

NASSCOM®

Center of Excellence-IoT & AI

A MeitY Initiative with Government of Karnataka

REPORT FOR JUNE- SEPT'19

COE – IOT & AI



Ministry of Electronics
& Information Technology
Government of India



K-tech

**INNOVATE
KARNATAKA**

NASSCOM® Center of Excellence-IoT & AI

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Minister's Visit

“Very Happy to see the Caliber of Innovation among Startups today”

Union Minister Ravi Shankar Prasad paid a visit to the NASSCOM Center of Excellence IoT-AI, where he spoke about the rise of India's trillion-dollar product market, the need for India to thrive as an innovation hub and why technology is the central piece of transformation across sectors & industries today.



NASSCOM Center of Excellence IoT& AI Bengaluru hosted Ravi Shankar Prasad, Union Minister for Law & Justice, Communications, Electronics & IT, Ajay Sawhney, Secretary of Ministry of Electronics & Information Technology (MeitY), Dr. E.V Ramana Reddy, IAS, Additional Chief Secretary to Govt. Department of Information Technology, Biotechnology and Science & Technology, Government of Karnataka and several representatives from NIC, STPI and other ecosystem organisations, where they got to witness firsthand the true impact of deeptech and innovation being nurtured.

Ms. Debjani Ghosh, President of NASSCOM along with other senior leaders accompanied the delegation across the facility and introduced them to various companies and startups on showcase with their products and

solutions in agritech, healthcare, cybersecurity, smart cities, healthcare and fintech.

The event notably marked the launch of the Center of Excellence's Digital Wellness Experience Zone – a unique platform to showcase the latest digital health solutions. Companies that were part of the showcase included Artelus AI, Niramai, Radical Health and Tricog Health.



AI won't replace doctors, doctors who don't use AI will get replaced

The sixth edition of the Life Sciences & Healthcare Innovation Forum (LHIF) was recently held on 19th September, 2019 at The Leela Palace, Bengaluru, which saw some of the most prolific leaders and decision makers in healthcare, medicine and technology converge and discuss the way ahead for India's healthcare industry.

With Redefining the Healthcare Landscape - The Digital Shift as its central theme, the event began with powerful keynotes delivered by Dr. Devi Shetty, Chairman & Executive Director, Narayana Health; Nalinikanth Gollagunta, President & CEO, GE Healthcare South Asia & MD, Wipro GE Healthcare; Gagan Singh, Managing Director, AstraZeneca Pharma India Ltd; and Niclas Jacobson, Deputy Director General & Head of Division for EU & International Affairs, Ministry of Health & Social Affairs, Govt. of Sweden.

Engaging Panel Discussions touched upon vital topics like Making A Societal Impact Through Health-Tech, Impact of Med-Tech Innovation on Universal Healthcare and Digital Doctor - The Future Perspective. In addition, six innovative startups were recognized for their path-breaking solutions with the #LHIF Innovation Award.

The event also hosted select industry leaders for a close-door roundtable discussion on The Digital Healthcare Initiative in India.



DR DEVI PRASAD SHETTY
Chairman & Founder
Narayana Health

“LHIF is a great opportunity for entrepreneurs in digital healthcare, for providers like us to present our pain-points & requirements, and industry to provide their cooperation so they can come up with world-class products. It's a great opportunity for India to get into digital health and look at the world as a market.”



Kidwai Memorial Hospital evaluates cutting edge solutions in oncology

Five startups pitched their solutions to doctors at Kidwai

NASSCOM CoE with the help of Government Health and Family Welfare Department, Government of Karnataka, facilitated an interactive startup pitching session for Kidwai Memorial Institute of Oncology (KCI). The startups interacted with Dr. C Ramachandra, Director, Dr. Prabha Seshachar, RMO, Dr. G. Ramesh, Professor and HOD of Biochemistry, Dr. T. Avinash, Surgeon & Dr. Amruth Kadam, DME.

Presentations were made by startups on Breast, Cervical, Lung cancer screening, Companion Diagnostics for Prognosis & Precision Medicine, Tele-Radiology, Pathology workflow platforms and Analytics tools for Remote cancer care and Wellness and Nutrition Therapy for cancer.

Additional Requirements gathered on Blockchain technology for Blood bank management,

Adjuvant therapy based on Radiation treatment and Genomic testing, Decision support platform for tumour board on prognosis, drug response and precision treatment and Companion diagnostics based on Histological profiling, reconstruction, Intra-tumoral heterogeneity. SOPs were prepared to facilitate the engagement of startups for randomized clinical trials and pilots, and a review report was sent to the DME.

Taking the lead on facilitating industry collaboration in healthcare, NASSCOM Center of Excellence IoT AI hosted startups developing innovative solutions in breast, cervical & lung cancer screening, precision medicine, teleradiology and healthcare analytics to senior doctors at Kidwai Memorial Institute of Oncology

India's Defence forces seek advanced technology solutions for tactical advantage

India's defence spend this year crossed \$66bn, with a heightened focus on R&D and technology. Specifically, the government has opened up avenues for startups to develop niche defence solutions for better indigenization. In light of these developments, NASSCOM CoE IoT AI along with DRDO & GITA organized a Technical Consultative Workshop to identify technology solutions for use cases specific to defence



A technical consultative workshop by DRDO, GITA and NASSCOM was conducted in Bangalore, which witnessed several senior officials from DRDO & Indian Army interact and present use-cases to a room full of industry leaders and startups poised to solve these challenges using technologies such as AI, IoT, ML, data science and more. Representatives from the Indian Army and DRDO presented challenge areas in security that included development of tactical Local Area Networks, drones for aerial surveillance in sensitive areas, development of light vehicles for deployment underwater, IoT & AI based hazard control systems and much more.

Manipal Health & NATHEALTH to enhance adoption of digital healthcare solutions

As a strategic partner, NASSCOM CoE IoT to provide access to latest innovations in IoT & AI in healthcare

Healthcare providers are hard-pressed for resources and technology solutions to ensure optimal delivery of healthcare facilities. Partnerships with Manipal Health & NATHEALTH will focus on deployment of emerging technologies for better healthcare delivery. Manipal Health, one of the nation's leading healthcare providers, and industry body NATHEALTH have collaborated with NASSCOM Center of Excellence to capitalize on the multiple benefits of advanced technologies for improved healthcare delivery in India. The partnership will leverage the benefits that IoT and AI can bring to the healthcare sector. They aim to deploy emerging technologies, to ensure better delivery of healthcare.



Collaboration to set up healthcare IoT/AI experience zone

NASSCOM CoE IoT & China's i-Campus sign MoU in India



Through NASSCOM CoE, Indian healthcare startups can now access the extensive market in China, utilize R&D facilities at the I-Campus, and strategise on service commercialisation.

Apex software industry body Nasscom on Tuesday said it has entered into a strategic collaboration with China's I-Campus to accelerate healthcare

innovation and cooperation in life sciences and healthcare sector. The development is part of Nasscom's ongoing efforts to bolster digital solutions for non-communicable diseases (NCDs), it said.

A group photo on 2nd day I co-chaired a plenary session in 2nd Knowledge Summit in Lyon, France on 17-18th Oct 2019 and with my co chair Prof Frederic Delmar and experts Prof Mohit Anand and Mrs Marie Eyquem, prepared & presented recommendations to the two Governments on actions for strengthening employability and entrepreneurship across the 2 nations. (I wish we took the picture on 1st day as some great suggestions came from those who are not in picture, -there were approx 50 academicians from India and France).



Unearthinsight & CoE launch startup scoring metric for India's deeptech ecosystem

India's trillion-dollar product ecosystem has brought the focus back on the need for strategic investments to raise the profile of startups, enhance industry insights, and allow for expansive avenues for innovation. NASSCOM CoE IoT AI conducted the first edition of Tech Invest Forum with the aim of connecting India's leading investors in deeptech with the burgeoning product startup ecosystem. 50+ startups registered to participate. 17 were shortlisted to pitch. Investors & accelerators that participated in the session included Arali Ventures, Speciale Invest, Chiratae Ventures, Indian Angel Network, Ideaspring Capital, Future Group among others.

Identifying high impact tech solutions for rural development through Unnati challenge

Erstwhile deputy CM G Parameshwara, along with former Karnataka Cabinet Minister Priyank Kharge and members of the Karnataka IT, BT & ST department visited the NASSCOM CoE IoT to identify high social impact startups with unique technology offerings. This is an extension of the Unnati programme, initiated by the Karnataka government's Social Welfare Department, designed to involve more members of the SC/ST community in startups. The Dy CM and the ministerial delegation interacted with NASSCOM CoE leaders to understand the impact of technology-driven ventures in all spheres of society today, and interacted with some of CoE's incubated startups to witness the range of innovation taking place.



Japanese CxOs Witness Innovation at CoE

More than 15+ CxO level delegates from Japan were invited to the NASSCOM Center of Excellence to witness the scope of work & innovation being fostered. The delegation was led by Mr. Kenichi Watanabe, Senior Advisor to Nomura Holding Board, and Counsel General of Bangalore

Engaging With France & Finland for Scaling & Investment Opportunities

BPI France representative Mrs Elodie Barria, along with the Head of Tech & Services Department for India, Business France were given a tour of the facility where they got firsthand exposure to investment opportunities. Startup Scaler, Finland-Scaling your Business - Markets, Tech & Funding organised an event where Navratan Katariya was the co-host and panelist. He was joined by Dr. Jukka Holappa, Commercial Counsellor, Business Finland, Embassy of Finland in India.

NASSCOM Healthcare Initiative brings insurance & pharma to strategise on technology adoption

Under its flagship initiative LHIF, NASSCOM CoE hosted leaders from Lupin Pharmaceuticals, Unichem Laboratories, Abbott, Indian Pharmaceutical Alliance, AstraZeneca India, Bajaj Allianz, Aditya Birla, Reliance Health Insurance, TATA AIG & the National Health Authority in Mumbai.

Through its healthcare initiative LHIF, NASSCOM CoE is driving engagement & deliberations with industry leaders on technology adoption & acceleration in areas like insurance and pharma. Two roundtables were conducted in Mumbai on these two topics – where the delegates discussed:

- Collaboration between Hospital Chains and Insurance Companies providing seamless experience and faster claims processing
- Increasing Awareness on need for Health Insurance from average individuals
- Digital Solutions in this sector are on upswing. Multiple Startups and Tech Companies are seizing the opportunities to come up focused solutions for the industry, especially using AI
- Focus on Wellness increasing. Insurance companies are looking at preventive health
- Aggregated Health Insurance Schemes for larger group of people in un-organised sectors and Small and Medium Enterprises is going to open up newer opportunities



National Digital Health Blueprint: Consolidation on Industry feedback facilitated

LHIF Brings together industry leaders to deliberate on NDHB's Blueprint to forge a united, Industry-led vision on Healthcare in India

Participants included Dr Nandakumar Jairam, Columbia Asia, senior representatives from GE Healthcare, AstraZeneca, OPPI, and HCG.

Following the NITI Aayog's Special Committee report on the framework and implementation of the National Health Stack (NHS) made public in July 2019, NASSCOM CoE led the industry feedback process by inviting industry & technology stakeholders to a closed-door workshop to deliberate on the provisions of the National Digital Health Blueprint and provide unified feedback to the NITI Aayog.



German diplomats discuss collaborative opportunities with India

The German Ambassador to India Walter Lindner, German Consul General Margit Hellwig Botte & MP Frank Muller-Rosentritt paid a visit to the NASSCOM Center of Excellence to discuss the scope of partnerships & collaboration with Germany's startup ecosystem. Globally, Germany is among the top five startup destinations in the world, with cities like Berlin and Frankfurt nurturing cutting edge technologies across domains like fintech & manufacturing. Meanwhile, India has retained its position as 3rd best startup destination in the world. The delegates were keen to explore potential for collaboration, especially in areas of deeptech.



Indo-Aus Market Access Programme for India's Next Big Businesses

Indian businesses are evolving rapidly, and crossing barriers everyday. In order to allow Indian businesses understand a competitive and robust overseas market like Australia, an Indo-Australian Market Access Programme was conducted at NASSCOM.

Indian startup Entropik Tech presents solution at Israel's DLD innovation festival

India and Israel are among the foremost deeptech startup ecosystems in the world, and have been playing a pivotal role in accelerating advanced technology adoption across domains. The two countries have identified scope for mutual benefit and collaboration, in a bid to advance the innovation quotient for startups in both nations. I2I, initiated by the Consulate General of Israel to South India, is one such effort to identify Indian startups in advanced technologies. Recently, a Pitching Contest was conducted by Consulate General of Israel to South India, Accenture Ventures, Intel India and

NASSCOM – open to startups using advanced technologies like IoT & AI, have at least two market deployments and have raised at least half a million dollars in funding. The winner of this pitching contest was Entropik Technologies, an AI-driven multi-modal emotion recognition platform, designed to help brands measure cognitive and emotional responses of consumers.

The team won a sponsored trip to Tel Aviv, Israel to attend the DLD Innovation Festival 2019 on 18th & 19th September, 2019.

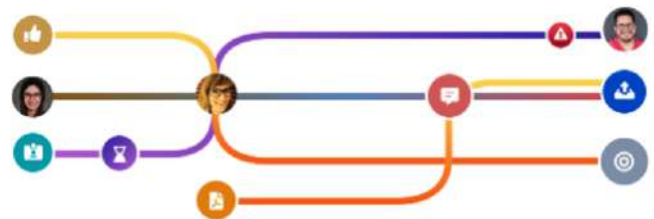
TyDy-ing up onboarding processes for a Multinational Company

One of the biggest challenges faced by organisations is managing new hire and employee data and information across multiple systems and multiple stakeholders. This generally done manually, and there are communication blackouts leading to an incomplete view of individual profiles. Bangalore-based HR tech startup Tydyworks to automate and consolidate data from large organisations to ensure onboarding and engagement can be brought on to a single platform. The process begins from acceptance of the offer letter and builds a personalized journey for each new hire.

TyDy has been working with a multinational beverage company to automates all operational tasks of onboarding like notifying multiple

stakeholders, sending data where and when required through the entire process and saving HR multiple hours of repetitive tasks. For each new hire, Tydy uses content and knowledge from within the company to engage and take each individual through a completely personalized journey that results in the fastest time to productivity. As part of the next phase, Tydy will automate data collection and automatically kick off relevant processes like Background checks, data unification and much more.

Automation for HR



PlugO installs on-the-go chargers at Manipal Hospital & India Mobile Congress

PlugO, India's first smart & fully automated power bank rental service, recently tied up with Airtel at the India Mobile Congress to provide on-the-go charging solutions on the go. PlugO has installed 42 devices at 21 locations within the IMC venue in New Delhi.

PlugO has also installed two devices in Bangalore's Manipal Hospital – near the ICU and the Emergency Wards. Nawal Lodha, cofounder is positive that more devices will be installed in and around critical care hospital units.



SwitchOn raises \$1 million from pi ventures

SwitchOn, an industrial technology firm, has raised \$1 million in seed funding led by pi Ventures, an Internet of Things-(IoT) and Blockchain-focused early stage venture fund.

Founded by Aniruddha Banerjee and Avra Banerjee in 2017, SwitchOn is an industrial tech company that helps manufacturing industries identify plant-level bottlenecks and improve equipment efficiency.

Axilor, an early stage investment firm led by Infosys founders Kris Gopalakrishnan and SD Shibulal, and angels from The Chennai Angels also took part in this round. The fresh funds will be used for strengthening the edge-compute architecture, expanding the team and market adoption in India and other countries in the European Union and Asia Pacific region.

SwitchOn is leveraging deep expertise in hardware and software design to create state-of-the-art edge solutions for increasing transparency, reducing turn-around, and improving quality on the shop-floor of manufacturing industries to ultimately achieve operational excellence. We believe that our customers will benefit heavily from our expanded global footprint and deep technology differentiators,” Aniruddha Banerjee, Co-Founder at SwitchOn said.



LazyCo wins Asia Hardware Battle, to pitch at finals in Shanghai in October

LazyCo emerged winner of the Asia Hardware Battle held in Bangalore, and have secured a place to pitch at the final regional event scheduled to be held in Shanghai in October. LazyCo's award-winning product Aina is an AI-enabled ring intended to be a faster and easier to use interface than a touchphone screen. This ring can connects to your phone via Bluetooth, can be used as a personalized remote for controlling smart home devices, booking cabs and unlocking devices, besides taking phone calls and talking to voice assistants. It can also act as a fitness and sleep tracker.



Robotics deeptech startup CynLr raises INR 5.5cr from Speciale Invest & Arali Ventures

Robotics deeptech startup CynLr raises INR 5.5 Cr from Speciale Invest & Arali Ventures among others. Over the 4 years since inception, the founders Gokul NA and Nikhil Ramaswamy have executed more than 30 custom engineered, machine vision-based robotic solutions for large manufacturing customers with a 100% attempt-to-success rate and have bootstrapped a sustainable business. Having proven the core intellectual property through these deployments, the founders are now aiming to productize their technology. CynLr plans to go-to-market with a single universal vision guided Pick>Orient->Place robot platform capable of handling varied types of objects.

Manufacturing customers can now rapidly deploy robots using the CynLr platform, without having to worry about custom designed fixtures and positioning systems which are currently mandatory for every robot deployment.

Speaking about the investment, Vishesh Rajaram, Managing Partner from Speciale Invest said “We believe Vyuti is poised to become the brain and eye for every robotic hand, which would allow it to pick, orient and place items as reliably as humans, a development that could lead to the automation of all warehouse and manufacturing line jobs on earth”

Further, Rajiv Raghunandan, Managing Partner from Arali Ventures said “We believe that CynLr’s approach of bringing together machine vision and AI will significantly enhance object intelligence for industrial robots, thus paving the way for greater penetration of robotics application across various industry segments”.

Cradlewise wins design award in Hungary

Cradlewise Inc. a Qualcomm Design in India Challenge winner, won the Platinum Award in the Children's Nursery products category of the Europe Product Design Award. Product designers Makarand Kulkarni and Niles Misal from Ether Design received the award in Hungary. The European Product Design Award™ recognizes the efforts of talented international product designers who aim to improve daily activities and regular tasks with their practical, well-thought-out creations.

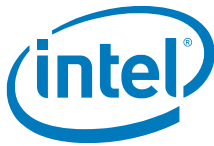


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