

# Covid19 Analytics Platform (CAP)

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**24x7, Integrated data2insights (d2i) platform**

# Agenda

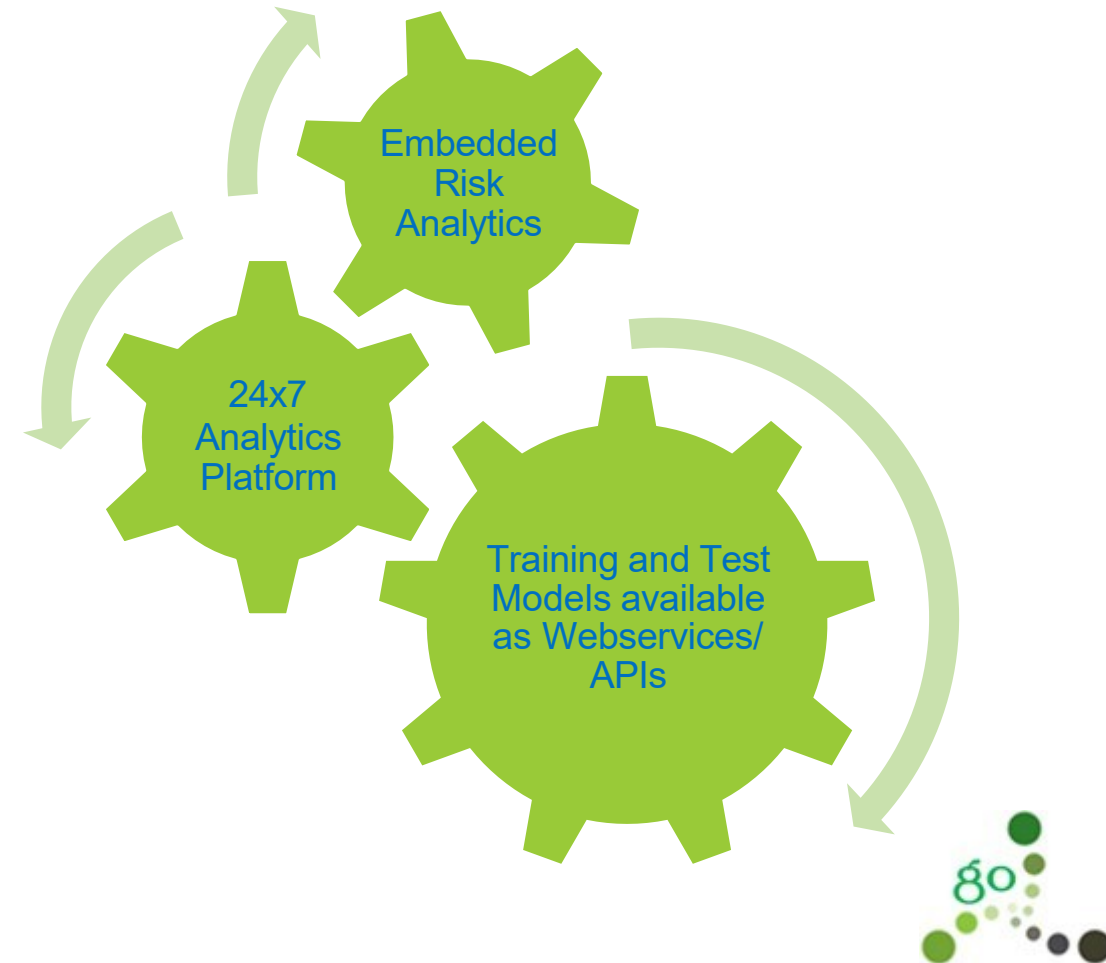
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- Covid19 Analytics Platform (CAP)
  - *Overview, Stack and Benefits*
- CAP's Applicability
  - *Typical Use Cases*
- CAP's Engagement Model
  - *Execution Model, Enterprise Scale*

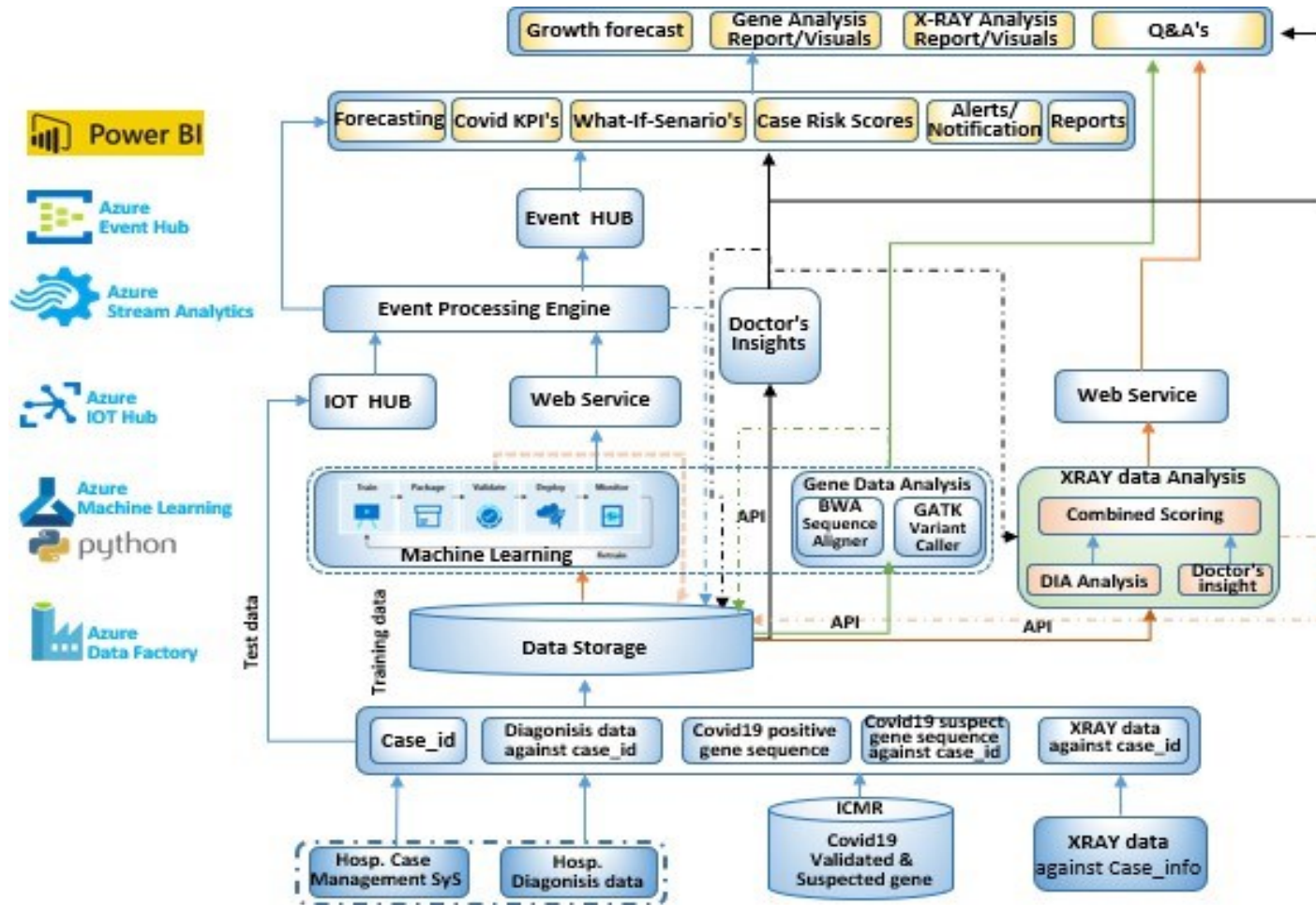


# Covid19 Analytics Platform (CAP) - Overview

1. CAP is an on-demand analytics platform that can be used by research organizations, public healthcare institutes, students of medical universities to access **analytical views, trained models & what-if/ business scenarios dashboards on covid19 datasets**
2. **CAP's objective is to accelerate forecasting models** for the capacity planning/forecasting of hospitals, disease outbreak models, target infections, etc. at a district level
3. **Risk Analytics is embedded as part of each module** – Case Risk Scoring, Training Models Repository, KPI Reports, Performance Benchmarking, Outbreak Models, Healthcare Capacity Forecasting, etc.



# CAP - Running Stack/Architecture on MS Azure Cloud

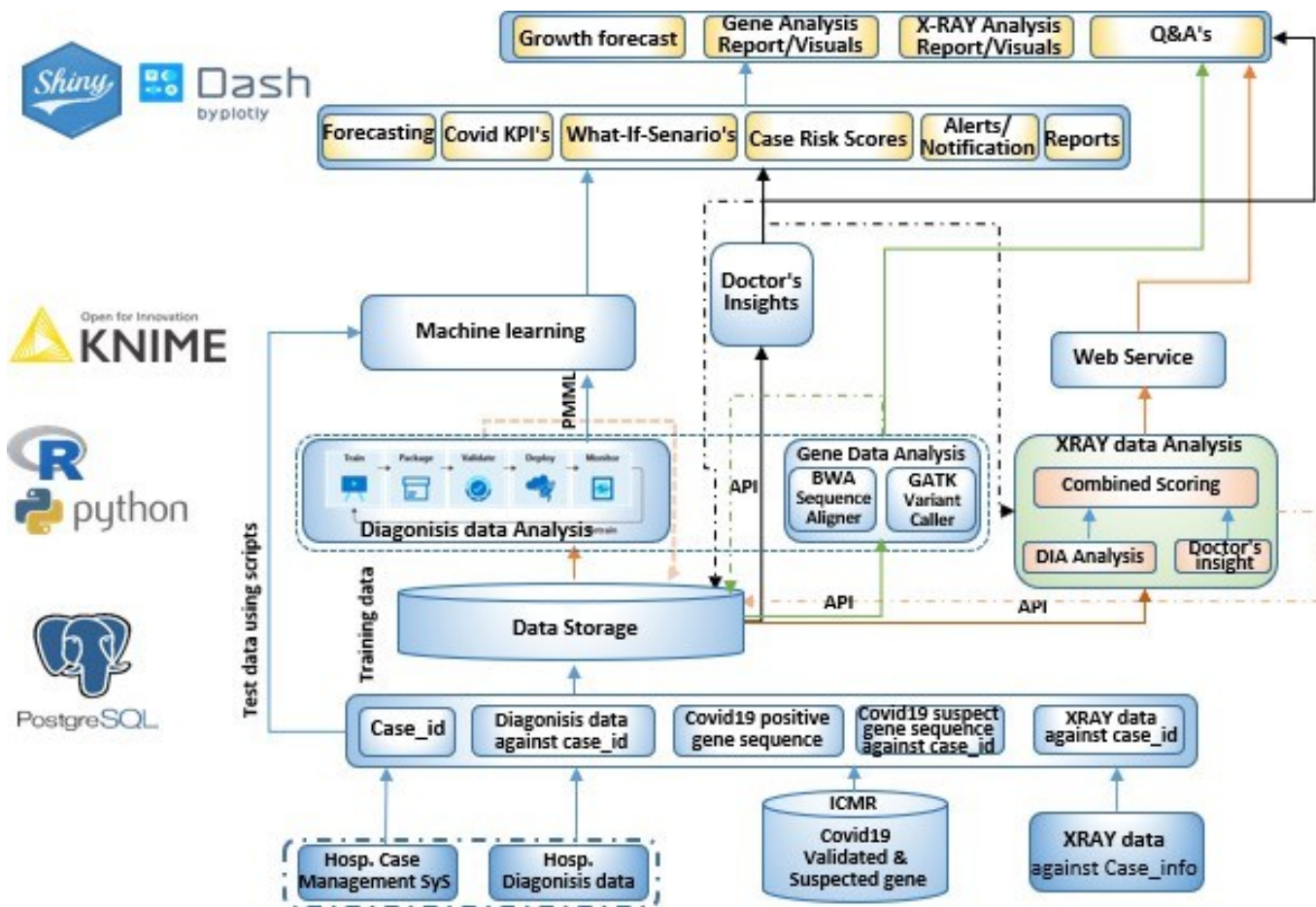


## Integrated API Platform for

- Generating “Case Risk Scores” from Diagnosis, Genomics as well as X-Ray DICOM Images
- Sharing a repository of trained models derived from Diagnosis, Genomics as well as X-Ray DICOM Images
- Developing Covid19 KPIs from a healthcare operations perspective (average cost/inpatient, average cost/outpatient, Ventilator/ICU Beds Utilization %, LOS, etc.)
- Benchmarking District-wise performance based on Recovery Rates, LOS, Re-admissions, Error Rates in Tests, Test Converge, etc.
- Generating Disease Outbreak Models, Hospital Capacity Growth, Target Infection Rates, etc. at a district level



# CAP - Running Stack/Architecture on Open Source



## Integrated API Platform for

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# CAP - Benefits

## Plug-in to any Healthcare Scheme like PM-JAY

Easily detect the risk scores of Covid19 admissions/claims made in PM-JAY program

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## Models + Analytical Views customized as per Indian scenarios

We have already customized 20+ analytical models related to disease spread, hospital capacity impact, infection rates, etc.

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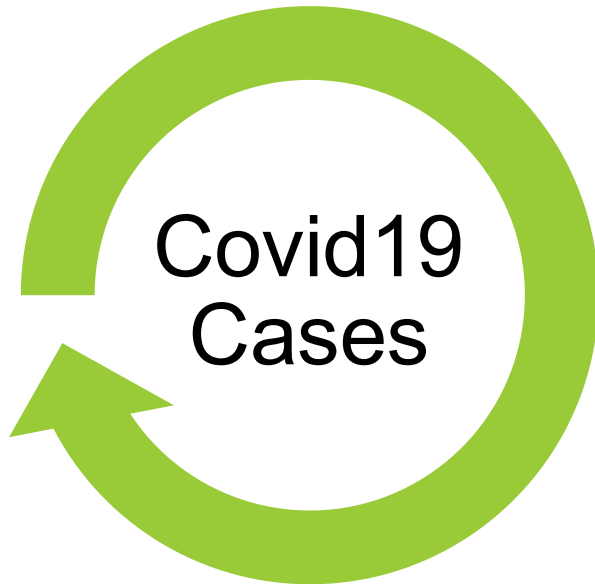
## API based Solution with an OPEX delivery & commercial approach

Turnkey management from Case Repository to Analytical Models

3



# CAP - Applicability/Key Use Cases



- X-Ray Images
- Diagnosis/ EMR Data
- Genomics Data

- ✓ **Drug Discovery & Genome Sequencing** - AI/ML on Genome data to build tests, find drugs and vaccines
- ✓ **Medical Imaging** - AI/Deep Learning has proven accuracy to detect patterns from Images
- ✓ **Forecasting** - AI/ML to forecast COVID19 cases, Hospitals capacity levels, Medical Devices inventory levels, etc. at districts level
- ✓ **Data Mining** - AI/Data Mining to analyze research reports, global data sets, online reports and news around the world to predict critical and anomaly events.
- ✓ **Healthcare Benchmarking** - AI/ML based Models + Analytical Views customized as per Indian datasets to periodically evaluate the healthcare readiness index at district levels

- ✓ Helps to setup the solution on cloud/on-premise for public healthcare firms in ~ **4-6 working weeks**
- ✓ **All models/analytical views/reports can be consumed in form of APIs**
- ✓ Easily scales up for enterprise adoption by using the **industry best practices across major markets**

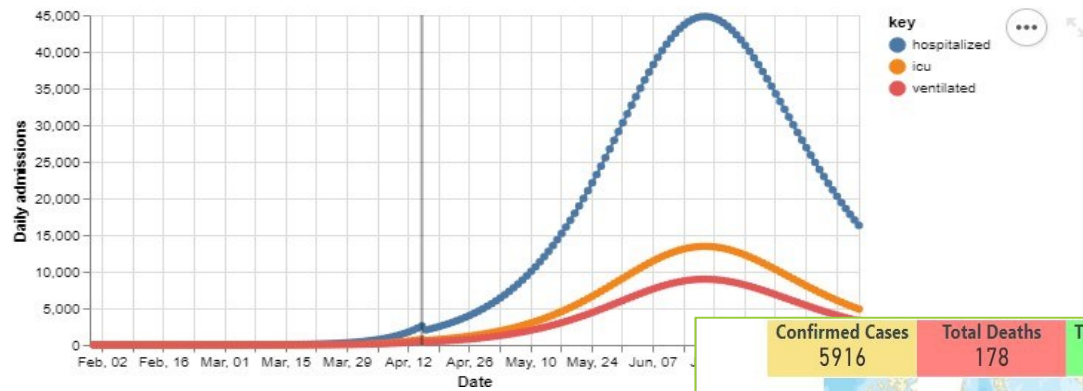


# CAP - Applicability/Point Solutions

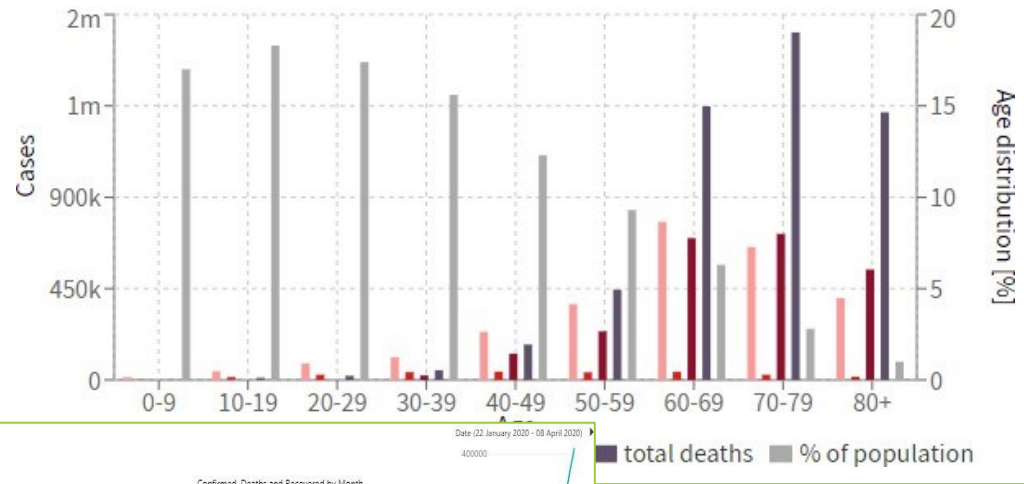
## New Admissions

Projected number of **daily** COVID-19 admissions.

NOTE: Now including estimates of prior admissions for comparison.



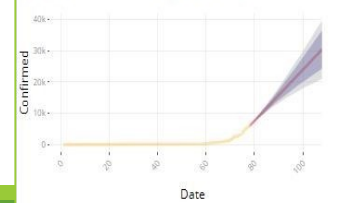
## DISTRIBUTION ACROSS AGE GROUPS



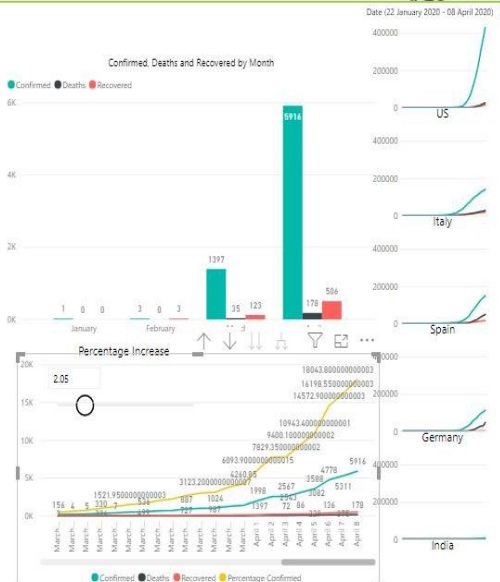
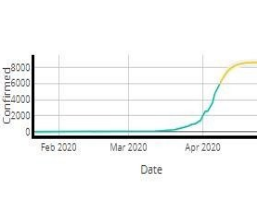
Confirmed Cases	Total Deaths	Total Recovered
5916	178	506



Time Series Forecasting using Exponential smoothing model to Predict the COVID-19...  
copy to clipboard Forecasts from ETS(A,A,N)



Forecast Using Neural Network to Predict the Covid-19 Patient





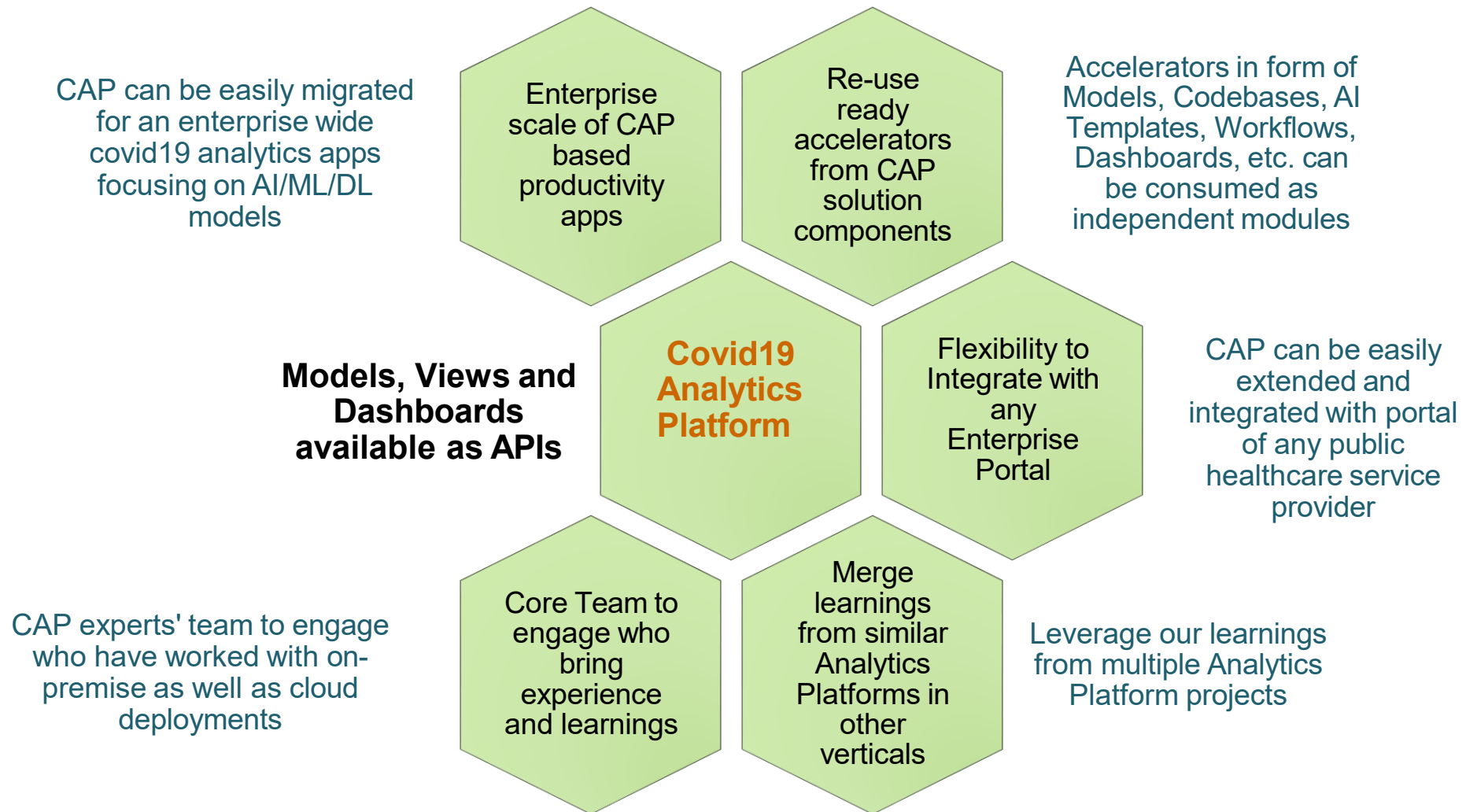
# CAP - Execution Model

## Typical Pilot/Project Constructs for a Public Healthcare Service Provider

<p><b>Offsite and On Cloud Management(100%)</b></p>	<p><b>Complete Solution Design to Deployment</b></p> <p><i>To be managed by Greenojo</i></p>	<p>➤ <b>100% on cloud project delivery</b></p> <p>➤ <i>Leveraging MS Azure Cloud</i></p>	<p>➤ <b>Pilot/Project to include FAT/UAT tests</b></p> <p><i>On-demand Analytics Platform with Interactive Dashboards</i></p>	<p>➤ <b>4-6 working weeks for a functional Pilot at any Healthcare Service Provider</b></p> <p><i>Post the contract signoff with a service provider</i></p>	<p><b>Execution directed by Analytics Platform practitioners</b></p> <p><i>Expertise with enterprise Analytics platforms and Models lifecycles</i></p>
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# CAP - Enterprise Scale of Adoption





## Applied Analytics for Digital Enterprises

# Thank You

Greenojō provides Automation, Analytics and AI solutions to  
enterprise customers

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For RFPs, Solutions and Sales/Partner  
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