

GURUGRAM REPORT

JANUARY-MARCH '22

Third Edition of **Healthcare Innovation Challenge (HIC 3)** launched by NASSCOM CoE

After the success of the first two editions, NASSCOM Center of Excellence (CoE) - IoT & AI announced the launch of the third edition of Healthcare Innovation Challenge (HIC 3) on 25th February 2022. HIC is a **unique use case focussed program aimed at enabling Digital Transformation of Healthcare.**

HIC 3 saw use case nominations from **Healthcare Providers, Payers, Medical device manufacturers and Technology Enterprises** including **Hinduja Hospital, GE Healthcare, Max Healthcare, Aditya Birla Health Insurance, Cygnus Hospitals, Apollo Hospitals, GAVS, BCMCH, HCG and Ortho-One.**

The poster for the Healthcare Innovation Challenge 3 (HIC 3) launch event features a central image of a doctor in a white coat with a stethoscope, surrounded by various medical icons like a cross, eye, heart, and person. The text on the poster includes the NASSCOM Center of Excellence-IoT & AI logo, the HIC logo, and the Ministry of Electronics & Information Technology Government of India logo. The main title is 'HEALTHCARE 3 INNOVATION CHALLENGE' with '3' in a large purple font, followed by 'YOUR DIGITAL TRANSFORMATION PARTNER'. The event is a 'LAUNCH' on '25th February 2022, 2:30pm onwards' at 'hic@nasscom.in'. The poster also lists several sponsors and partners, including AstraZeneca, GE Healthcare, Novartis, Siemens Healthineers, Medgate today Magazine, GAVS, Applied Materials, AWS, Medix, Aditya Birla Health Insurance Co. Ltd., Aditya Birla Capital, Apollo Hospitals, Believers Church Medical College Hospital, HCG, Max Healthcare, Ortho One, P. D. Hinduja Hospital & Medical Research Centre, and Ujala Cygnus.

NASSCOM®
Center of Excellence-IoT & AI
A MeitY Initiative with Govt. of Karnataka, Haryana, Gujarat & AP

HIC

Ministry of Electronics & Information Technology
Government of India

MEITY STARTUP

HEALTHCARE 3
INNOVATION CHALLENGE
YOUR DIGITAL TRANSFORMATION PARTNER

LAUNCH
25th February 2022, 2:30pm onwards
hic@nasscom.in

ENTERPRISE PARTNERS: AstraZeneca, GE Healthcare, NOVARTIS, SIEMENS Healthineers

ASSOCIATION PARTNER: A SOCIETY OF HEALTHCARE PROFESSIONALS

MEDIA PARTNER: Medgate today Magazine

DIAMOND & USE CASE SPONSOR: GAVS

PLATINUM SPONSORS: APPLIED MATERIALS, aws, medix

USE CASE SPONSORS: Aditya Birla Health Insurance Co. Ltd., ADITYA BIRLA CAPITAL, Apollo HOSPITALS, Believers Church MEDICAL COLLEGE HOSPITAL, HCG, MAX Healthcare, ORTHO ONE, P. D. HINDUJA HOSPITAL & MEDICAL RESEARCH CENTRE, Ujala Cygnus

Nominated Use Cases are given below:

Early detection of Microbes and Infection (AMD)

Prescription Digitisation using voice recognition (ERx)

Comprehensive Patient Care / OPD Automation (OPDA)

Preventive Health checkup tracking (PHT)

AI based Surgical Video Recording & Reporting (SVRR)

OPD Cashless Payor Solution (CPS)

Inpatient volume prediction based on Outpatient volume (IPV)

Integration of Multiple data sources to create a Data Lake (CDL)

Automated Credit payment settlement (ACS)

The launch had thought leadership sessions from:

• **Ms Cecilia Oskarsson**

Trade & Invest Commissioner, Embassy of Sweden and Head - Sweden India Healthcare Innovation Centre

• **Dr Girdhar Gyani**

Director General, Association of Healthcare Providers India

• **Mr Ayan Choudhury**

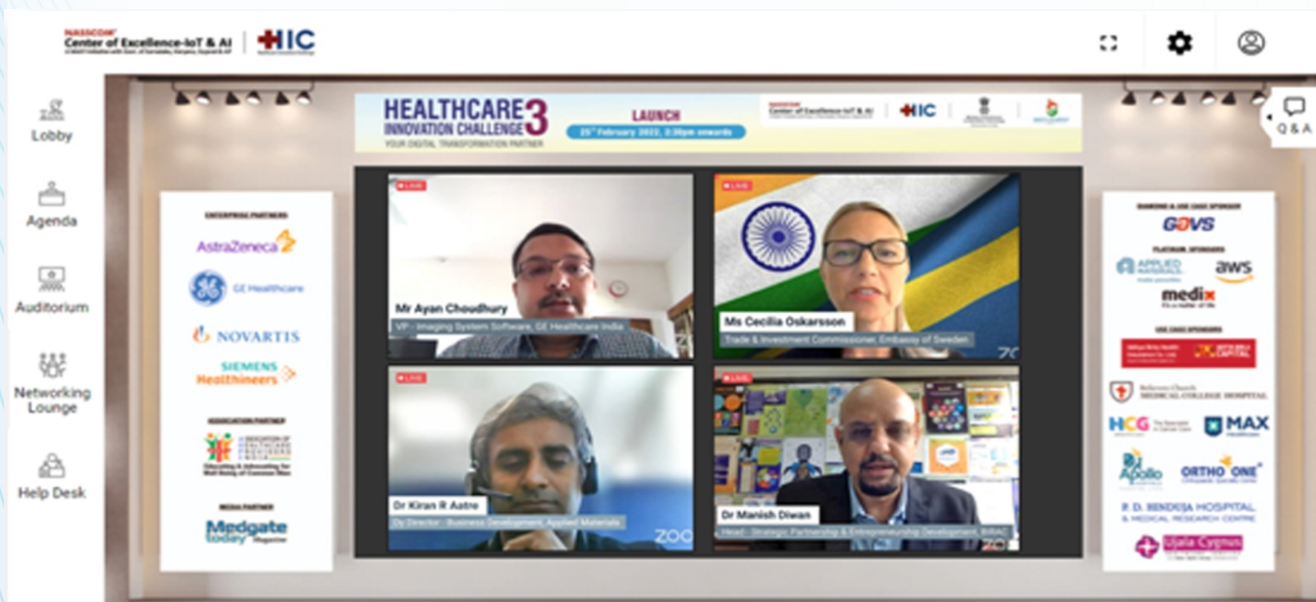
VP - Imaging System Software, GE Healthcare;

• **Dr Kiran R Aatre**

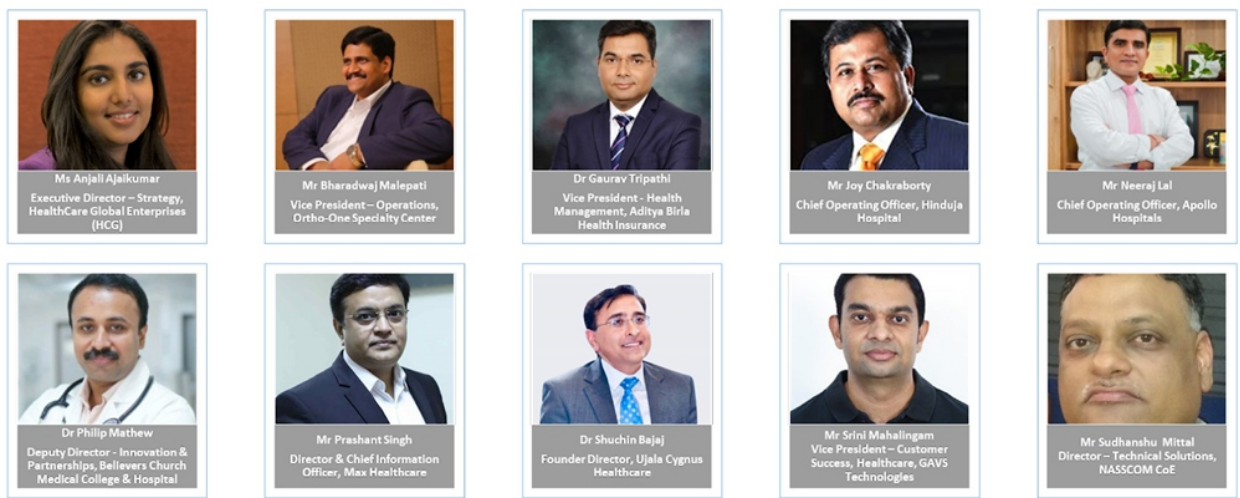
Dy Director - Business Development, Applied Materials

• **Dr Manish Diwan**

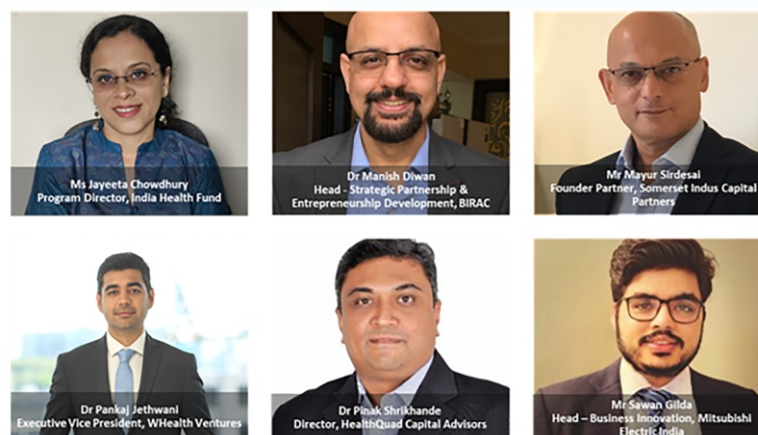
Head - Strategic Partnership & Entrepreneurship Development, BIRAC



There was an engaging and thought-provoking panel discussion with the senior Leadership team members of the HIC 3 Use Case Sponsors including **Ms Anjali Ajaikumar**, Healthcare Global Enterprises (HCG); **Mr Bharadwaj Malepati**, Ortho-One Specialty Center; **Dr Gaurav Tripathi**, Aditya Birla Health Insurance; **Mr Joy Chakraborty**, Hinduja Hospital; **Mr Neeraj Lal**, Apollo Hospitals; **Dr Philip Mathew**, Believers Church Medical College & Hospital; **Mr Prashant Singh**, Max Healthcare; **Dr Shuchin Bajaj**, Ujala Cygnus Healthcare and **Mr Srin Mahalingam**, GAVS Technologies.



The event also hosted HealthTech Investors such as BIRAC, India Health Fund, WHealth Ventures, HealthQuad Capital Advisors and Somerset Indus Capital Partners.



NASSCOM CoE is accepting applications from solution providers, startups and TechSMEs for the HIC 3 use cases.

Investor Hours with StartupXseed

NASSCOM CoE - IoT & AI, invited the Investment Team of StartupXseed Ventures for Investor Hours with StartupXseed Ventures. Investor Panel consisted of:

- BV Naidu, Founder & Managing Partner
- Ravi Thakur, Co-Founding Partner

StartupXseed is looking to invest into DeepTech Startups having an IP and sustainable business model. The ticket size is US\$0.5M - 1.5M.

DeepTech Startups in B2B & B2BC space were invited for the pitching to the Investors.

How Augmented Reality is Revolutionizing the Retail Industry

Sat, Mar 26, 2022: NASSCOM Centre of Excellence – IoT & AI organized a session on the use of Augmented Reality in the Retail Industry. The session was led by Meenal Gupta, Founder & CEO, & Noor Fatma, CTO, Easiofy Solutions where the team discussed the increasing consumer preference to buy online and the need to bring the immersive experience of a retail store to the consumer's phones through Augmented Reality.

Meenal talked about the differences and similarities between Augmented Reality, Virtual Reality and Mixed Reality. She further explained the architecture of their platform, ARTee, which is a cloud-based multi-layered plug-and-play, made in India and does not use expensive third-party licences. The platform comes with easy-to-use domain templates for various sectors such as retail and healthcare.

The poster features the following information:

- Logos:** NASSCOM Center of Excellence-IoT & AI, Haryana Startup, MeitY Startup, and EASIOFY.
- Event Title:** HOW AUGMENTED REALITY IS REVOLUTIONIZING THE RETAIL INDUSTRY
- Presenters:** Meenal Gupta (Founder & CEO) and Noor Fatma (CTO).
- Date & Time:** 26th March 2022, 11am onwards
- Place:** Online Webinar. Zoom
- Website:** <https://haryana.coe-iot.com/>
- Additional Text:** INNOVATION SATURDAY
- Social Media:** Follow us on Facebook, YouTube, Twitter, and LinkedIn.

Noor introduced Easiofy Solutions' product for the retail sector, ARTee-Retails which is a 3D configurator for the products along with the option to view the configured product such as furniture in Augmented Reality in the customers' space and then a button to buy the product right away.

Easiofy's ARTee-Retails has a built-in measurement tool which can be used to measure the available space in the customer's home and give product recommendations according to it. ARTee-Retails can be used for many products such as appliances, automobiles, machines, medical equipment etc.

The team also discussed ARTee-Health which is tele radiology and tele consultation platform. ARTee-DICOM viewer is an app which is used by doctors to examine the CT/MRI data on their mobile phones as traditional images and also in 3D in Augmented Reality. It comes with an admin panel which is used by hospitals and labs to upload the data on the ARTee-Health platform. The AI engine then converts the 2D images to 3D and the doctor can view them anywhere anytime on his mobile phone. ARTee-Health will be able to leverage the power of 5G for live streaming of human holograms in AR and VR for remote consultation. Easiofy is currently working with the Department of Telecommunication for ARTee-Health solutions.

VECROS develops Asia's first Network of Autonomous Drones to secure premises with Computer Vision and Edge AI

NASSCOM CoE, Gurugram incubated startup, VECROS has developed a one of its kind operating system **JETPIX** for drones that enable drones to move in coordination. Leveraging the power of computer vision, VECROS has provided Sterlite Technologies the optic fibre inspection using drones and an innovative web app which helped them realize all the anomalies.



Recently VECROS demonstrated their capabilities to the **INDIAN ARMY DIRECTOR GENERAL OF MILITARY OPERATIONS (DGMO)**. They have demonstrated VECROS AI on edge system for providing support to ground troops on reconnaissance missions, and surveillance and most importantly providing situational awareness for better decision making and execution. A custom dataset trained on millions of army vehicles has shown detection and tracking of military vehicles along with semantic segmentation of enemies and friendlies.

Besta Prem Sai, Founder, Vecros said, "At Vecros, we're working on arranging multiple drones to do surveillance and image processing on the fly. We have built a drone embedded with GPU that helps drone owners to process data without any third-party system."

He further added that the Vecros surveillance system can track 500 to 1000 objects synchronously in a single image. It can also uniquely identify every object and track their global movement which helps surveillance agencies to understand the nature of threats more accurately.

Nautilus Hearing Solutions successfully tested & screened 6000 individuals for hearing loss

NASSCOM CoE, Gurugram incubated startup, Nautilus Hearing screened more than 6000 individuals (adults & children) for hearing testing to detect hearing loss at an early stage and thereby provided opportunity for timely treatment. Hearing loss can manifest at any stage of life, regular screening is, therefore, important to identify hearing loss at an early stage to prevent hearing loss from being permanent.

Communication disorders like hearing impairment have their onset at a very early stage in life. Only through systematic early detection programs children with hearing loss can be assured of leading a normal life, said, **T Udaya Raga Kiran**, Founder of Nautilus Hearing.



Nautilus uses mobile technology to provide an affordable and cost-effective portable platform for hearing testing and can store data from the tests securely building on the technology to leverage the power and portability of software-defined diagnostics and tablets. The device is integrated with AI & ML technology that makes hearing healthcare simpler, affordable, reliable & reachable to the common man.

Remya Ravi, Co-Founder of Nautilus Hearing, said, this year we did hearing testing for 300 children in a school in Hubli, the results show 76 % of the tested children were identified with ear-related problems. Nautilus also tested 500 police officials and 40 % of them were identified with ear-related problems. This data explains the importance of hearing screening programs to prevent hearing loss. She further added that Nautilus Hearing will be reaching out to more people in different regions to identify hearing problems and avoid hearing loss.



Ayati's portable and hand-held medical device is revolutionizing the neuropathy screening

Peripheral Neuropathy leads to severe damage to the foot including loss of limbs and this was a fact not many were aware of. Keeping this in mind as well as observing the stats and facts, Ayati Devices came up with VIBRASENSE, a pioneering device designed for the early detection of Neuropathy.

Ayati Devices has recently screened more than 500 subjects in **Maharashtra (Shegaon and Chandrapur) region**, thus protecting more than 1000 feet by detecting the issue early. The patients saved up to 2 million USD in health expenditure which could be a burden in addition to foot loss. During another camp at **Niramaya Gujarat**, the team successfully screened 37 Diabetic patients, out of which 29 tested positive for diabetic foot. This is one of the reasons why every diabetic patient must get their neuropathy screening done on time, said Nishant Kathpal, Founder, of Ayati Devices.



Nishant Kathpal explains the concepts required for the procedure

He further added that Ayati's vision is to prove the first level of innovative and affordable healthcare monitoring solutions for the masses. Thus, Ayati aims to screen each diabetic patient for neuropathy through VIBRASENSE. Our next focus is to expand throughout the country and some parts of Middle East Asia and Africa.

Ayati's flagship product, VIBRASENSE, is portable, hand-held, battery-powered, and can screen up to 70+ patients on the go. It is a quick screening tool that produces a controlled stimulus at the tip to quantify the severity of the foot and display it on the screen. It has also an option of wireless connectivity to connect it with the application for generating the reports. The USP of the product is to analyze the patients based on their history. The algorithm classifies the patient into the low-mid-high-risk category. Ayati Devices won multiple grants and awards with a total sum of INR 1.5 Cr including the BIRAC BIG and BIPP Awards. The team has also received awards such as the **"Best start-up award"** in Spain and the **"Best IoT medical device award"** at Indian IoT Congress.

Avidid Technologies: Enhancing Policing (Maharashtra Police, Mumbai Police, Delhi Police) with Digital Technologies & AI

Police departments in India have traditionally been slow adopters of technology. It is primarily because of the highly prevalent bureaucratic practices and legacy systems still in use in police departments. Although with the advent of new technologies, many operational procedures of policing are becoming paperless, there is an urgent need for transforming policing with a holistic and objective-oriented approach rather than digitizing individual processes. Hence, police departments are looking for innovative technology solutions that can integrate with their conventional systems and simplify their daily operations rather than complicating them with incomprehensible technology implementation.

Avidid Technologies, based in Kota, Rajasthan is providing police departments with a platform called Third I. Having spent around five years working extensively with Police Departments, the Avidid team has identified the existing challenges and opportunities.

Avidid's Third I and other modules are now being used by more than 35000 Police personnel in 1400+ administrative offices as its users, they are not only performing their day-to-day duties in the Third I platform but also capturing a lot of untapped data as well. It is at present saving work equivalent to man-hours of 500 people and saving lacs of paper daily. It has considerably improved police response time as well. Powered by Automation, ML & AI, Third I enable Real-Time Information Management, Data Visualization and Improved Communication.

Explaining the viability of Avidid solutions, Kovid Sawla, CEO of the company says, "All our modules require very minimal infrastructure (only smartphone & desktop mostly); e.g., instead of RFID, or tracking device, we provide an alternative such as QR Codes, Mobile Apps etc. Thus, our solutions are viable and feasible for Police Departments."

Avidid Technologies has given its solutions to more than 20+ large organizations including Maharashtra State Police, Mumbai Police, Delhi Police, Childline India (1098) etc. and has incorporated multiple techniques and algorithms for various analytics, prediction and recommendation based on past crime data to generate various Charts, Statistics and assessment, generate heatmaps, identify Crime/Accident Hotspots, Patterns, Patrolling Recommendations, auto alerts system etc. which can greatly help decision-makers to take directed and insightful action.



Airveda is one of the cohort winners at India Clean Air Challenge (ICAC)

Airveda is a company engaged in Indoor & Outdoor Air Quality Monitoring and feed into the Air Quality Index (AQI) dashboard.



ActGrants organised India Clean Air Challenge (ICAC). This challenge was designed with the **Ministry of Housing and Urban Affairs (MoHUA)**, state governments, and the **Air Pollution Action Group (A-PAG)**. Social Alpha is the incubation and acceleration partner. The problem statements were defined in consultation with the government, to be aligned with the priorities of the **Central Pollution Control Board (CPCB)**, state governments, and municipal corporations.

Airveda was one of the startups selected for Acceleration at Social Alpha. A **grant of up to INR 20 Lakhs** in addition to technology and market access, business, and marketing support will be provided to Airveda. The pilot will be facilitated in partnership with the **Smart Cities Mission**, which will be lead by CEOs of Smart Cities Missions from across India.

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ASSOCIATION OF INDIA



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St Johns
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Foundation

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FOR FURTHER INFORMATION CONTACT :

E-mail: co-innovate@nasscom.in | Website: <https://haryana.coe-iot.com>