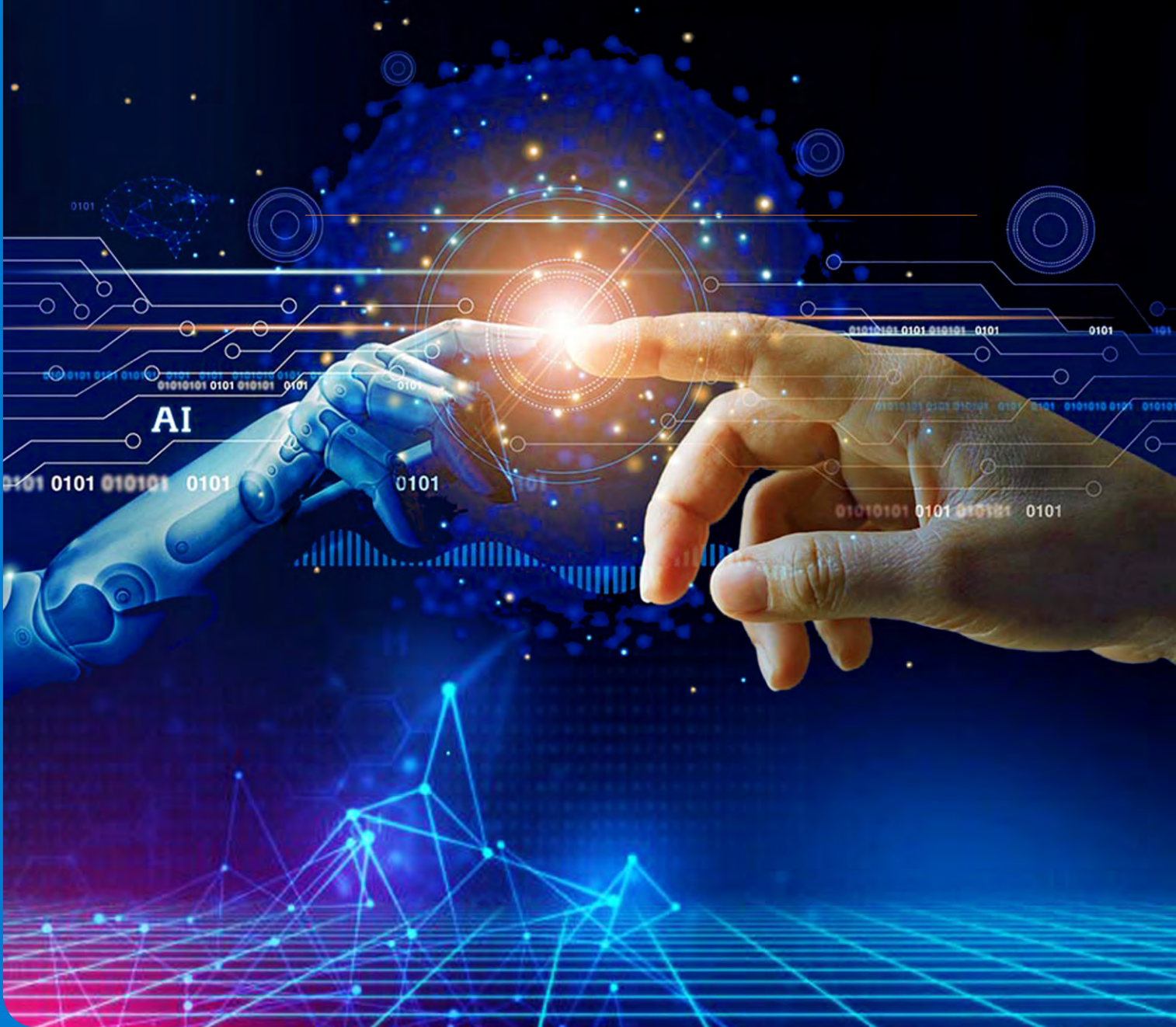


QUARTERLY REPORT FOR
GURUGRAM

JAN - MAR, 2021



Ministry of Electronics
& Information Technology
Government of India



EDITOR'S DESK



Sudhanshu Mittal

Head & Director
Technical Solutions –
CoE Gurugram

While the benefits of digital technology adoption are not in dispute anymore, when it comes to actually selecting which technology and solutions are relevant and proceeding with adoption, there continue to be strong challenges. Being highly regulated, healthcare sector imposes challenges which are correspondingly larger with concerns around ability of doctors / nursing to properly use the technology, impact of technology malfunction including any human error, cyber security, data privacy being just few of the challenges hindering the adoption.

The Healthcare Innovation Challenge (HIC), a flagship initiative of NASSCOM CoE-IoT & AI aims to address the gap by bringing appropriate startups and SME players onboard who can provide the required solutions as well as can jointly work as partner with hospitals to address the customization needs. Eventually HIC aims to become a platform where any healthcare service provider can bring its need for any kind of digital technology solution, with the confidence that platform has curated solution developers to address the needs.

While we congratulate the winners and runners-up of HIC#1 selected by the jury, it is prudent to remember that we have only just begun. The ultimate test is the actual deployment of solutions with hospitals and for that a hard grind is ahead of us all. We look forward to working with all the stakeholders to drive the digital transformation of healthcare.

Healthcare Innovation Challenge: Enabling Digital Adoption in Healthcare Providers

Due to COVID-19, Healthcare Providers are under immense stress due to increased costs facing a huge burden on the existing infrastructure at one end and dealing with decrease in regular patient footfall at the other end.

NASSCOM CoE has launched first of its kind program called Healthcare Innovation Challenge (HIC) to address the challenges faced by Healthcare Service Providers through the adoption of Digital Technology solutions.

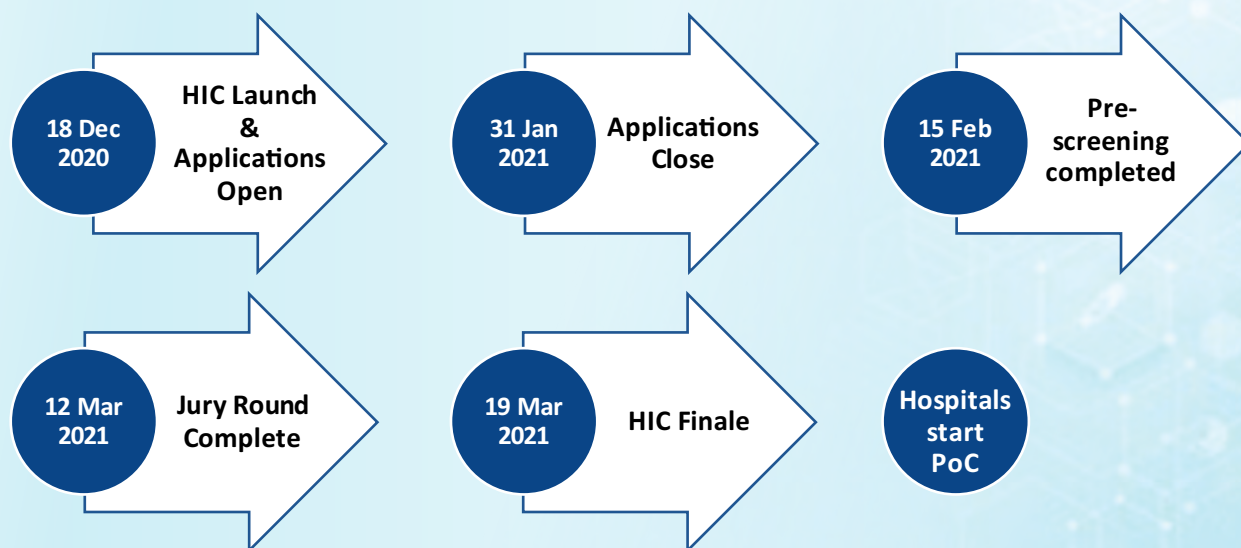
The key objectives of Healthcare Innovation Challenge (HIC) are:

- Driving operational excellence enhancements for Healthcare Service Providers by enabling automation of key processes and digitization of clinical workflows through Collaborative & Frugal Innovation
- Enabling Healthcare Service Providers to nominate Use Cases as per their digital solution needs
- Driving the program that enables the curation, evaluation & deployment of Technology led Innovative solutions that address the nominated Use Cases

Hospitals across the nation had nominated Use Cases as per their digital solution needs

OPD Automation	Sakra World Hospital, Bengaluru
IPD Automation	Zydus Hospital, Ahmedabad
Prescription Digitisation	Rajiv Gandhi Cancer Institute, New Delhi
Digitising Pathology Slides	Dr Mehta's Multispecialty Hospital, Chennai
Integration of Diagnostic equipment with EMR	Aravind Eye Care System, Madurai
AI based Respiratory Syndrome Diagnosis	IMS & SUM Hospital, Bhubaneswar

Post the use case nomination by the Partner Hospitals, applications were invited from solution providers at a pan India level. Over 125 applications received from various solution providers pan India which were then prescreened by the CoE team. The pre-screened applications were presented to the 25 Jury Panelists comprising of key stakeholders from 18 Healthcare Organizations including Hospitals, Pharma Companies, MedTech Enterprises & Diagnostic Chains.



“Winners and runners up were announced during the HIC Finale, by Hospital Panelists” which was attended by 300+ key Healthcare stakeholders. It was followed by the initiation of deployments by the Hospitals along with the winning solution providers for each of the use case.

Hospital Panelists



Ishaq Quadri [Moderator]
 Secretary, HIMSS India Chapter



J P Dwivedi
 CIO, Rajiv Gandhi Cancer Institute & Research Centre



Dr Sameer Mehta
 Vice Chairman, Dr Mehta's Multispecialty Hospital



Saravanan Sankaran
 CIO, Aravind Eye Care System



Dr Jayashankar Das
 Director – Research, Institute of Medical Sciences & SUM Hospital



Anjali Ajaikumar
 VP Strategy, HCG Hospitals



Bhoopendra Solanki
 Head – IT, Sakra World Hospital



Naveen Kumar
 General Manager – IT, KIMS Hospital



Manishkumar Rai
 Head – IT, Zydus Hospital

HIC Use Case Winners

OPD Automation	BestDoc and KareXpert
IPD Automation	Evelabs and Stasis Labs
Prescription Digitisation	mTatva and Augnito
Digitising Pathology Slides	Aindra and Qritive
Integration of Diagnostic equipment with EMR	RTWO Healthcare and Healthgraph
AI based Respiratory Syndrome Diagnosis	Qure.AI and Predible

PoCs have been initiated by the Partner Hospitals with the winning solution providers. The updates on the PoCs with the hospitals will be shared in the next newsletter. For more information, pls visit <https://haryana.coe-iot.com/hic/> or reach out to us via hic@nasscom.in

SUCCESS STORIES

DronaMaps brings Hi-Tech transformation to empower NDRF teams during Uttarakhand Floods



Ushering in a hi-tech transformation to India's rescue framework, NASSCOM CoE incubated DronaMaps is powering command and control centers to support search & rescue missions with NDRF and other national and international bodies during natural calamities. DronaMaps specialises in command-and-control centers that integrate existing information of a geography with a backbone of 3D drone maps and drone live feeds. This brings together in depth understanding of the area of interest with real time updates and visuals of the situation on the ground. Previously, DronaMaps has provided geospatial intelligence-based command and control centers to 7 states in India during the Covid 19 pandemic.

NDRF is the largest rescue force in the world and has been adopting innovative technology with the help of AGNIi and Invest India. As the disaster in Uttarakhand hit, DronaMaps' command and control center enabled prioritisation and decision making on the ground, drastically cutting down the time and risk of reconnaissance. For example, areas which were 300-400m below the accessible region in steep slopes and could have taken hours to reach were surveyed with drones in a matter of minutes, all the while ensuring the safety of the rescue personnel. For on ground operations, eight to nine areas were prioritized based on data from high resolution 3D maps, live drone images, and videos. The 3D drone map enabled a

simulation model of the flood, estimating the movement of the water. The real time visual feed helped identify structures with maximum damage, location of sewage grates etc. Signs of life amidst the debris were identified with advanced thermal sensors. During the reconnaissance phase of the rescue operations, drones helped assess if the tunnels were logged with water and strategise the safest approach.

Ayushi Mishra, COO & Co-Founder, DronaMaps, said that a geospatial analysis of the Chamoli glacier from high resolution satellite maps revealed that between the dates of 5th February and 10th February 2021, the area lost 135 sqkm of snow cover. According to estimates, the damage to Tapovan site is spread across 35 acres with assets washed out or with structural damage. This geospatial analysis aimed to recreate the entire chain of events starting from the source in Chamoli simulating the flow of water till Tapovan, identifying damage to assets in the path till Tapovan, and in the end a geospatial change tracking of the Tapovan area itself. With the intention of assessing damage on the path and to understand the chain of events so we can potentially use this knowledge in the future to predict and enable preparedness for such events. The command-and-control center connected the entire on ground force with reliable and transparent information about the lay of the land.

STACKFUSION enables Gurgaon's Spazei-Tech Park with NETC FASTag for a Contactless Parking experience

Spaze I-Tech Park in Gurgaon is known for housing offices of innovative companies and the popular retail outlet Shoppers Stop. Spaze I-Tech Park also has a large EV charging station in its basement parking that demonstrates the Spaze group's long-term thinking and technology adoption. Spaze I-Tech Park has made its parking system upgraded to address Covid challenges by upgrading Stackfusion Private Limited's Parkzap smart parking solution with FASTag and ANPR (Automatic Number Plate Recognition) features.

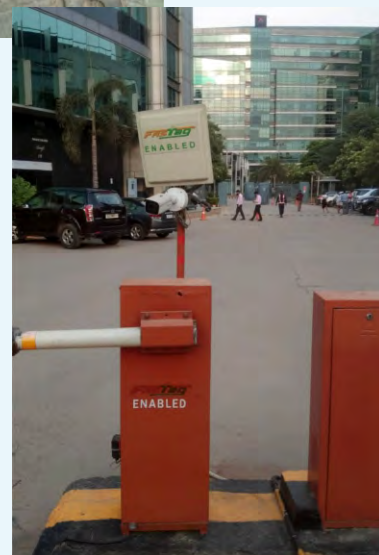
The Parkzap smart parking solution provides a parking experience that is informative, easy and non-intrusive for visitors. The solution has been running successfully at Spaze I-Tech Park since 2016. Its FASTag upgrade enables automated payment of parking fee at the exit by visitors from the FASTags installed on their vehicles. It enables touchless, cashless, paperless and queue less parking experience to the end user and provides robust security in terms of vehicle recognition and authentication via FASTag.

ICICI Bank is the acquiring bank for this project as per the partnership with NPCI. With this, the Bank will debit parking charges from the FASTag account of the commuters and then credit them to the partner's bank account. The Bank was the first to launch the innovative service of FASTag nationally, on the Mumbai – Vadodara corridor, way back in 2013. NPCI is now geared-up to expand the contactless car parking facility in all the major cities of the country. It has also initiated discussions with major malls, airports and other private parking lots in, Mumbai, Bangalore, Chennai and Delhi for the NETC FASTag powered contactless car parking solutions.

Rakesh Kapoor, Executive Vice President – Facility Management, Spaze Towers, said “We as a group have always promoted disruptive technologies by adopting them in our

organization. Our FASTag compatible parking facility is one of our many initiatives to provide a safe environment for visitors to return to workplaces or resume shopping. Parkzap solution, that has been running at Spaze I-Tech park successfully for last 4 years helped us in our efforts with their FASTag integrated upgrade.”

Echoed Varun Sharma, Assistant General Manager at Preserve Facilitiez “We have seen people interested to avail the Spazei-Tech Park parking facility for the uninterrupted experience they get and the user-friendly display that provides them personalized information.”

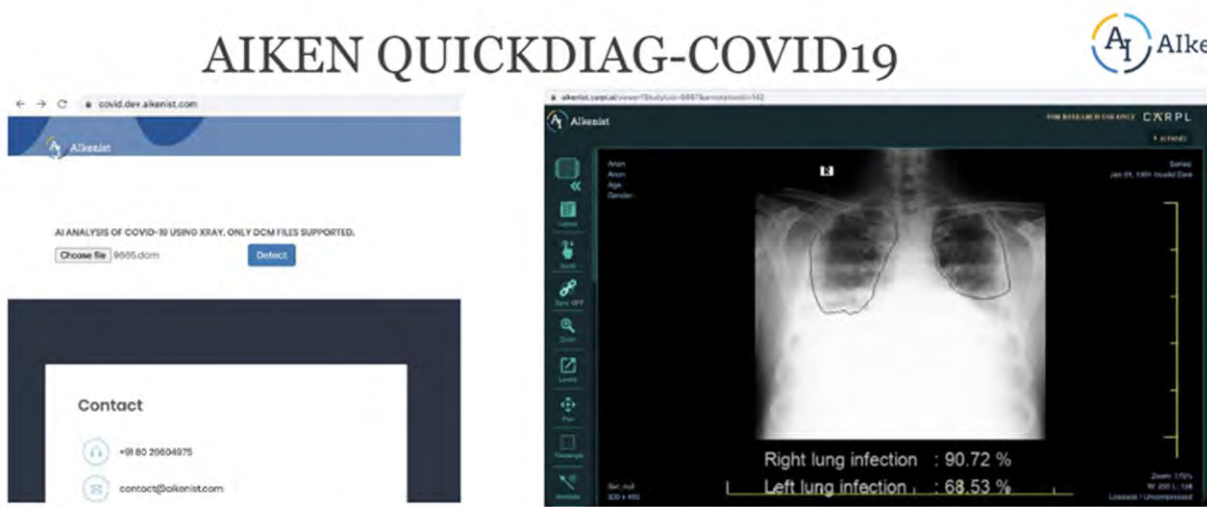


AI based COVID Screening & Progress Monitoring

The second wave of the SARS-CoV-2 pandemic that hit India has been lethal across all age groups. It has been observed that COVID positive patients slip pretty quickly from mild symptoms to serious complications requiring intensive care.

COVID infected patients are usually classified into (I) asymptomatic infection (II) acute upper respiratory tract infection (III) mild pneumonia, (IV) severe pneumonia, and (V) critical cases in need of a ventilator. To control the fatalities in COVID, timely progress monitoring is essential. Chest CT (HRCT) & Chest X-ray (CXR) are important radiological tools for this purpose.

Chest CT scanning in patients with COVID-19-associated pneumonia usually shows ground-glass opacities. Chest CT provides quantitative metrics to measure the severity of damage to the lung. Among them, Co-Rads and CTSS (CT Severity Score) are commonly used. Co-Rads score goes from 1 to 6 and shows the level of lung infection due to COVID-19. CTSS gives the quantitative estimation of lung damage due to ground-glass opacity.



AIKEN QUICKDIAG-COVID19

AI ANALYSIS OF COVID-19 USING XRAY. ONLY DCM FILES SUPPORTED.

Choose file | 8005.dcm | Detect

Contact

- +91 80 29604975
- contact@aikenist.com

Right lung infection : 90.72 %
Left lung infection : 68.53 %

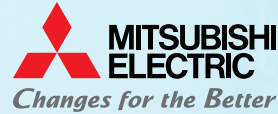
- **Prescreening for RT-PCR and COVID-19 analysis of admitted patients**
- **Fast - Takes less than 1 min** once scan is uploaded to get results
- **Easily Deployable** - Compatible with all X-Ray machines. The same thing extended for CT analysis
- **Low Cost** - Less than 100 INR/scan
- **High Accuracy** - >90% detection rate

Today most Radiology centers for COVID-19 CT scans provide either or both scoring methods. It is normally done by Radiologists after going through CT Axial scans slice by slice from top to bottom. This takes a few mins for Radiologists to score. **CoE TechWizards company Aikenist's QuickDiag AI based algorithm** is deployed by Radiology companies like Mahajan Imaging & Prima Diagnostics and a few hospitals based in Bengaluru & Mumbai to reduce the scoring time. The AI technology developed by Aikenist, can provide an automatic preliminary report with CTSS to the Radiologists. Radiologists can modify the report if required and sign it. As the technology helps to address a greater number of patients, the needy patients get the report on time which is very crucial to do faster diagnosis, treatment and saving life.

STRATEGIC PARTNERS



CO-CREATE/INNOVATION PARTNERS



ASSOCIATION PARTNERS



INFRASTRUCTURE PARTNERS



FOR FURTHER INFORMATION CONTACT :

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