skills, and resources. There are two components; they're not completely unrelated, but what is perhaps largely in our sphere of influence is, most importantly, how one can keep themselves motivated, irrespective of what happens outside. The most important things in life are not accomplished in a day. They may not be accomplished in our lifetime. Can you apply yourself to keep working at it? Keep trying? That needs a certain internal anchoring. So that's one aspect. Now, how does one develop that anchor? Call it Sadhana. There are different ways to get to that point. And the other aspect, as I said, is the resources that one can keep acquiring. Even if you don't have it, you can collaborate with somebody who can bring in other team members. So that's all about teamwork—just organizing and getting those resources. And that multiplies. The experience has always been that if we are anchored internally and are able to persist, eventually we will continue to be able to get those resources and whatever else.

Interviewer: What has been your anchor?

Mr. Gunaranjan: How do you find an anchor? I think I may be putting it one way now; I think, after a point in time, maybe putting it another way, because we're all going through a life experience, and I believe that an anchoring or internal support system -- you evolve that. Where I am now is to constantly remind myself and lean on what Swami often says: "You have everything you need. Most important, that joy is latent in you. And you don't have to do anything to access it. You have to only kind of keep things that are clouding it away." It is latent, for sure—

100%. It's there, in, around, and everywhere, just to not let the cloud get in the way of accessing it. You don't have to achieve it. You don't have to acquire it. It is there. So, it's a constant reminder. Yeah, there may be moments where we forget it, but we go back and remind ourselves in different ways. All Sadhana is about you using different techniques to do that, but the essence of it is to know that, as Swami says, Ananda, that resource is always accessible for you. Divinity is with you, and you should be able to live in that moment all the time. So, I think if that anchoring comes more and more, it's not like a single moment after which you are constantly in it; it is more about how often you can be in that contemplation. And the more you are able to be in that contemplation, the less you are perturbed externally. There'll be ups and downs. It's part of the game. And to be able to take both with ease and keep applying because there's nothing to lose, you have it all. So, then you are just a participant in everything else. And that, I think, is the key. And the more we are anchored in that, I think that makes things much easier.

Interviewer: It was nice to hear that. How has our institute shaped your business career?

Mr. Gunaranjan: So, again, to lean on Swami's words, there's been, I think, conviction coming out of years of experience. And the journey I've gone through is what Swami always said. Education is for a life, not for a living. Humans are the only ones who make it a complex thing to live. All animals find their way very easily. Education's primary purpose is actually to find the purpose of life and pursue it. And living is very easy. I am comfortable sitting in this chair, a simple, functional plastic chair. Somebody wants a golden chair. It's in the mind. And so you go on a laborious journey to acquire that style of living. And at the end, it is all inconsequential, because we all have to relinquish everything. So I think the core of education is to reinforce and anchor that the core of our education is for life. What you want to do in terms of living and what you want to pursue is each one's. At the end of the day, it is a zero-sum game. We'll all depart.

And as a whole, I think our education system in Swami's institution was an opportunity to give us that grounding and to pursue it further, to really kind of experience what that grounding can give you. And I think that's the most important thing to seed that anchoring in us. That is the most precious thing to have here. I think in living, there are a hundred ways, a thousand ways, and a million ways; it is really inconsequential. You can do it from any other institution. And so,

coming back to what we have to do, we have to remember that Swami was so emphatic that this is an institution where education is for life, understanding the purpose of life, and pursuing that.

And in work life, you'll realize you have to learn every day if you have to do it. It's just a small component of acquiring some skills, but that part of the knowledge and skills you continue – that journey continues based on the context in which you're working. But what remains consistent is being able to find that anchor in our lives that kind of insulates us from all the other kinds of ups and downs.

Interviewer: Just one last question. How can our institute now help in this centre, which is situated right in Parthi. Is there any roadmap you have in mind?

Mr. Gunaranjan: Specifically, about the palliative care center, I think it's a very holistic approach, looking at giving care and comfort, using the best of what medicine can offer, but also bringing in community participation in terms of looking at their emotional support, social support, and most importantly, spiritual support. That's a fantastic thing about palliative; it's fun. It is one medical branch that actually formally talks about all of this. And therefore, it's a great way to look at exposure and, to whatever extent, the possibility of participation, of students in this.

Interviewer: Thank you so much for your time, Sir. I could see that in between our discussion, you had a discussion with the attenders, and went to the pharmacy. I see that you're very busy throughout the day. Thank you so much for giving close to 36 minutes of your time. I'm sure that this conversation will be a good piece for the Institution's Innovation Council Magazine.



Detecting Financial Fraud

Himavardhan
Aspiring Entrepreneur &
Student, Bachelor of Business Administration
(Batch June 2023 - June 2027)
Sri Sathya Sai Institute of Higher Learning

In this business world, there are evolving technologies like artificial intelligence, machine learning, data science, the Internet of Things, etc. Finance is essential in any organisation, as it helps make investments or acquire profits. In 1992, there was a Harshad Mehta scam, a significant stock market scam in India. Harshad Mehta, a stockbroker, tricked the banks by submitting fake documents that the banks could not identify, and the banks, in turn, gave him money. He then used the money to buy company shares and inflate their prices. The stock market looked like it was doing well but eventually crashed, and people lost much money. Recently, we learned about the case of electoral bonds. Electoral bonds are financial instruments that allow individuals and organisations to fund political parties anonymously. These electoral bonds may lead to the corruption of political parties or to unethical practices.

In this digital world with massive amounts of data being generated daily, detecting financial fraud on an enormous scale has been challenging. There are only a few examples of the fraudulent behaviour. It is like finding a small needle in a giant haystack. Now, in the finance industry, which contains large amounts of data, there are two things we need to be concerned about: security and privacy. So, when the data is secure, we can choose whether the data can be private or publicly available. So now, what if our data is not secure? With the evolution of AI technologies like artificial neural networks, large language models and the development of AI chatbots like ChatGPT by OpenAI, Gemini by Google and Copilot by Microsoft. Attackers have been able to break the security firewalls by stealing sensitive information, also known as data breaches, and by damaging the data, also known as data loss.

Even though we have come to know about data breaches and data loss in newspapers and

TV channels, people are not able to explain how these financial frauds have been occurring despite having many security protocols. Sometimes, in the worst scenarios, people do not even know that financial fraud has occurred; the attacker does the act unbeknown to the victim -- a complex and challenging task. So now, in this worst-case scenario, we will detect financial fraud on a large scale.

To detect financial fraud, we should first know how the attacker behaves, and develops a set of rules on how the attacker behaves. However, implementing a financial fraud detection system with a set of rules is very weak because any changes in the behaviour of the attacker, in turn, will lead to changes in the set of rules. It is like a security guard at a bank. He has instructions or a set of rules to watch out for suspicious behaviour –e.g., if someone other than the authorised person is trying to open the bank lock. These rules and instructions are easy to understand. This is all about traditional fraud detection in finance.

So now we will convert several such sets of rule-based detection use cases to machine-learning use cases. Suppose there is a super assistant who can learn from your experience. So, you train your assistant to identify the suspicious activity of people trying to open the bank lock. This helps your assistant recognise similar patterns that it is trained to recognise in the future or even some other malicious activity in which the assistant has never been trained before. This is how machine learning use cases work. It learns and gets trained from the past data and identifies similar ones which it has been trained in. It can also recognise new ones which it has never been trained in. However, the problem is that people do not trust the machine learning model or the machine learning use case because they cannot understand its decisions. This problem is also known as the black box problem in finance. However, there is a trick to solving this problem. Instead of training the machine learning model or the machine learning use case based on data, we train the machine learning model based on a set of rules or instructions that we can understand and trust. This mainly solves three problems:

1. Teaching the assistant: We do not have many examples of real-world fraud, but we can use the security guard's rules to create practice scenarios for the assistant.
2. Knowing what to look for: The security guard's instructions tell the assistant what

information to pay attention to when looking for fraud.

3. Checking the assistant's work: We can compare the assistant's results with the security guard's decisions to see if they are on the same page. By using a simple model like a decision tree or a flowchart we can easily see the steps the assistant takes to identify fraud. This transparency helps people trust the model's decisions. Even though the assistant might get better with different techniques later, understanding the initial training based on a clear set of rules or instructions helps build trust.



Innovation in Our Daily Lives

Ch. Rahul

Student, II B.Com.

Sri Sathya Sai Institute of Higher Learning, Brindavan Campus

One mid-afternoon, I was sitting on the luxurious chair in the shop run by my father, waiting to receive a bulk order. After a brief wait of 20 minutes, the order did arrive, but now I had discovered a new problem. The godown keys, which are usually hung on the wall, were missing. Then began my search, helter-skelter, for a pinky-size key in a room of 2000 sq ft. After sweating out for a little more than half an hour, I found the key.

Thinking back, this is the problem in every household/shop. As a man rises in his economic prosperity, so does his desire for security. That is when 'Lock and Key' comes into the picture. Every house or shop with a lock and key has a probability of misplacing the key. This problem needs our attention, as people tend to lose a lot of valuable time and peace of mind in search of the misplaced key.

Trying to resolve the problem, I realized all it needed was the aid of technology coupled with a little bit of common sense. Every key has a "key chain," and the key to this problem lies in the keychain! We need to place a tiny Bluetooth speaker inside the keychain that we usually use, and connect it to an application. So, the next time you find your key missing, all you need to do is open the app and press the key icon. A song or sound will automatically arise from the speaker, revealing the location of the key.

Why not a GPS tracker? It will be more costly compared to a Bluetooth speaker and can have more technical issues (like being hacked, providing the wrong location, or having difficulty in tracking our locations precisely). But mainly, the cost can be forbidding.

As I was coming up with this solution, it hit me that there are many 'search problems' in our mundane lives. But as it is said, there is no lock (problem) without a key (solution). Let us

reimagine our approach to everyday problems, viewing them not as obstacles, but as opportunities for innovation. Whether it is developing sustainable solutions to environmental issues or revolutionizing healthcare delivery, technology has the power to shape a brighter and more resilient world. If each person tries to address these problems with the expertise they have, our lives will become easier and more comfortable. All it needs is technology and a hunger for innovation.



SSSIHL – IIC Events: December 2023 to April 2024

EVENT 1

Participation in the Regional IIC Meet - December 11, 2023

Sri Sathya Sai Institute of Higher Learning actively participated in the Regional Meet hosted by the Institution's Innovation Council (IIC) on December 11, 2023, at the Institute of Aeronautical Engineering, Hyderabad.

SSSIHL's participation in the IIC poster presentation and networking sessions served two key purposes. Firstly, it allowed the institute to effectively showcase its achievements in innovation. Secondly, it provided a platform for collaboration and learning from peers.

Dr. Swetha Thiruchanuru, Innovation Coordinator, presented a poster highlighting SSSIHL's innovative activities from 2021 to 2023. The presentation focused on the institute's unique "Modern gurukula system model," emphasizing its approach to empowering individuals. The jury acknowledged the initiative's impact in fostering an innovative environment. Dr. Padmaja, IIC Faculty Member, and student members Ms. Apoorva Havisha and Ms. Asha Rani actively participated in interactive sessions. These sessions provided a valuable platform for sharing insights and learning from other institutions, fostering collaboration and the exchange of ideas.

The experience reinforced SSSIHL's commitment to cultivating an innovative ecosystem, and the insights gained will undoubtedly shape future initiatives in pursuit of excellence and impactful innovation.

EVENT 2

Industrial Visit to JK Brands & Solutions – December 16, 2023

On December 16, 2023, the Department of Management and Commerce at the Sri Sathya Sai Institute of Higher Learning, Muddenahalli Campus, organized an industrial visit to JK Brands & Solutions. This educational excursion provided students with the opportunity to explore a newly established startup led by Mr. Sunil Kumar, the company's sole proprietor and gracious host for the visit.



The visit began with a tour of the JK Brands & Solutions facility, which manufactures steel bed frames. These bed frames are specifically produced for export to the USA. Following this, the students proceeded to another location in Hosur, Sree Devi Powder Coating Pvt. Ltd. This facility focussed on the meticulous finishing and packaging of the manufactured bed frames for export. During their visit, students observed the powder coating process applied not only to bed frames but also to a diverse range of products, including motor parts, bumpers, and steel frames. This highlighted how an extensive variety of items undergo coating and painting at the premises.

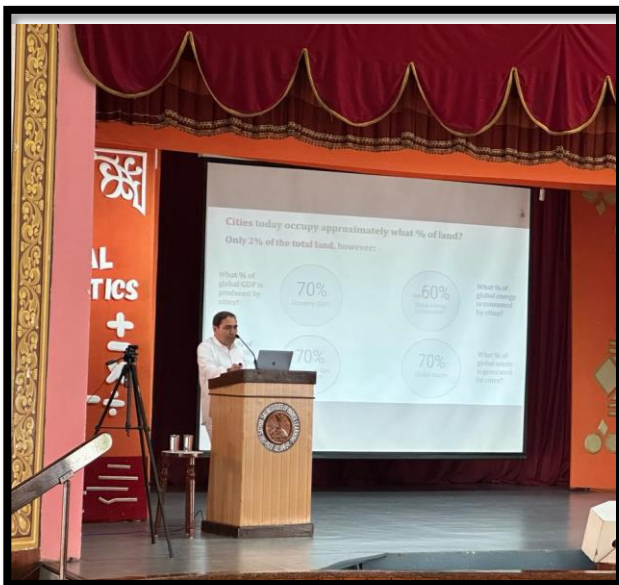
EVENT 3

Talk by Prof. Bharat Dahiya on "Sustainability and Innovation" – December 23, 2023

Professor Bharat Dahiya, from Thammasat University, Thailand, delivered a compelling talk on "Sustainability and Innovation" to students at the Prasanthi Nilayam campus of Sri Sathya Sai Institute of Higher Learning. Drawing upon his extensive experience as both an academician and a former UN employee, Prof. Dahiya highlighted the urgent need to address climate change and achieve the United Nations Sustainable Development Goals (SDGs).

He began by emphasizing the imminent threat of climate change, stressing the importance of immediate action to mitigate its impact on our planet. Prof. Dahiya elucidated the interconnectedness of environmental, social, and economic challenges facing humanity, underscoring the necessity for innovative solutions to create a sustainable future.

Throughout his talk, Prof. Dahiya elucidated various frameworks and strategies through which innovation can drive sustainability. He discussed how technological advancements, such as renewable energy sources and eco-friendly infrastructure, can play a pivotal role in reducing



carbon emissions and conserving natural resources. Moreover, he emphasized the significance of adopting sustainable practices in industries, agriculture, and urban planning to foster environmental stewardship and social equity. In addition to technological innovations, Prof. Dahiya highlighted the importance of social innovation and inclusive governance in achieving sustainable development. He encouraged students to actively engage in community-driven initiatives

and advocate policies that prioritize environmental protection and social justice.

Furthermore, Prof. Dahiya shared insights from his tenure at the United Nations, illustrating the

global efforts and collaborations necessary to address complex sustainability challenges. He urged students to become agents of change and to leverage their education and talents to contribute positively to the society and the planet.

In conclusion, Prof. Bharat Dahiya's talk on "Sustainability and Innovation" provided students with a comprehensive understanding of the pressing issues of climate change and sustainable development. Through his expertise and engaging discourse, he inspired students to embrace innovation as a catalyst for positive change and to strive towards building a more sustainable and equitable world.

EVENT 4

Manthan: Innovation Hackathon 2023

The IIC-SSSIHL organized the Manthan: Innovation Hackathon 2023 to promote creativity, problem-solving, and entrepreneurial spirit among students, faculty, and researchers. The event focused on tackling real-world challenges across various sectors, encouraging participants to develop innovative solutions with potential for commercialization.

A total of 41 enthusiastic participants showcased their entrepreneurial zeal and innovative ideas. Each participant/team presented their business plan pitch to an expert panel in a 15–20-minute time frame.

The primary objective was to provide a platform for addressing pressing issues in diverse domains like education, science & technology, agriculture, finance, cybersecurity, social impact, and more. The hackathon aimed to cultivate an entrepreneurial mindset and empower participants to transform concepts into actionable solutions.

An esteemed panel of industry leaders evaluated the pitches based on predefined criteria, including innovation, feasibility, scalability, market potential, social impact, and presentation

quality. IIC-SSSIHL's commitment to supporting participants was evident throughout the event, ensuring every idea received the opportunity to flourish.

EVENT 5

The National Start-Up Day Celebration – January 16, 2024

The National Start-Up Day Celebration at Prasanthi Nilayam was organized by the Institution's Innovation Council at the Sai Hira Global Convention Centre on January 16, 2024. The event aimed at building up an innovation eco-system within the Institute by inspiring and promoting entrepreneurship among the students and faculty members.



Inaugural Session

The inaugural session commenced with traditional Vedic chants, Poornakumbham, and the ceremonial lighting of the lamp by Hon. Chancellor Sri K Chakravarthy, Vice Chancellor Prof. Raghavendra Prasad, Prof. Reddanna (Emeritus Professor, University of Hyderabad; Executive President of Federation of Asian Biotech Associations), Prof. Pallav Kumar Baruah (President IIC, SSSIHL), Dr. Sayee Manohar (Convener IIC, SSSIHL) symbolizing the auspicious beginning of the event.

Prof. B Raghavendra Prasad, Vice-Chancellor of Sri Sathya Sai Institute of Higher Learning, delivered the welcome address, setting the stage for the day's proceedings. He emphasized on using scientific knowledge for the benefit of mankind, rather than using it just as an expensive futility. He thanked the alumni entrepreneurs for their active support and requested them to conduct workshops for the students. He also mentioned about introducing new institutional policies to support entrepreneurship. He wished the programme would be beneficial to all the participants.

Prof. Reddanna, Professor Emeritus at the University of Hyderabad, Executive President of FABA, and Founder Director of the NIAB, delivered the Keynote Address on the 'Role of University in Promoting Start-ups,' emphasizing various initiatives supporting students and the evolving entrepreneurial environment. He emphasized the role of curriculum in moulding the innovative mind of the students. He also mentioned the role of FABA in creating an innovation ecosystem on campuses.

Session 1: Talks by Industry Experts

Speaker 1: Dr. R. Venkataraman, Founder and CEO of Karkinos Healthcare and Advisor to the Chairman, RIL, provided valuable insights into the 'Societal Impact through Start-up: Role of SSSIHL'. He highlighted the institution's role in fostering an entrepreneurial culture and instilling an innovative mindset in students through the unique Sri Sathya Sai system of education. Emphasizing the significance of execution, he stated that a vision without execution is mere

hallucination. Mr. Venkataraman also underscored the importance of humility for entrepreneurs to thrive.

Speaker 2: Mr. Naveen Lakkur, Chief Innovation Coach at the Institute of Inspiring Innovation, captivated the audience with insights into the 'Spirit of Entrepreneurship,' exploring fundamental aspects of nurturing innovation. Through his talk, he ignited the potential of innovation, drawing references from his book "Inseparable Twins". Mr. Lakkur explained the symbiotic relationship between innovation and technology, describing them as two sides of the same coin. He emphasized channeling youthful energy toward job creation benefiting the entire community.

Session 2: Panel Discussion - 1

Moderator: Sri Lakshmikant (Co-Founder, ValueCraftz Advisors)

The panel, consisting of Dr. Shivakiran (CEO of ATAL Incubation Centre, Andhra Pradesh), Sri Manoj Dusanapudi (Master Inventor at IBM: IPR), Dr. Ram Ramdas (Social Entrepreneur), Sri Sathya Pramod (Co-Founder of Inflection Point Ventures) and Dr. Bharati Dhar (Founding Director of Vitasta) provided rich insights about various aspects of innovation and entrepreneurship and shared their personal experiences. Dr. Ram Das highlighted "Sthitapragnya" and "Nishkama karma" to be the two most important qualities of a successful entrepreneur. Mr. Shivakiran defined the incubation centers to be "A one-stop solution for converting ideas into business". He explained how the incubators support idea flow from bottom to top and cash flow from top to bottom. Sri Sathya Pramod emphasized on the importance of having a clear vision, the right mindset, and adequate funding for the sustainability of any start-up. While discussing the role of integral education of SSSIHL in raising successful entrepreneurs, Dr. Bharati Dhar mentioned that SSSIHL instills extremely useful entrepreneurial skills like discipline, collaboration, perseverance, and service attitude, in all students through its daily activities. While explaining the role of IPR in entrepreneurship and start-ups, Dr. Manoj advised investing in patent filing only if the innovation is first of its kind, possesses significant business value, and is capable of generating high revenue.

Session 3: Expert Talk and Magazine Release

Dr. Anshuman Das, CTO and Co-founder of Labby Inc., shared his 'Start-up Journey,' offering valuable insights based on his personal experiences. Despite encountering numerous risks typical of an entrepreneur's journey, he courageously embraced them with a positive attitude. Dr. Das emphasized the importance of having a resilient mindset to confront risks and persevere through challenges, demonstrating the determination to overcome obstacles and begin anew if necessary.



The first issue of SRiSHTI (SSSIHL's Research in Scientific, Humanitarian and Technological Innovations) a magazine of IIC, SSSIHL, was officially released by the revered Chancellor and Vice-Chancellor, officiated by the editorial board led by Prof. Rani P. L.

Displaying innovation and sustainability, the magazine was available as e-copies for all participants, which they could download by scanning a QR code displayed at the exit points.

The event also included an Awards and Recognition ceremony, acknowledging various citations from the institution, and highlighting the commitment to fostering innovation

and entrepreneurship. Dr. Murali Ravi from the Department of Physics and Dr. B. E. Pradeep from the Department of Biosciences received awards for their excellence in innovation.



Session 4: Panel Discussion - 2

Moderator: Prof. M Sainath (Executive Director, ICFAI)

The second panel comprised of Mr. Naveen Lakkur (Chief Innovation Coach at the Institute of Inspiring Innovation), Mr. Manoj Nakra (Co-Founder of SCIP), Mr. L. Ganesh (CEO, iFocus Systec India Pvt. Ltd.) and Mr. Nirbhay Lumde (Head of ESG & Sustainability at CGI), engaged in a comprehensive discussion while answering questions, such as, how important is it to deal with the unexpected. Aren't young students afraid of unlearning formal knowledge and learning from their mistakes? Why should one start a start-up during studenthood? How important is the concept of "responsible innovation"? All panelists emphasized aiming at holistic and sustainable innovations with high authenticity and strong objectivity for establishing a successful start-up. The panel concluded that along the path laid down by Bhagwan Sri Sathya Sai Baba, SSSIHL imparts skills to the students to live life ethically, insists on both creation and application of knowledge, teaches innovation by design and collaboration through culture and trains the young minds to overcome the fear of the unknown.

The National Start-Up Day Celebrations at Prasanthi Nilayam provided a platform for meaningful discussions, insightful talks, and recognition of outstanding contributions in the field of entrepreneurship. It served as a diverse hub for innovative ideas and entrepreneurial



spirit, reinforcing the belief that each participant possesses the potential to stand out and create a substantial impact. The event successfully promoted the spirit of innovation and entrepreneurship,

leaving the participants with valuable lessons and inspiration for their entrepreneurial journeys.

EVENT 6

Colloquium on 'Innovation in Science and Technology' – February 10, 2024

The Sri Sathya Sai Institute of Higher Learning's Innovation Council (IIC) organized a Colloquium on Innovation in Science and Technology at the Prasanthi Nilayam Campus on February 10, 2024.

In the first session of the day, Dr. Jurgi Camblong, Co-founder and CEO of Sophia Genetics, delivered the keynote address, focusing on Artificial Intelligence (AI) in healthcare. He acknowledged the widespread adoption of AI but highlighted its limited presence in healthcare.

Dr. Camblong presented Sophia Genetics' mission to bridge this gap by leveraging AI, Deep Learning, and Machine Learning to analyze patient data for targeted cancer treatment

recommendations. He emphasized the company's strategic focus on cancer and rare diseases, allowing for concentrated efforts to improve patient outcomes.

Furthermore, Dr. Camblong stressed the importance of decentralized AI-ML platforms in healthcare, promoting data-driven medicine accessibility. He highlighted the critical role of cloud computing in enhancing AI accuracy through increased data exposure. Dr. Camblong offered valuable advice to aspiring entrepreneurs, urging them to persevere and embrace challenges in their pursuit of innovation.

The session concluded with an interactive question and answer session that the staff and students from all campuses actively participated in.

The second session saw Dr. Camblong being joined by Dr. Venkatramanan, CEO and Founder, Karkinos Healthcare and Advisor to the Chairman, RIL. In this session, the formidable task of applying innovation in medicine took center stage, revealing a landscape far more intricate than one might initially perceive. Dr Venkatramanan underscored the formidable hurdles that innovation in medicine presents, highlighting the need for substantial capital, time, and a robust network of connections within the medical community. The process of innovation in medicine, as elucidated during the seminar, demands significant financial investments and considerable time commitments. He emphasized that the challenges extend beyond the inception of ideas to the intricate execution phase.

Establishing connections within the medical field is a crucial factor for success, the speakers emphasised. Dr Venkatramanan stressed on the importance of being recognized within the industry, citing the publication of papers in prestigious journals such as Cell, Nature, and Science as a testament to one's standing. Navigating the medical innovation landscape requires strict adherence to basic norms to gain credibility. Drawing parallels with historical instances, the speaker invoked the challenges faced by Galileo against the Copernican theory, highlighting the need for present-day challenges in the medical ecosystem. Dr Camblong positioned collaborative mindset and the sharing of knowledge as integral components of medical progress. Discouraging the hindrance of others' research, he advocated for a collective

approach towards advancing medical science. He highlighted the significance of curiosity, passion, personal honesty, and intellectual honesty in the pursuit of medical innovation.

This session too ended with an elaborate Q&A session which saw a lot of participation from the audience and some insightful responses from the speakers.

EVENT 7

Field visit for proposed Atal Tinkering Labs – February 12, 2024

With a vision to nurture one million children in India into Neoteric Innovators, Atal Innovation Mission has been tasked with establishing Atal Tinkering Laboratories (ATLs) in schools across India. The objective of this programme is to foster curiosity, creativity, and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc.

The Institution's Innovation Council at the Prasanthi Nilayam campus visited the Zilla Parishad Boys' High School at Kothacheruvu following a discussion with the Head of the school. Faculty members and students from different science departments of the Prasanthi Nilayam Campus spent a few hours in the school, in an attempt to understand the possible implementation of the ATL in the school. The Department of Physics has proposed to offer short term internships for selected students. Similarly, other departments that visited have initiated some activities for the students and the teachers to benefit from. In turn, a return visit to the campus inspired the school faculty and the students. During the National Science Day celebrations on our campus, a team of students and teachers visited our campus to participate in the events.

EVENT 8

Innovate 360 – February 12 – 16, 2024

The Muddenahalli Campus of Sri Sathya Sai Institute of Higher Learning hosted a transformative event, "Innovate 360 - Unveiling the Power of Data Science, Computing, and Beyond," from February 12 to 16. This week-long convergence brought together intellects, ideas, and cutting-edge technologies, showcasing the dynamic landscape of data science and computing. The event not only assembled experts but symbolized a collective effort to unravel the potential at the intersection of technology and human ingenuity. "Innovate 360" pushed the boundaries of what was deemed achievable, promising a journey into new realms of possibility. The 5-day data science workshop organized by alumni of the Sri Sathya Sai Institute of Higher Learning offered a deep dive into various aspects of the field. The workshop equipped participants with not only technical skills but also a broader understanding of the connections between data science and other disciplines.

The first day kicked off with Sri Vigneshwaran exploring the role of Artificial Intelligence (AI) in shaping social media discourse. He discussed how machine learning models are trained and evaluated, while also highlighting how AI can be used to mitigate online toxicity through various applications. In the afternoon session, Sri Surya Lamichaney emphasized the importance of domain knowledge in data science. He explained how understanding the specific field where data is applied enhances the effectiveness of data science solutions. The day concluded with an interactive session on full-stack development led by Sri Ashik Rai and Sri Gigme Lepcha. Participants gained practical knowledge through hands-on exercises and real-world case studies, solidifying their grasp of integrating theoretical concepts into practical applications.

The second day focused on artificial intelligence and related technologies. Sri Ajay Mukund delivered a comprehensive lecture that unpacked the functionalities and limitations of AI, machine learning, and deep learning. He then delved into transformers and Large Language Models (LLMs), explaining their components and operations. The afternoon session with Sri Arunraj Gopalsamy explored the transformative influence of the Internet of Things (IoT) on

everyday objects. He showcased diverse IoT applications across various sectors and highlighted the challenges of security and data privacy that need to be addressed for sustainable societal impact.

Day 3 was dedicated entirely to exploring Geographic Information Systems (GIS). Sri Anand Ranganathan led the session, explaining the multifaceted nature of GIS, which encompasses software, hardware, people, data, and analysis. Through engaging presentations, he revealed the widespread applications of GIS across diverse domains and emphasized its interdisciplinary nature. Participants gained a profound understanding of GIS as a vast and dynamic field of study offering opportunities for both technical and business backgrounds.

The fourth day's events continued with Sri Samik's presentation on "LLM and Vector Databases for Large Scale Document Curation". He provided insights into the integration of language models and the deployment of vector databases on a large scale. Attendees learned about fundamental principles of language models and the concept of embeddings with practical applications. The afternoon offered two sessions. Sri Subhankar delivered a lecture titled "Behind the Cloud", exploring the foundational concepts underpinning cloud computing and virtualization. Participants gained a nuanced understanding of cloud computing's core principles and the multifaceted realm of virtualization. The second session, led by Sri Pranav Srinivas Dutta, focused on "Uninformed and Informed Graph Traversal Strategies". This session delved into crucial graph traversal aspects with practical exercises using Google Maps as an example. Participants gained hands-on experience with uninformed and informed search algorithms like A* search and Bidirectional A* search.

The final day's morning session explored "Spark Optimization" with Sri Jyotin Padhi and Sri Venkat Kilaru. They compared Hadoop MapReduce and Apache Spark, providing insights into data processing methodologies. The session focused on Spark's extensive services, data handling capabilities, and key considerations for optimization. The afternoon session offered a glimpse into the promising field of actuarial science. Sri Sathya Sai Mudigonda, Dr. Rohan Yashraj Gupta, and Sri Naga Teja presented on the evolving landscape of actuarial science and its role in shaping financial strategies. Additionally, students from the II MSc program

presented their research papers, adding an academic dimension to the discussions. The valedictory session, led by Sri S.V.S. Sarma, commended the diverse range of topics covered in the workshop, including data analysis and machine learning. He highlighted the workshop's impact in equipping participants with both technical skills and a deeper understanding of the intricate connections between data science, computing, and beyond.

EVENT 9

i-CUBE – INCEPTION, IMAGINATION, INNOVATION: March 14 –16, 2024

After the preliminary vedic chants, lighting of the lamp, welcome address and keynote by the revered Vice-Chancellor, Prof. B. Raghavendra Prasad, the event commenced with a compelling keynote address by Sri CN Ram, Co-Promoter of FYNDNA TechCorp (P) Ltd., Mumbai, which effectively set a high standard and tone for the remainder of the conference. His talk spanned a plethora of topics, with a particular focus on the spheres of innovation and implementation.

In an address that both captivated and inspired the audience, Shri Debasish Chakraborty, a distinguished unicorn founder, shared the riveting narrative of his entrepreneurial journey. His odyssey, which spans over three decades, is a testament to the relentless spirit of innovation and perseverance in the face of adversity.

Mr. BG Venkatesh, a passionate entrepreneur, tenacious in his field of expertise of traditional foods and herbs, with over 25 years of experience, excels in people management, product development, and marketing communications. Sri BG Venkatesh emphasized on traditional foods and herbs for a better quality of life. This session left a lasting impact on food habits and healthy living as the speaker urged all the students to lead healthy lives.

Prof. M Sessa Sayee, an individual whose visionary initiatives have left an indelible mark on various spheres of endeavor, next spoke on “Soil and Me”. From dynamic discussions to practical exercises, every moment of this workshop has been an opportunity for growth and self-discovery. Participants not only gained valuable insights into entrepreneurship and

innovation but also developed a deeper understanding of their own capabilities and potential. On Day-2 of the i-Cube workshop, the first session by Sri. B. Ramesh was a very insightful one on leadership. Throughout the session, the speaker gave instances from his own life, and also instances where Swami himself spoke about leadership. In conclusion, Sri. B. Ramesh gave the students a glimpse into how one should perform one's role as a true leader by staying within certain ethical boundaries.

The next speaker was Sri. Prashanth Raju, currently the CEO of Trayee Business Solutions Pvt. Ltd., a Business Processing Outsourcing firm which specializes in providing backend support for retail banking and credit card operations. In this session on "The Major Drivers of Entrepreneurial Growth", the speaker shared valuable lessons that could help the students be successful entrepreneurs and serve the society. Drawing from his extensive experience, Mr. Raju outlined the main characteristics of a successful entrepreneur -- a strong intent, keen identification of opportunities, unwavering self-confidence, a customer-centric approach, adept talent acquisition, a willingness to take calculated risks, and a steadfast commitment to human values.

Sri Venkataramani Suresh, Co-Founder & Chief Business Officer, Karkinos Healthcare (P) Ltd., Delhi spoke on "Art and Science of Building and Scaling Startups" elucidated the essential attributes that underpin entrepreneurial success. By embracing innovation, fostering a culture of learning, building strong teams, and cultivating effective leadership, we can chart a course towards entrepreneurial excellence, said the speaker.

Mr. Sathya Pramod, a distinguished figure in the entrepreneurial ecosystem, the co-founder of KayEss Square Consulting Pvt. Ltd., delved deep into the intricate realm of start up financing, offering invaluable insights into the mechanisms through which start-ups secure funding from investors. He elucidated the different stages of financing, shedding light on the diverse avenues through which start-ups navigate their financial journey.



Mr P S Gunaranjan, a passionate philanthropist and entrepreneur, whose work is markedly different from that of the stereotypical entrepreneur, held a workshop that provided a thought-provoking introduction to social entrepreneurship. By highlighting the challenges and rewards, along with valuable life lessons, Mr Gunuranjan instilled in the participants a deeper understanding of this impactful field.

Mr. Viswas Polepalli, Vice President, Account Management Services, Teikametrics India Solutions (P) Ltd., Bangalore is an accomplished professional in the Digital Marketing Industry. His workshop left a lasting impact on the participants. It ignited their entrepreneurial spirit, encouraging them to think beyond conventional boundaries.

Sri Thiruvengadam Parthasarathi, Former Senior Director, Deloitte Touche Tohmatsu India (P) Ltd., Bangalore delivered the Valedictory Address. Sri T. Parthasarathi gave his experiential insights and finding on the subject of Innovation and its endless pros encircling the field of Entrepreneurship. He stated that Innovation is “the Key” for transformative power in the current business world. He stressed on the importance of fostering a culture of creativity, of continuous learning and of building a strong network of mentors and advisors, which truly is beneficial.

EVENT 10

Workshop on “Inspire to Innovate: Cultivating Creative Solutions” – 16 March & 30 March 2024

The workshop on "Inspire to Innovate: Cultivating Creative Solutions" organized by the Institutions' Innovation Council – SSSIHL provided a unique opportunity for participants to enhance their entrepreneurial skills and develop innovative business models. With esteemed speakers and interactive sessions, the workshop aimed to inspire creative thinking and empower participants to transform their ideas into actionable strategies for success.

The first session of the workshop focused on understanding the Business Model Canvas, a strategic management tool used to visualize and develop business models. Mr. Shalabh Mittal, CEO of School for Social Entrepreneurs India, and Mr. Shivam Kumar Dang, Head of Startup Ecosystem Growth at Simpl, led an engaging discussion on the key components of the Business Model Canvas and its application in real-world scenarios.

The speakers led an interactive discussion on the key components of the Business Model Canvas, including customer segments, value propositions, channels, revenue streams, and more. Participants gained insights into the importance of crafting a sustainable business model and identifying unique value propositions to address market needs effectively.

In the second session, Mr. Vikas Bagri, Entrepreneur and Chief Evangelist at Positive. Gifts, introduced participants to the use of Chat-GPT for enhancing creativity and innovation. Through interactive demonstrations and practical exercises, participants learned how artificial intelligence can be leveraged to generate novel ideas, solve complex problems, and streamline innovation processes. The session encouraged participants to explore the potential of technology in fostering creativity and driving innovation across various domains.

The workshop on "Inspire to Innovate: Cultivating Creative Solutions" was a resounding success, empowering participants with valuable insights and tools to drive innovation and entrepreneurship. Through engaging sessions and practical exercises, participants gained the skills and confidence to pursue their entrepreneurial aspirations and transform innovative ideas into tangible solutions for societal challenges.

EVENT 11

Workshop on 'Management of IPR in International Business' – March 20, 2024

The Institution's Innovation Council organized an online workshop on the 'Management of IPR in International Business' with Sri Saikrishna Rajagopal, Founder and Managing Partner of Saikrishna & Associates. Sri Saikrishna Rajagopal graduated from the National Law School of India University, Bengaluru, has emerged as a highly reckoned and ranked counsel associated

with groundbreaking litigation and has an acknowledged reputation for being an outstanding arguing counsel.

In this interactive session, the students learned the meaning of IPRs, the classification of IPRs into industrial property and copyrights, and related issues. The students also learned about trade-marks, patents and copyrights in particular and the acts which govern them. They were exposed to various cases like the Monkey Selfie Case, Delhi University Photocopying Case, Hot News Case and a few others. The students also learnt about a few international conventions and treaties like the Paris Convention and the Berne Convention, the WIPO Copyright Treaty, Trips, and UPOV. The students got a thorough understanding of the aspects of international property rights and their context in International Business.

EVENT 12

Orientation Programme on 'Innovation and Entrepreneurship in English Studies' – March 23, 2024

The Department of Languages and Literature -- English, Anantapur Campus, SSSIHL, in collaboration with the Institution's Innovation Council organised the first event in the orientation programme series titled "Innovation and Entrepreneurship in English Studies".

The first session was conducted in person by Mrs. Smita Vivek Jakkani, an alumna of the department and currently a research scholar at CHRIST (Deemed to be University), Bengaluru. Delivering an insightful talk titled "Can We Get a Patent in English Studies?" she explained the different processes involved in registering for patents. As a patent holder for her SPCAM model, she used her own experience as a touchstone to explain the different stages that one must cross in order to arrive at a patentable idea/product. The session was followed by an interaction with the students.

Mrs. Amrutha Varshini S. led the second session of the orientation programme. The session was conducted in hybrid mode. Mrs. Amrutha Varshini, from her experience of being an entrepreneur, discussed with the students the topic "From Startup to Scale-up: Building a 6-

figure business". She delineated the various means to utilise the knowledge of English, primarily focussing on the education and allied sectors. She also elaborated the techniques one can employ to harness the power of social media for financial benefit. She enumerated the many strategies she had employed in order to flourish in her startup business.



When the course of studies is over and the pupil has come out of the drill and grill, he is awarded a Degree, at the Convocation! This Degree is, in effect, only a begging bowl! With that in hand, the Graduate can go to every office, and clamour before every door, "Give me a job! Give me a job!" Present day education converts youth into beggars, seeking food from door to door. They cannot stand on their own legs, and earn food, independently. This is not a sign or characteristic of Bharatheeya culture. No. The mistake lies in the teachers and leaders, the leaders and their advisers."

- Bhagawan Sri Sathya Sai Baba
(Sri Sathya Sai Speaks, Vol 10 (1970), 13 May 1970)

