

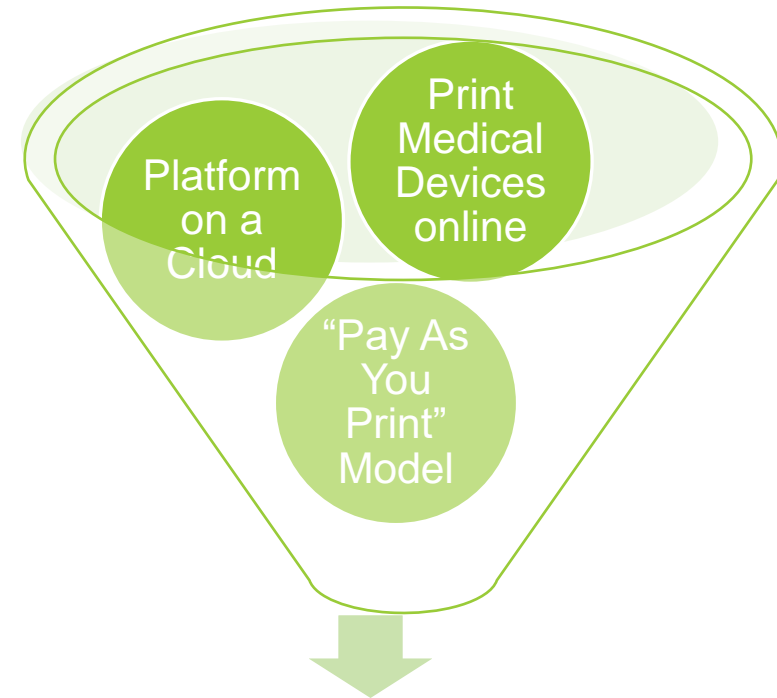
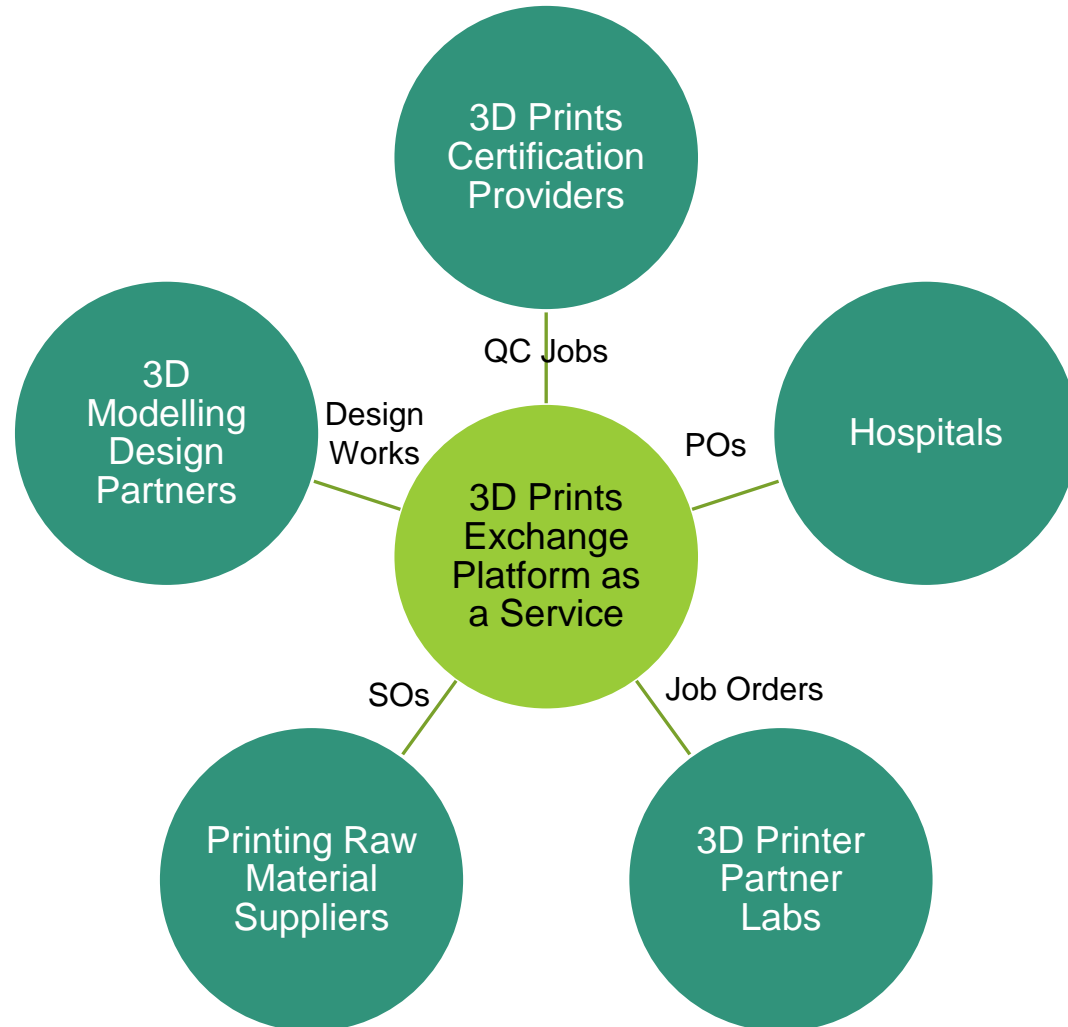
5G Use Cases

Vertical - Healthcare

Use Case 1

Building a 3D Prints Exchange on Cloud for Hospitals

Overall Partner Ecosystem

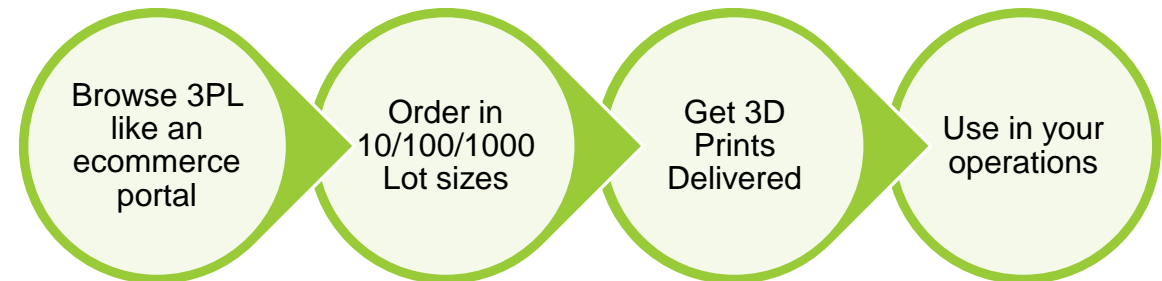
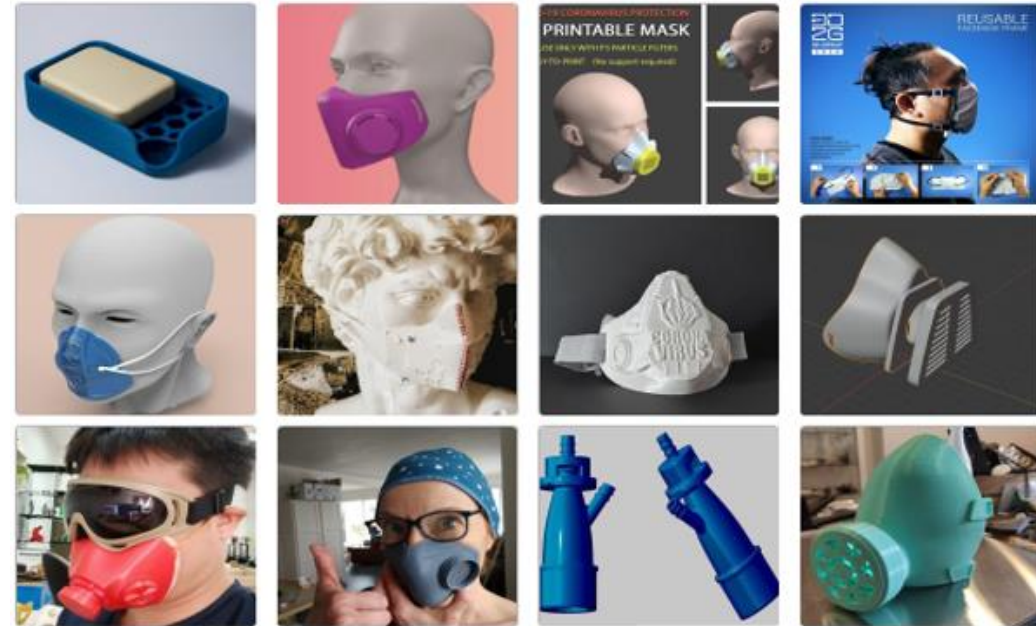
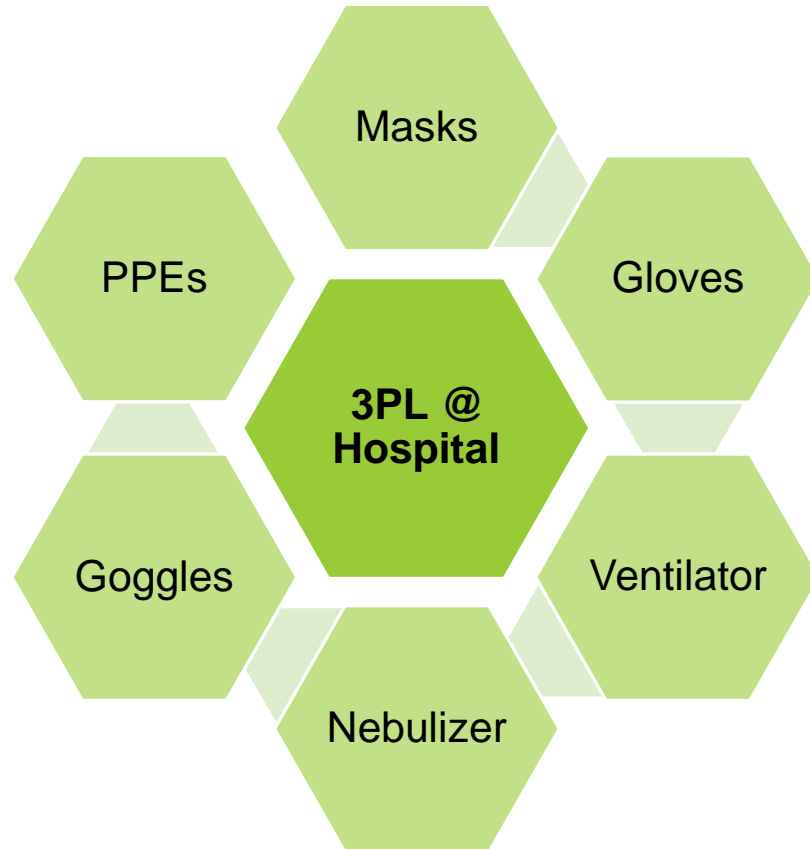


3D Prints Exchange (3PE) for
Medical Devices & HSE
Accessories for Health workers

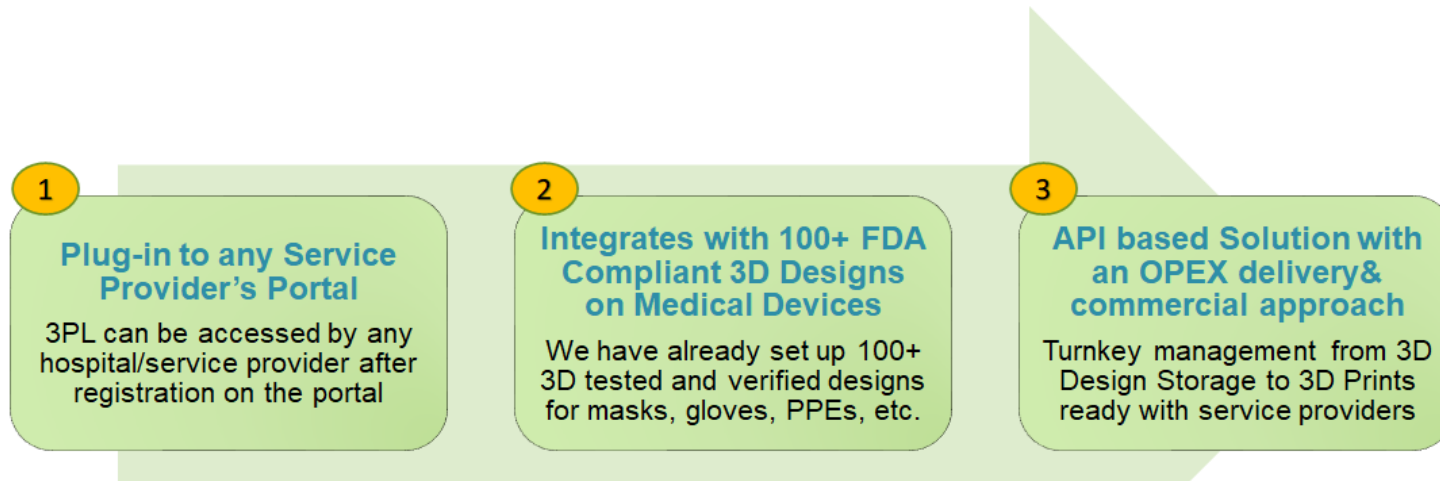


Hospital Perspective - 3D Prints Library (3PL) for Safety and Devices

Browse → Order → Print → Use



3D Prints Library - Business Benefits



- ✓ Helps to setup the solution on cloud/on-premise for a hospital in **3-4 working weeks**
- ✓ Enables FDA Compliant 3D design files to be stored and shared with 3D printers registered on cloud, so that the **entire O2C (order to cash) process happens on cloud**
- ✓ Easily scales up for enterprise adoption by using the **industry best practices for 3D Prints of Medical Devices**

- ∅ **Greenojo's 3D Prints Library (3PL)** is an on-demand 3D Prints of medical devices and accessories which can meet the instant demands from healthcare service providers/hospitals
- ∅ 3PL will help in **managing ad-hoc demand-supply gaps at the healthcare service providers/hospitals level** due to outbreaks such as Covid19
- ∅ **3PL solution is built on a concept of 100% SaaS and a "Pay as you Go/Print"** model for Hospitals/Service Providers who want to leverage this platform as an OPEX model

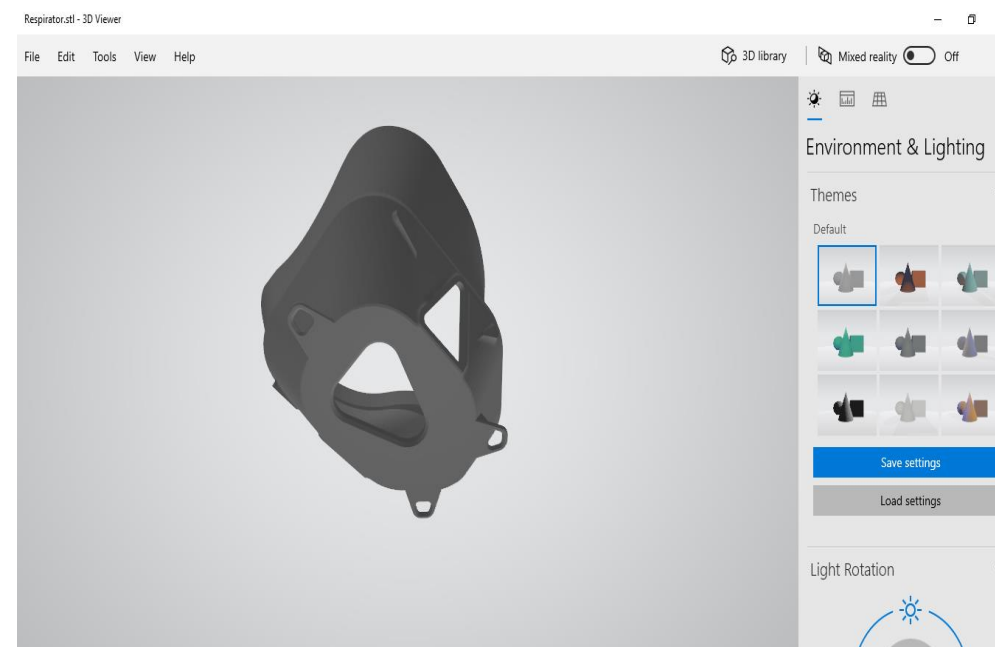
3D Prints Library/Exchange Platform - 5G Impact

3D library to be available as a mobile app for hospital staff

AR/VR enabled 3D design views before raising POs

Real-Time edits, suggestions to customize existing STL/3D design files

Reduce the TAT for the O2C/Order Fulfillment process



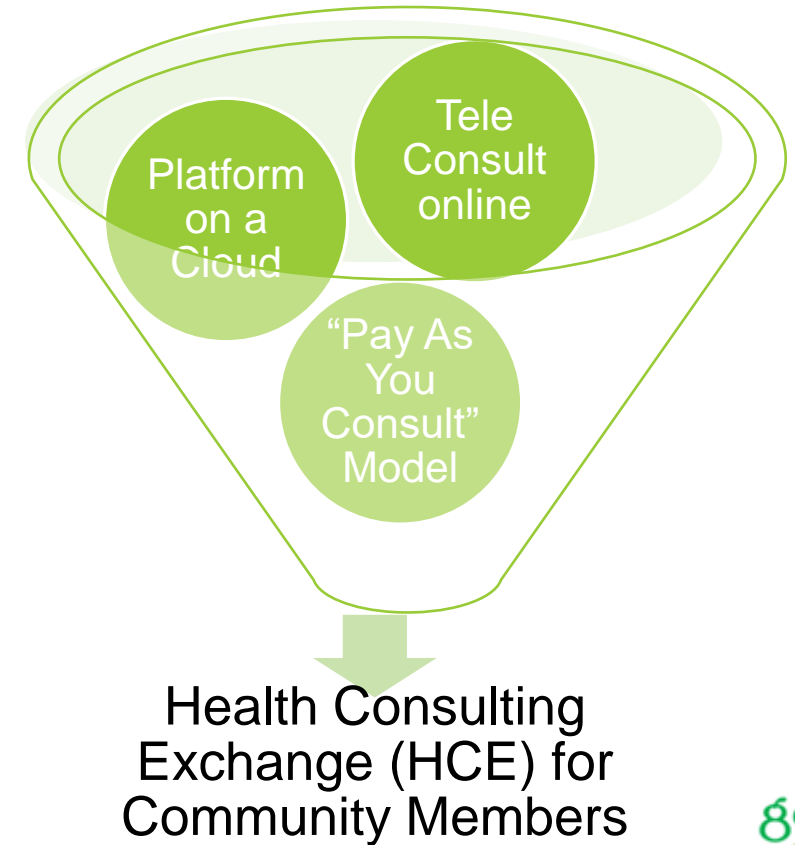
Readiness to test & scale on a 5G Test Bed

- ∅ We had tested the integrated solution on a MS Azure Cloud instance (from setting up the 3D exchange to on-demand deliveries)
- ∅ We have developed the core architecture and got it validated by industry experts from manufacturing as well as healthcare segments
- ∅ Our accelerators in form of Process Mapping Templates, Workflows, Dashboards, etc. can be useful for a hospital that wants to setup its own 3D Prints SCM portal
- ∅ Order fulfilment process (3D Printing Jobs) is fully automated using Microsoft as well as 3rd party tools with built-in AV/AR extensions
- ∅ Supports real-time changes to customize existing STL/3D design files
- ∅ We want to extend this platform as part of Advanced Manufacturing Collaboration (Community Program)

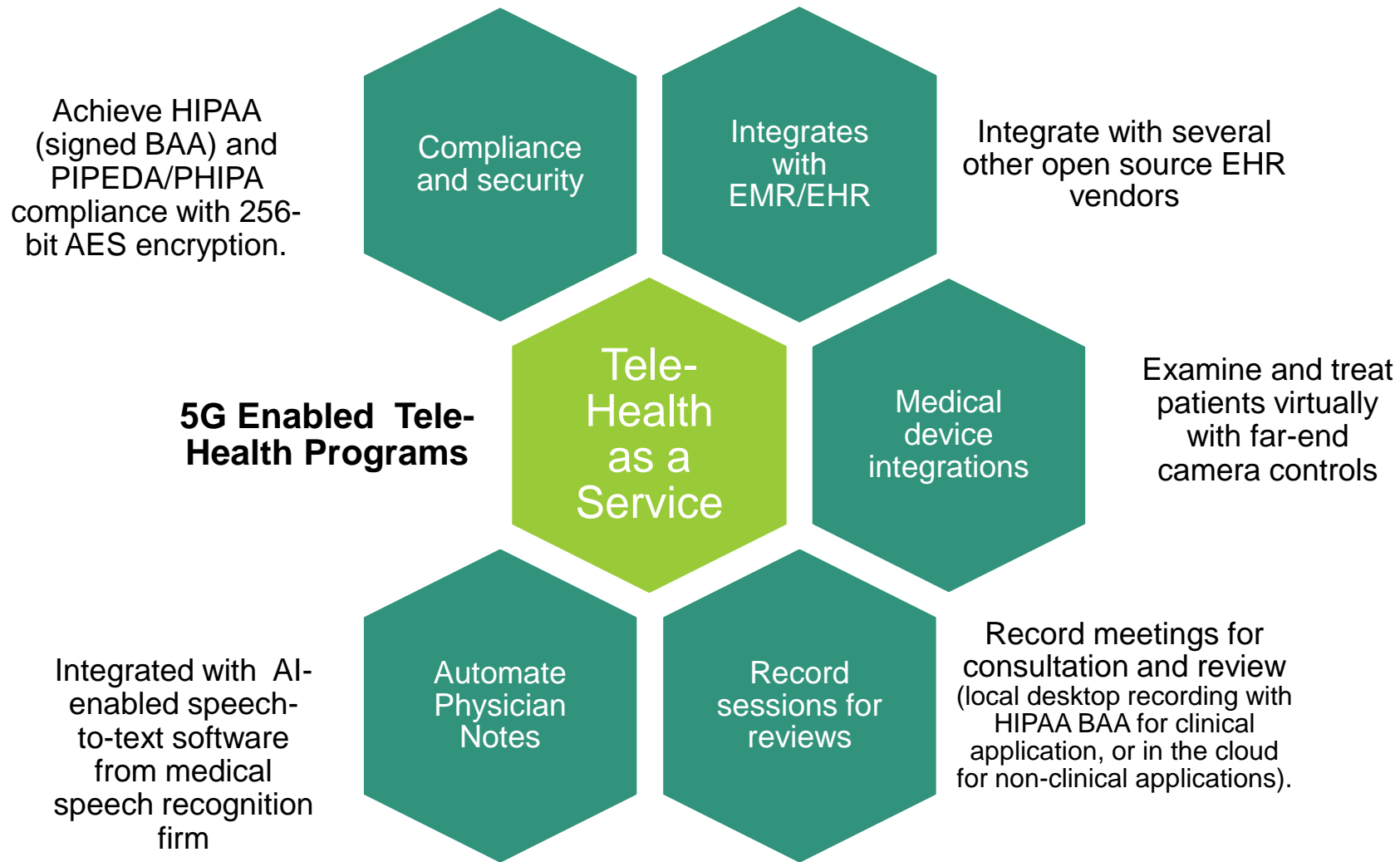
Use Case 2

Tele-Medicine (integrated with EMR/EHR) for wellness diagnosis

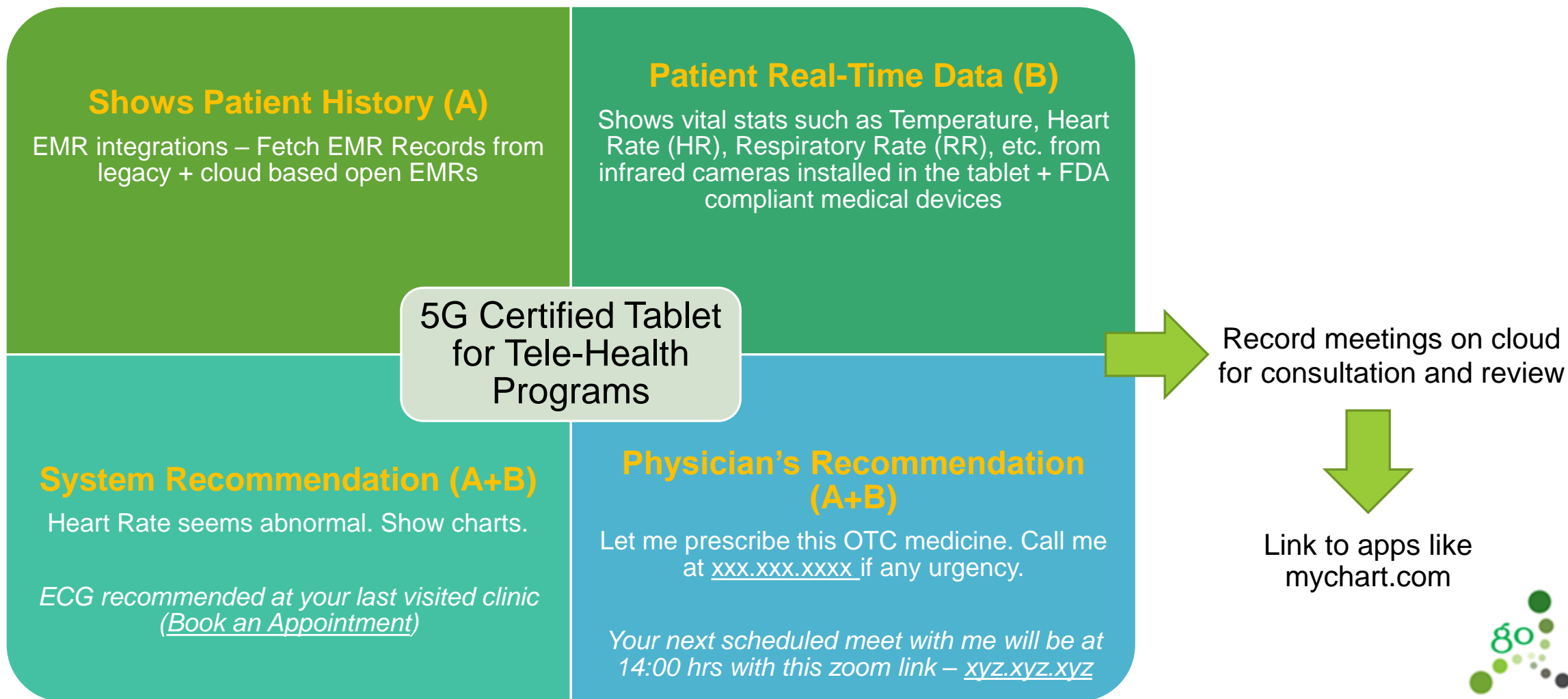
Overall Partner Ecosystem



Expected Features in 5G enabled Tele-Health Applications



5G certified device for Tele-Health Programs (using 5G Band)



Readiness to test & scale on a 5G Test Bed

- ∅ We had tested a tele-health solution as a service with video consultation and records getting stored in a cloud based EMR/EHR in the backend
- ∅ We have integrated the components such as EMR/EHR with a tele-medicine platform running on a non 5G environment
- ∅ Automation for Physician Notes as well as System's recommendation are not enabled, as we are testing with a 3rd party partner
- ∅ Security standards have been all tested for the communication across these systems
- ∅ We want to support this as a community development program as part of Smart Healthcare Program as part of GOI initiative (for programs like PMJAY, NDHM, etc.)

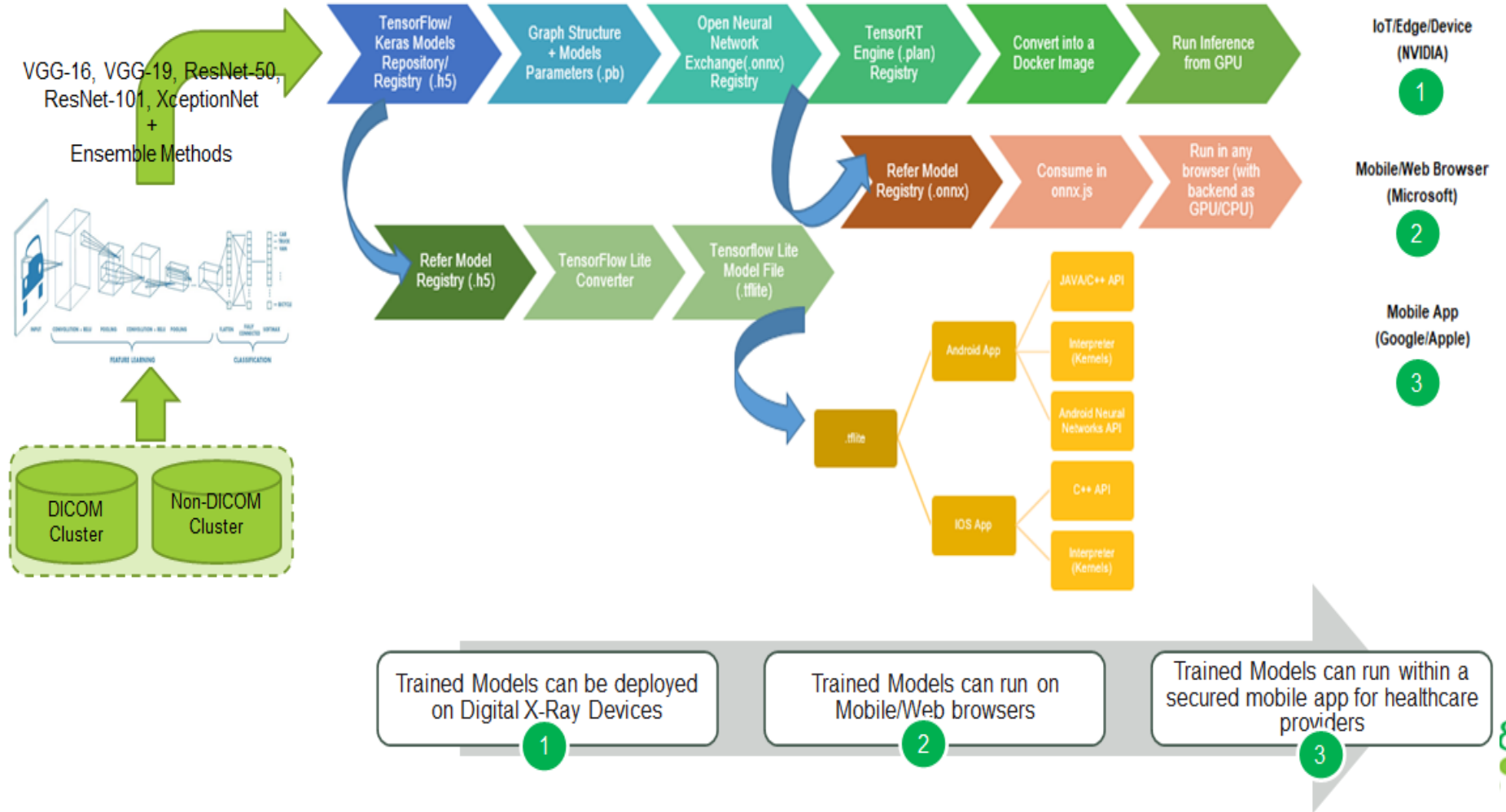
Use Case 3

Medical Imaging Analysis to
detect anomalies/outliers
(i.e., infections)

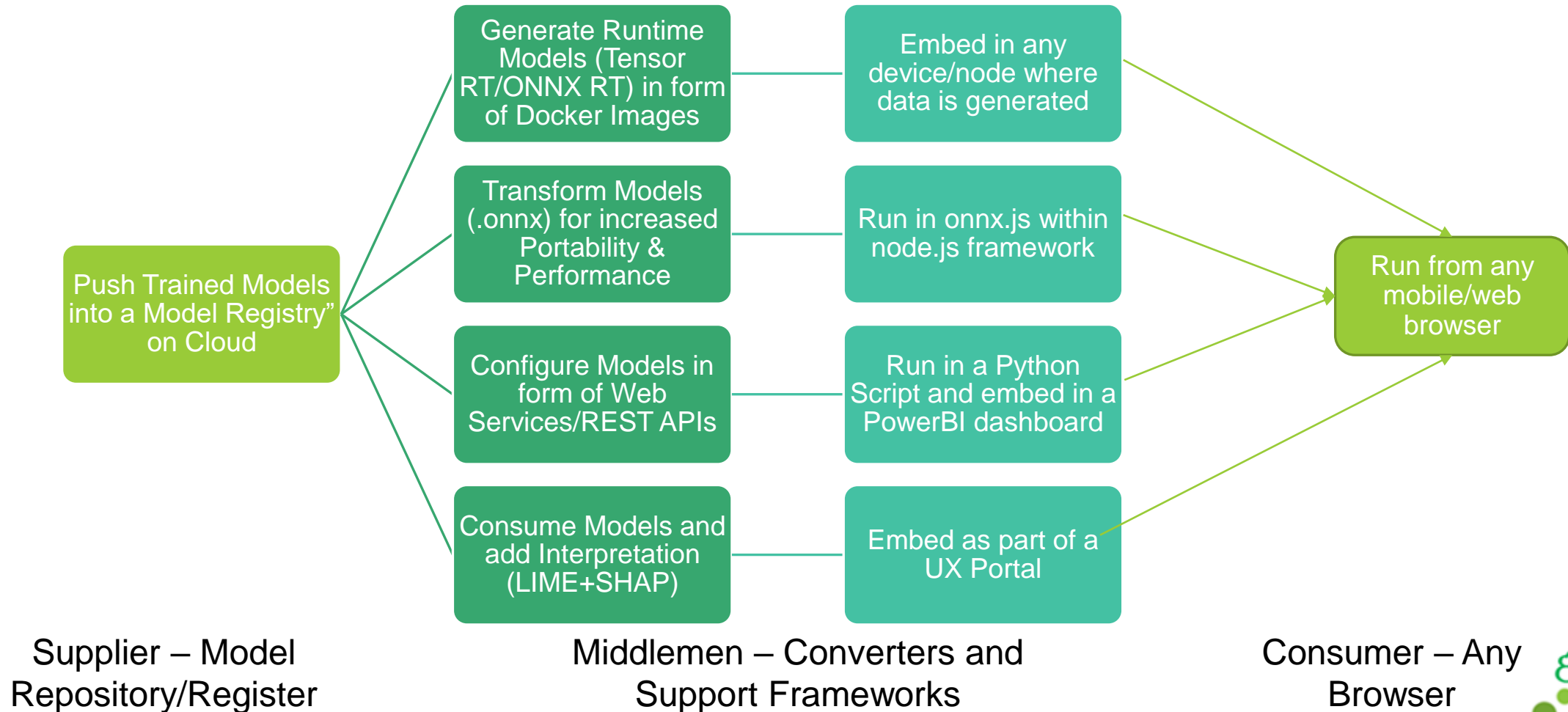
Medical Images Analytics & Delivery in IoMT (Internet of Medical Things)

5G Dependents

- a) Transmission of Data from Digital X-Ray devices to an EMR/EHR system
- b) Running Trained Models on a browser in real-time to augment physician's recommendation
- c) Running Trained Models within a secured mobile application



Building Blocks in Medical Image Analysis and Delivery



Readiness to test & scale on a 5G Test Bed

- ∅ We had tested this IOMT solution for medial images in a Param Computing, thanks to an accelerator program sponsored by NVIDIA and C-DAC
- ∅ We have integrated the solution components running on a non 5G environment
- ∅ Security standards have been all tested for the communication across these separate sources as per the HIPPA guidelines
- ∅ We want to scale this solution as part of Quantum Analytics in form of a DQApp(Distributed & Deep Quantum Application)



Thank You

Greenoj provides Automation, Analytics and AI solutions to enterprise customers

For RFPs, Solutions and Sales/Partner enquiries, connect us at - sales@greenoj.com

Sales Offices

- US/Canada - Houston, TX, USA | Burlington, ON, Canada
- EMEA - Bucharest, Romania | Dubai, UAE | Lagos, Nigeria

Delivery Offices - India

- India - Bhubaneswar | Bangalore | Ahmedabad | Hyderabad | Trivandrum