



Cloud-Native Hybrid Intelligent Application Delivery Platform

with built in AI/ML Dataflow Orchestrator

Enterprise SRE Scale Ready | Fully Managed Hybrid PaaS / SaaS Services | NIST/Hi-Trust Compliance

Container Native | Cloud Cost Optimized

- **Intelligent decision making** enables a systematic connection between analytics and continuous, contextual and connected decision making.
- **Adaptive experiences**, like chatbots and natural language interfaces, respond to user needs.
- **Process augmentation and transformation** increases automation and dynamic business transformation, unlike traditional business information apps.



Unovie Corporate Overview

A Joint Venture company with Seqato India to support Global Transformation Opportunities



105+

Global Employees

Region Wise Delivery Resources Headcount

US

6

India

90+

Singapore

12



HQ

Austin Texas



40+

Managed Services customers



2

Delivery Centers



50

Cloud Certified



Why Unovie?

- Strong Domain Knowledge in verticals we serve
- Platform Engineering
- Digital First Strategy
- Innovative skin-in-the-game business models



Verticals

- Media & Entertainment
- Healthcare
- Telecom
- Manufacturing
- Hi-Tech
- Government

• **TOP 10 MICROSOFT PARTNERS IN INDIA**

• **MICROSOFT RECOMMENDED PARTNER TO ROLL OUT MICROSOFT FOR STARTUPS PROGRAM**

• **PREFERRED APP INNOVATION PARTNER**



Specialist
Infra and Database Migration
Azure Virtual Desktop



Specialist
Build and Modernize AI Apps
with Microsoft Azure



Specialist
Cloud Security



Specialist
Infra and Database Migration
Build and Modernize AI Apps
with Microsoft Azure

Our Services

Business Transformation

Digital Transformation

Cloud Migration & Modernization

Product Engineering

Business Process Automation

Infrastructure Management

Application Management

DevSecOps

Enterprise Analytics

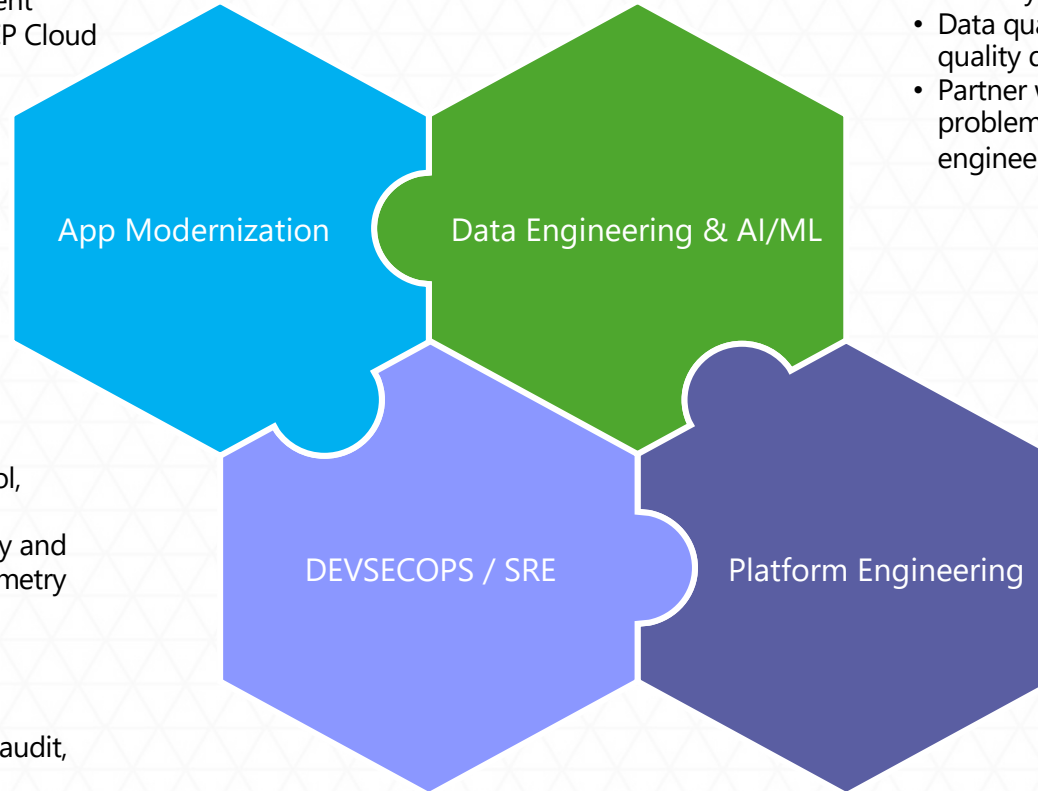
AI/ML

Testing and QA services

Cloud-Native Platform Engineering COE

POWERED BY UNOVIE

- Reference and Implementation Architecture Solution to rapidly build GPU/TPU rich AI Intelligent applications.
- NextGen App Delivery Platform built on Container Native Services deployed in Hybrid (Cloud/OnPrem Environments)
- Successfully migrated 16+ customers from on-premise environment to cloud-native edge environment
- Deep Integration Expertise in Azure/AWS/GCP Cloud Environment



SRE AND DEVSECOPS

- Infrastructure Management, Security Control, CI/CD Pipeline
- Test Data Release Automation, Observability and Trace Automation using eBPF and OpenTelemetry Platforms.
- Self-Service Bot Automation Interfaces to Developers through API-First driven Orchestration Platforms.
- Threat modelling, Security assessment and audit, application hardening, Vulnerability Management, compliance monitoring, Monitoring & Reporting

DELIVERING REALTIME INSIGHTS

- Complex data pipelines, reporting solutions using Cloud Data Technologies
- Leveraging modern data patterns like Data Mesh to deliver data as a product
- Deep expertise in Data Mesh Technologies (ADF, ADLS, DataBricks, Synapse, Python, Cosmos DB) and AWS Data Technologies and Industry best open-source tools and technologies
- Data quality & anomalies detection framework to deliver high quality data for experimentations
- Partner with strategic customer to resolve complex business problems using AI / ML solutions and validate GEN-AI solution engineering.

CLOUD-NATIVE / CONTAINER PLATFORMS

- Cloud Native Platform Development using Kubernetes, Docker and Microservices.
- Cloud-Agnostic Enterprise PaaS Platform to support complex Developer Friendly API rich orchestration with OpenShift, AKS, EKS implementations.
- Enable AI / MLOPS edge friendly inference of models for MedTech and IIoT use cases and support AIOps operational efficiency through custom chat driven interfaces to improve system and customer interactions

Harvard
Business
Review

Survey: GenAI Is Making Companies More Data Oriented

by Thomas H. Davenport and Randy Bean

January 15, 2024

CIOs sharpen cloud cost strategies – just as gen AI spikes loom

CIO

How Generative AI is spurring demand for real-time data and improved data governance

BrandPost • By Rohit Kapoor
Jan 18, 2024 • 5 mins

The GenAI Datacenter Squeeze Is Here

By Doug Eadline

The immediate effect of the GenAI [GPU Squeeze](#) was to reduce availability, either direct purchase or cloud access, increase cost, and push demand through the roof.

Exponential data growth could turn storage for AI into an information supply chain



FORRESTER

Spend On Generative AI Will Grow 36% Annually To 2030

21 Dec 2023

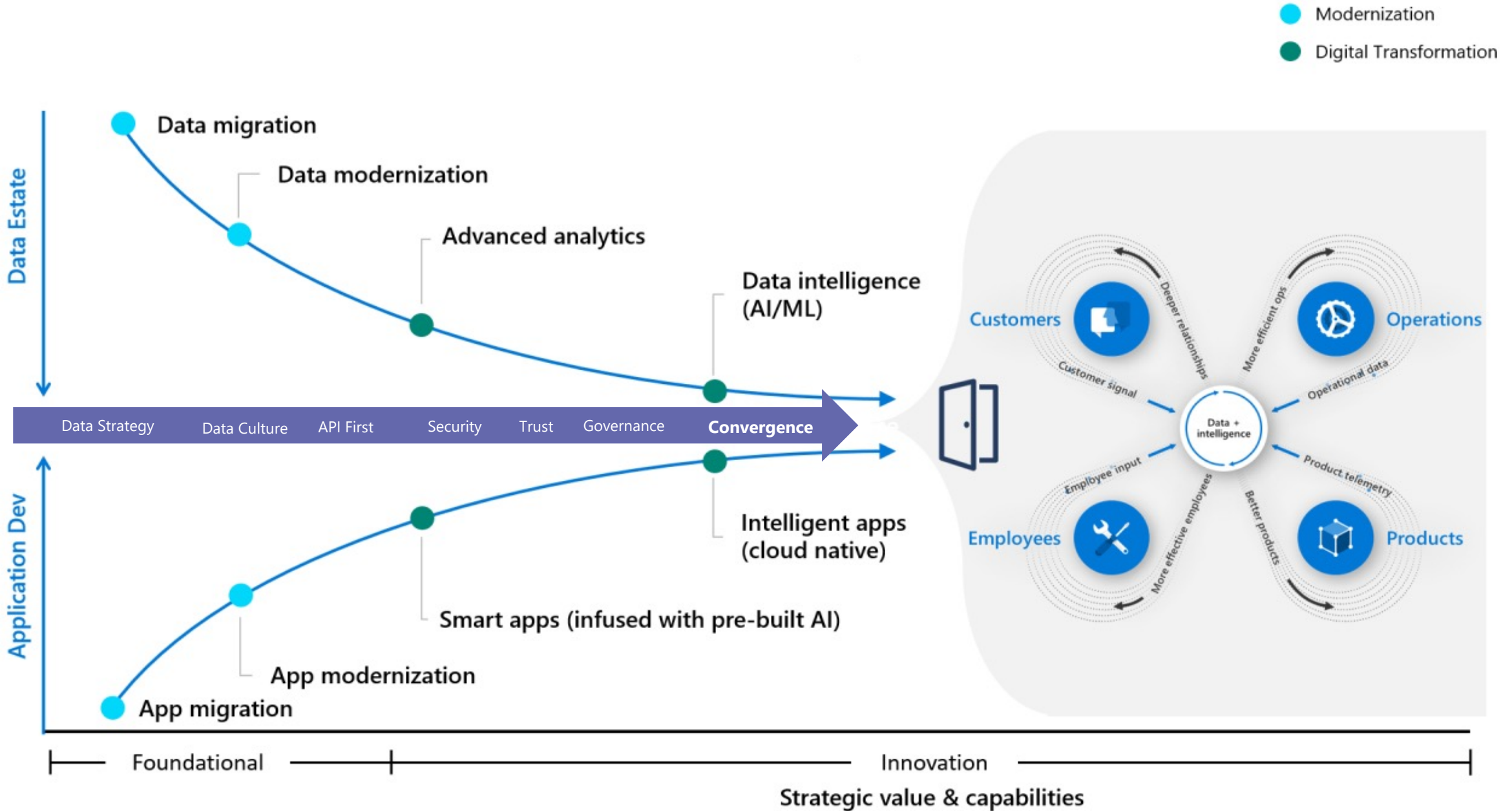
IDC Forecasts Spending on GenAI Solutions Will Double in 2024 and Grow to \$151.1 Billion in 2027

16 Apr 2024

IDC: Generative AI Spending to Reach \$26 Billion by 2027



Continuum to unlock digital innovation

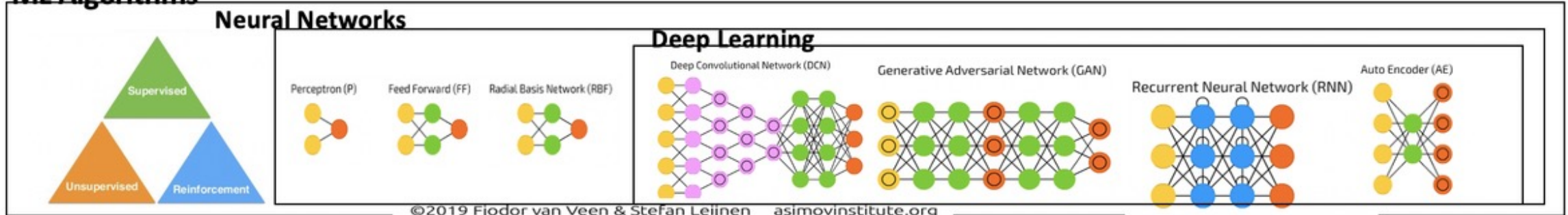


AI/ML Fusion

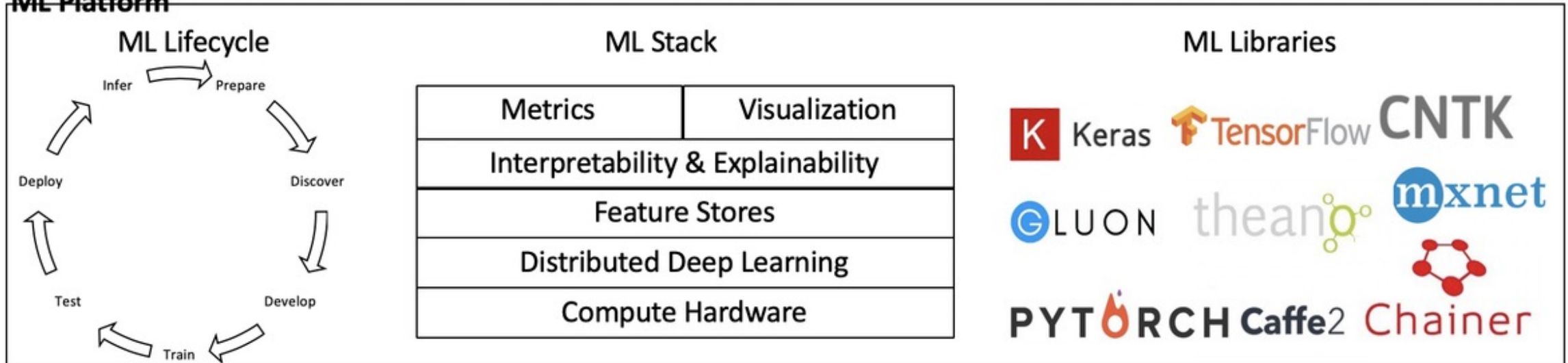
AI Services

Speech	Vision	NLP	Expert Systems	Planning	Robotics
Speech to Text Text to Speech Conversational UI	Image Recognition Machine Vision	Translation Information Extraction Text Classification	Knowledge Based Systems	Simulated Environments Grid Environments	Industry 4.0 Logistics

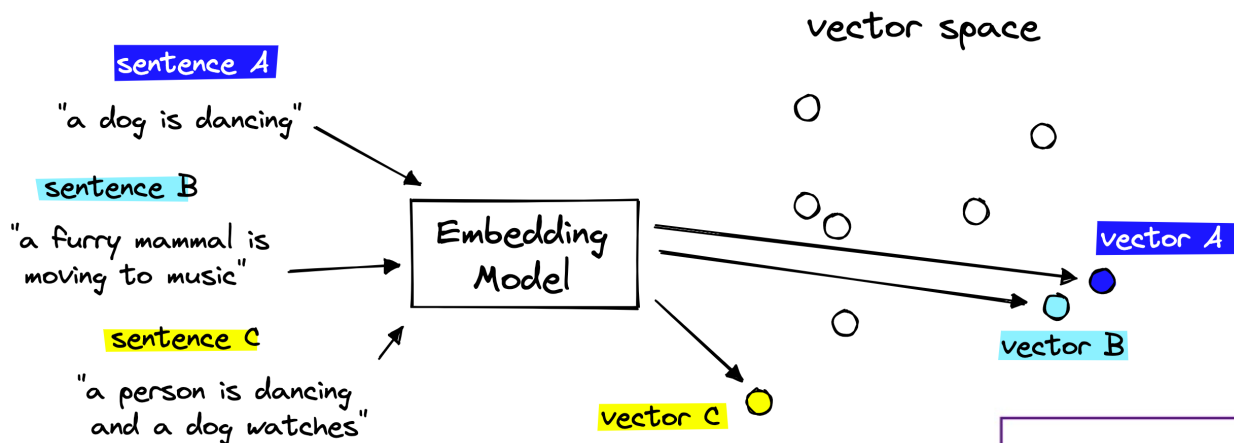
ML Algorithms



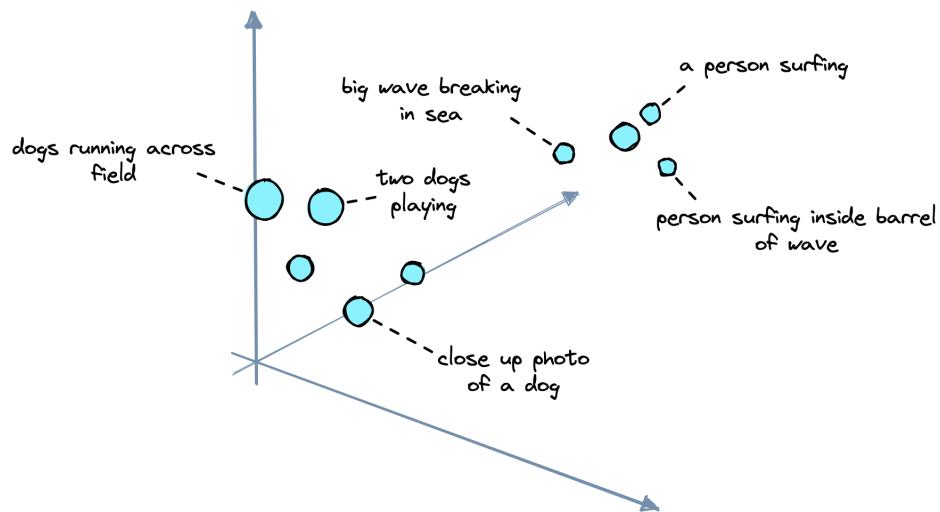
ML Platform



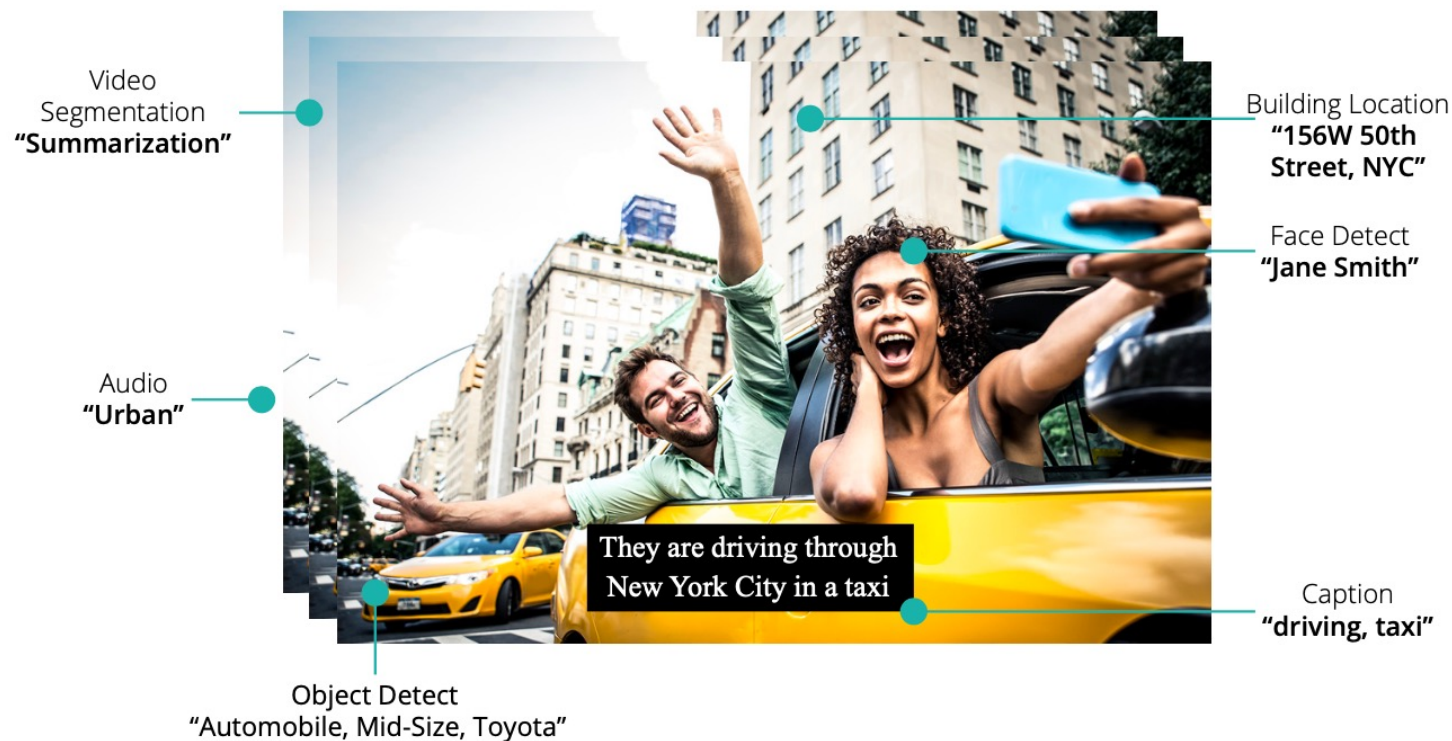
GenAI : Vectors : Large Models



Vector Embeddings Dimensions and Correlations



VIDEO CONTENT ANALYSIS: MICROSERVICES



Market Need : Cloud Optimized for AI Future

Public Cloud costs remain a key concern for IT leaders, who find themselves nearing a crossroads where expenditures for core workloads will need containment **to free up spend for AI innovation.**

The study, paid for by IPaaS provider Boomi, found that **87% had exceeded their set cloud budgets over the past two years and that 69% foresee exceeding their cloud budgets during the current fiscal year.** In other words, we've spent too much money on the cloud and will continue to spend too much.

For Gen AI, while cost savings, optimization, and efficiency are all great ideas, **if not implemented properly, they can cost enterprises more than the value they bring initially.**

Risk mitigation, governance, security, and compliance are all still nascent when it comes to AI programs as the current procedures, policies, and processes are not built for AI.

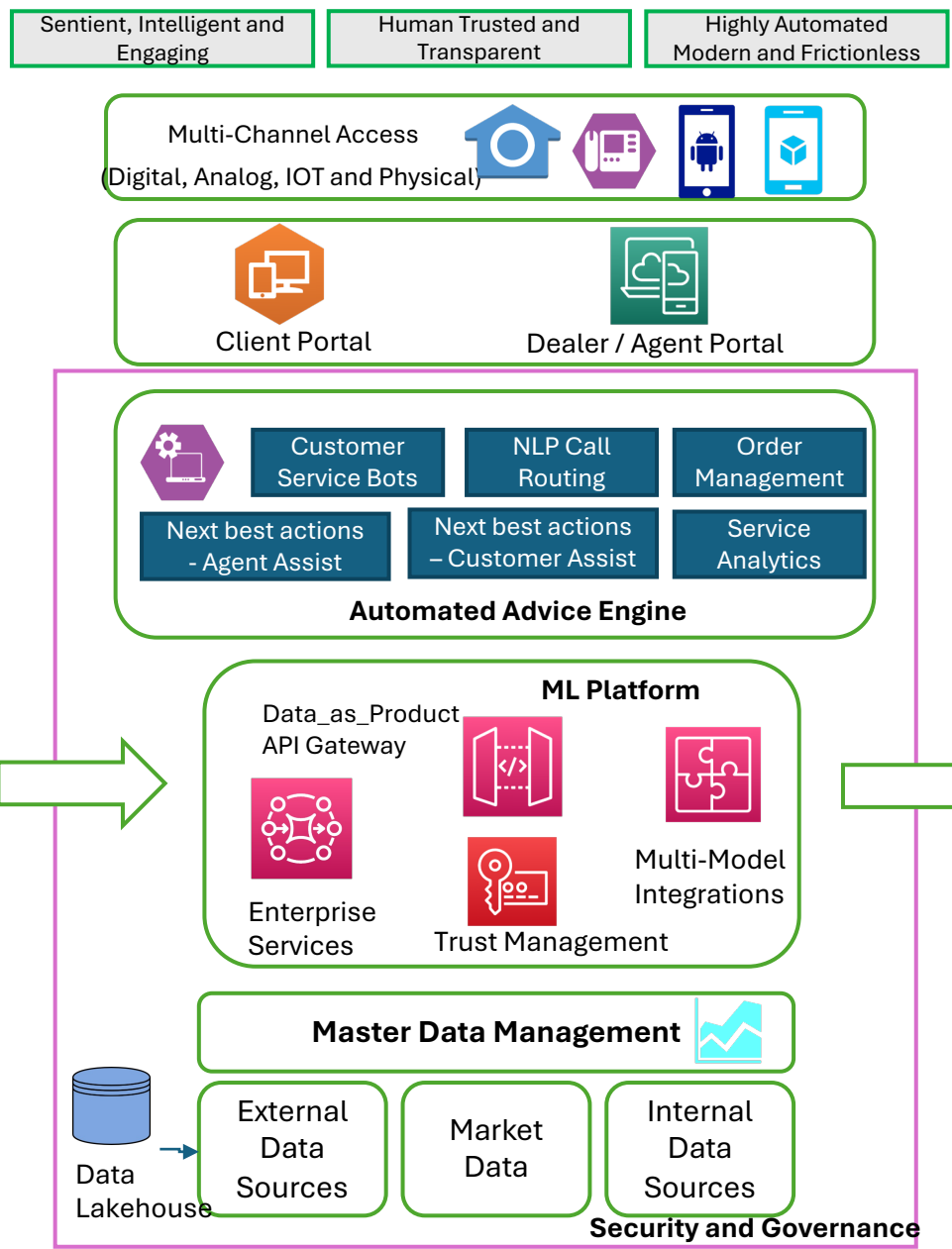
OTT/DTH Service Provider

DTH Service Provider are transitioning to digitally enabled, scalable platforms to empower customers and operational teams with compelling experiences

- User research**
(Voice of clients/FAs/other users)
- Applied design**
(Human-centered)
- Content management**
- Digital marketing**
- Digital ID**
- Client Data Store**
 - Personal data, Transaction History, Weblogs
 - Client Preferences
- Client data aggregator**
(Across providers/clients)

- Notification services**
Computer-generated, personalized, real time
Email In-app SMS Social
- Social/chat engine**
 - With peers/friends/advisers
- Client relationship management**
 - Prospects, sales, servicing
 - Client/sales analytics
- Client on-boarding/account opening utility**
 - Digital, with e-signature
 - Integrated across products
- Content Partner**
(Proprietary Content Partner Agreements)
- Best Interest Engine**
 - Guided Decision Making
 - Package Comparisons

Customer / Dealer / Installer L1/L2 Agent Call Center



Setup Boxes
Feature Rich set-top boxes also allow customers to access additional features such as on-demand content, pay-per-view movies, and interactive services.

Channel Packages
Variety of channel packages that include different combinations of channels, such as sports, movies, news, and entertainment channels. Customers can choose the package that best fits their needs and budget

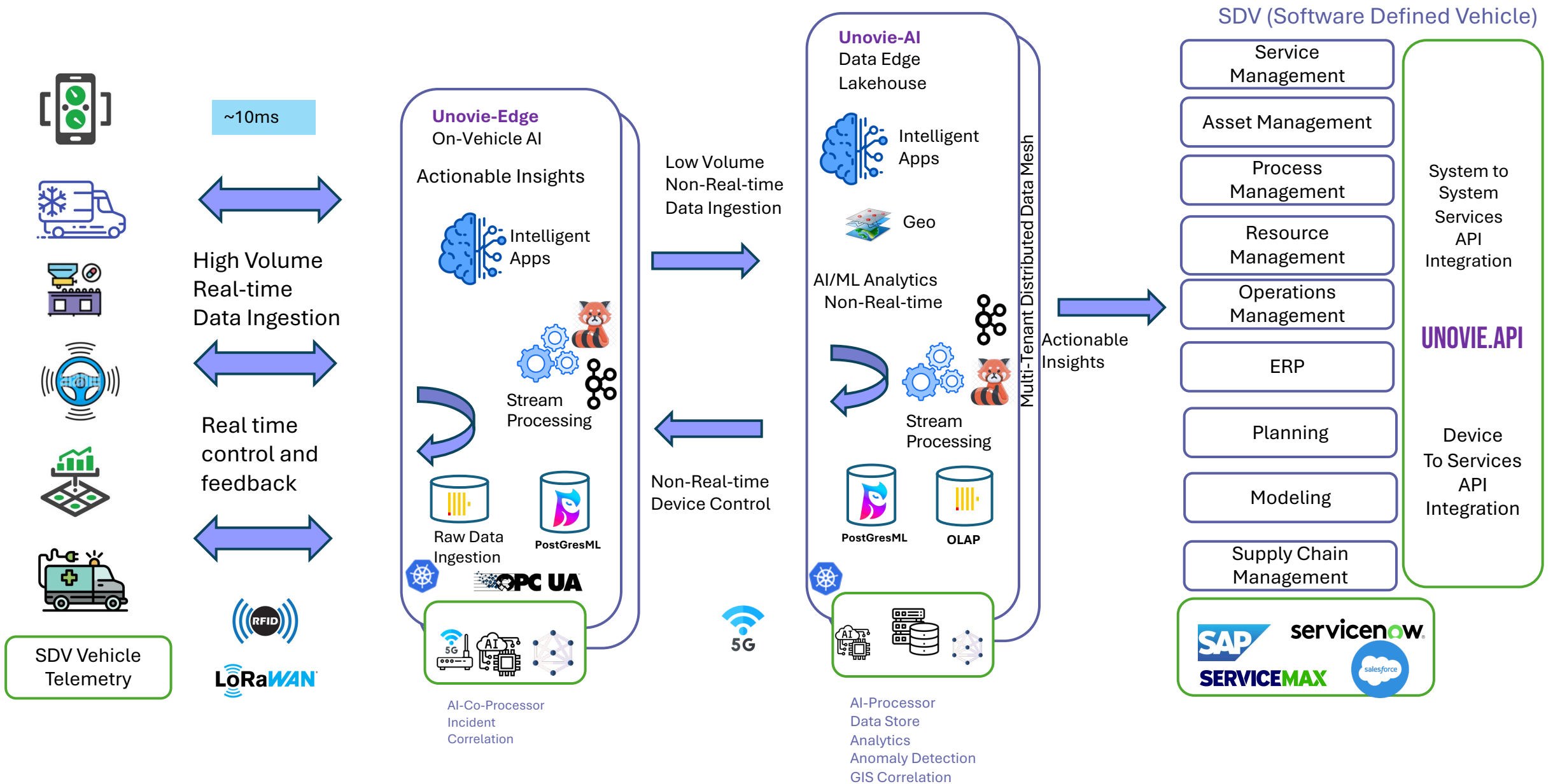
HD Packages
High-definition (HD) channels, which provide a higher quality picture and sound than standard-definition channels

Interactive Services
Games, video-on-demand, and pay-per-view movies

Multi-Room and DVR
Connect multiple TVs to a single set-top box and access the same channels and features on all TVs, and record favorite sows and movies for watch it later

Mobile Applications
Customers to access their accounts, view program schedules, and even watch live TV on their mobile devices.

IIoT Edge to Cloud Architecture

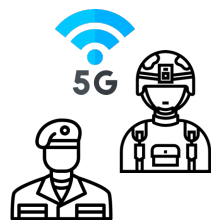
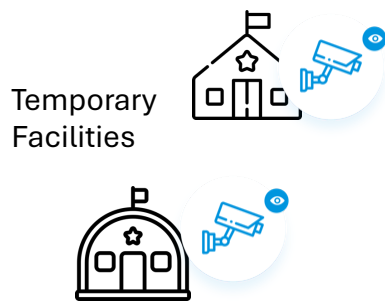
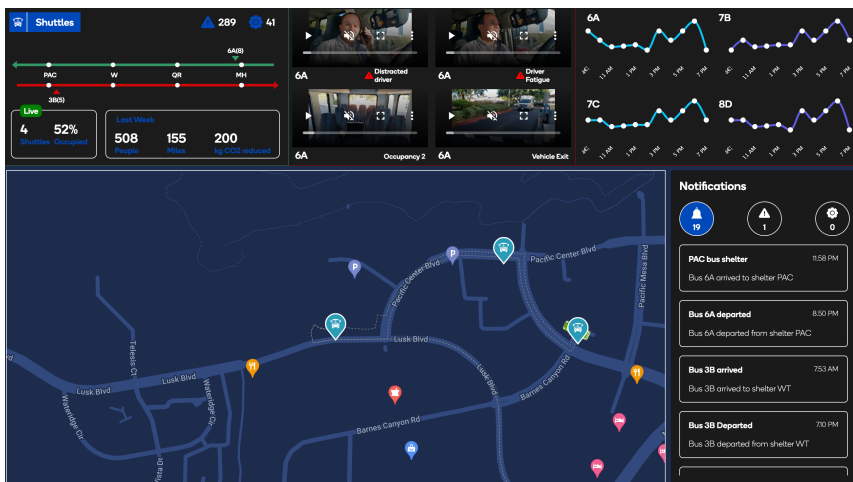


5G Edge : COW (Cellphone on Wheels)

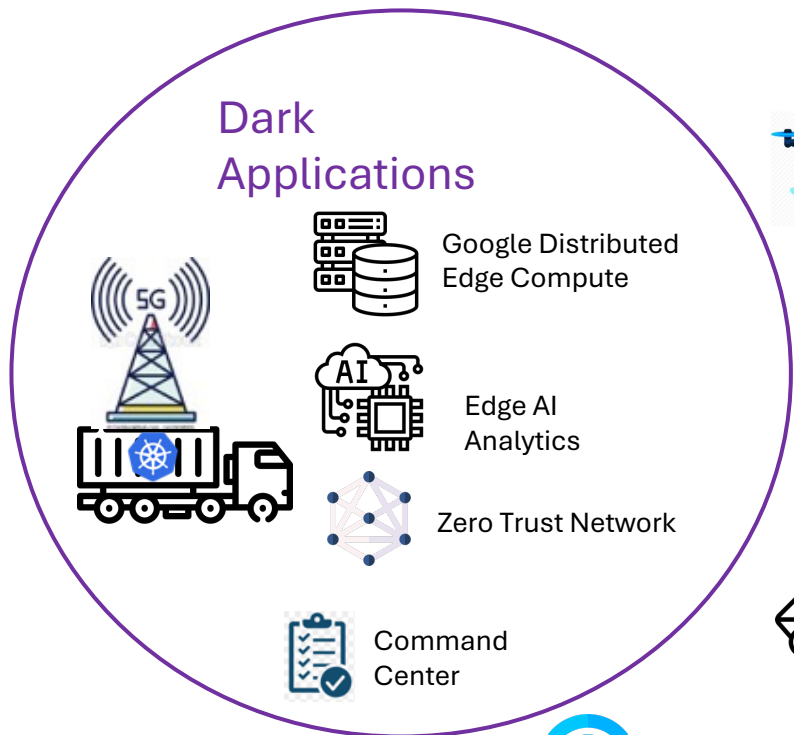


Dark Applications

- Offline / Occasionally Connected
- DoD Hardened for ATO
- Local AI/ML Analytics
- < 5ms latency



Military Personal



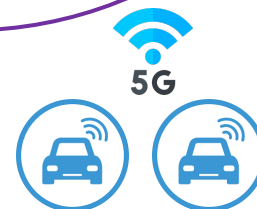
Drones



Defense Equipment

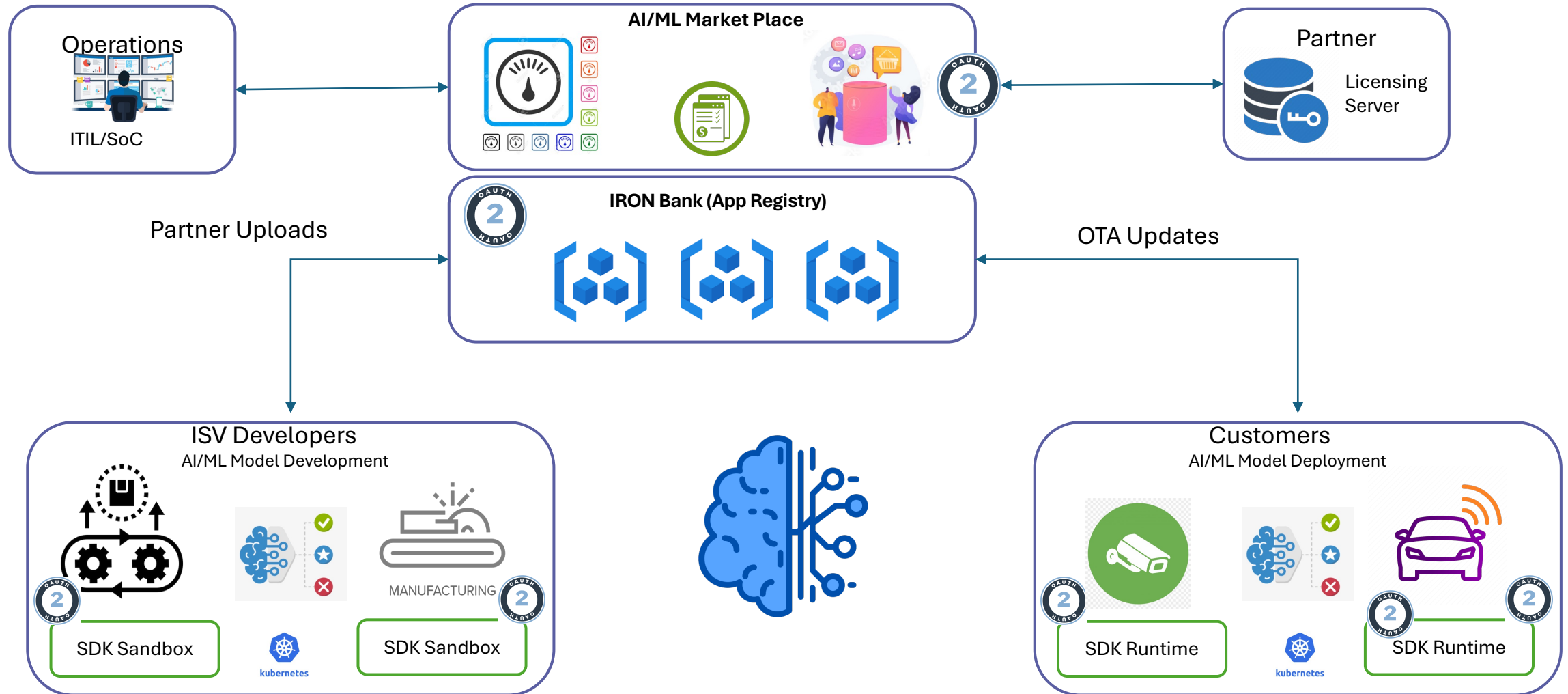


Defense Vehicles



Commercial Vehicles

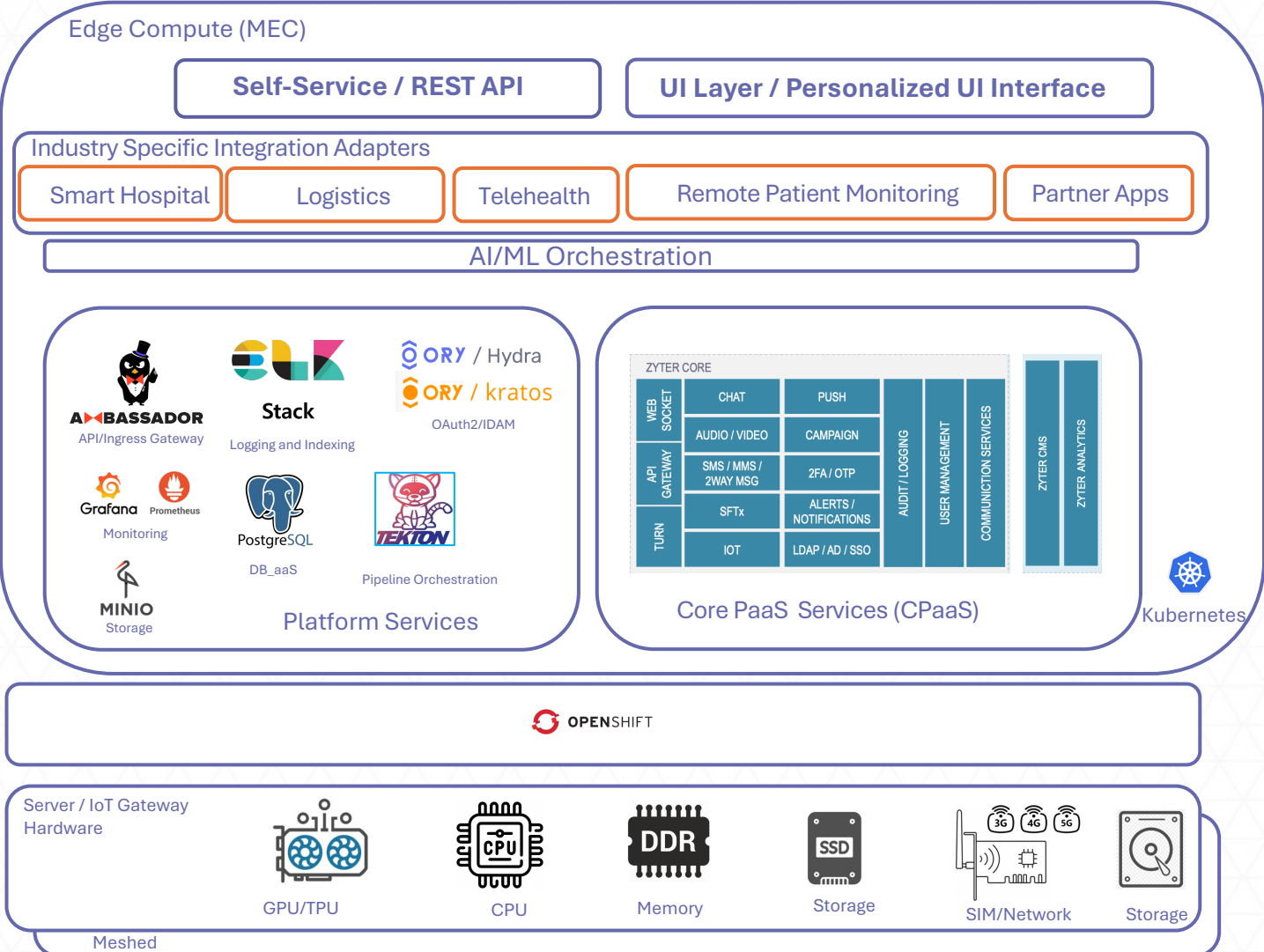
AI/ML Model : Market Places



5G Edge : HealthCare

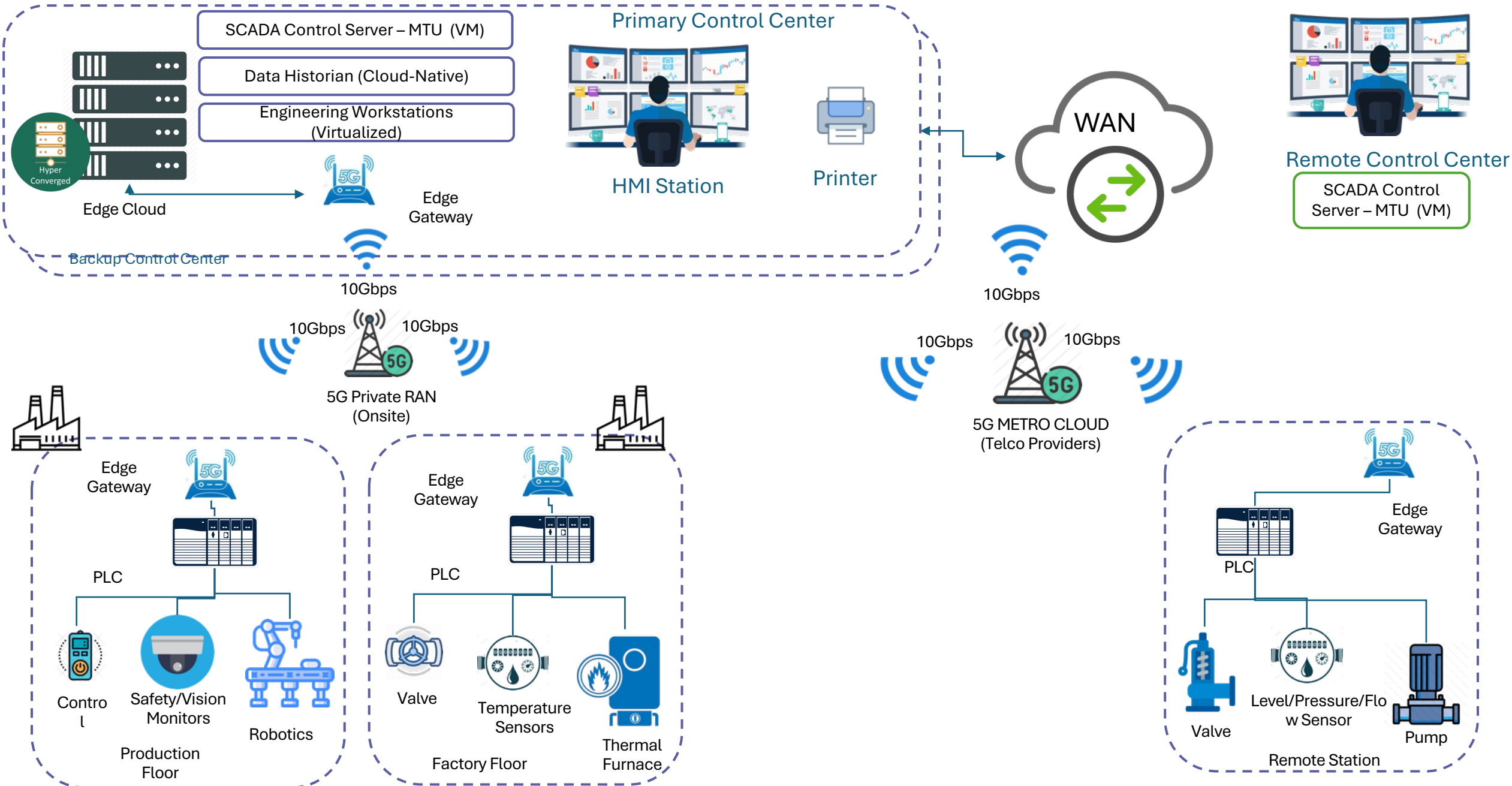


- Hospitals
- Care Team
 - EMR
 - HMS
 - Pharmacy & Medicine

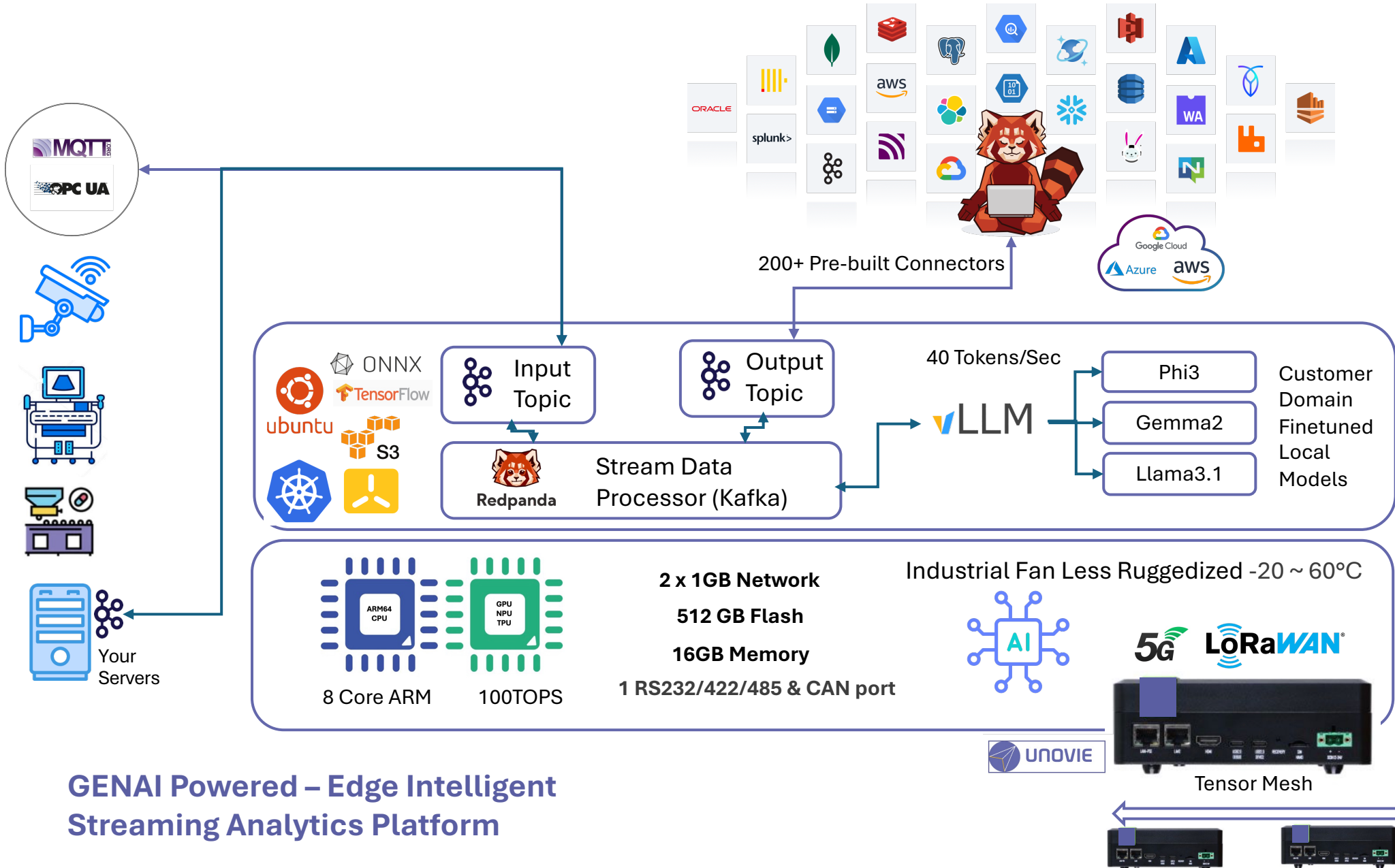


- Amazon EKS
- Teams Collaboration
- AI/ML Market Place
- API for FHIR
- AWS Security Hub

5G IIoT Connected Edge

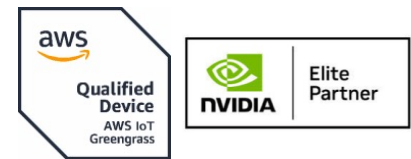


Edge Intelligent Stream Analytics Platform



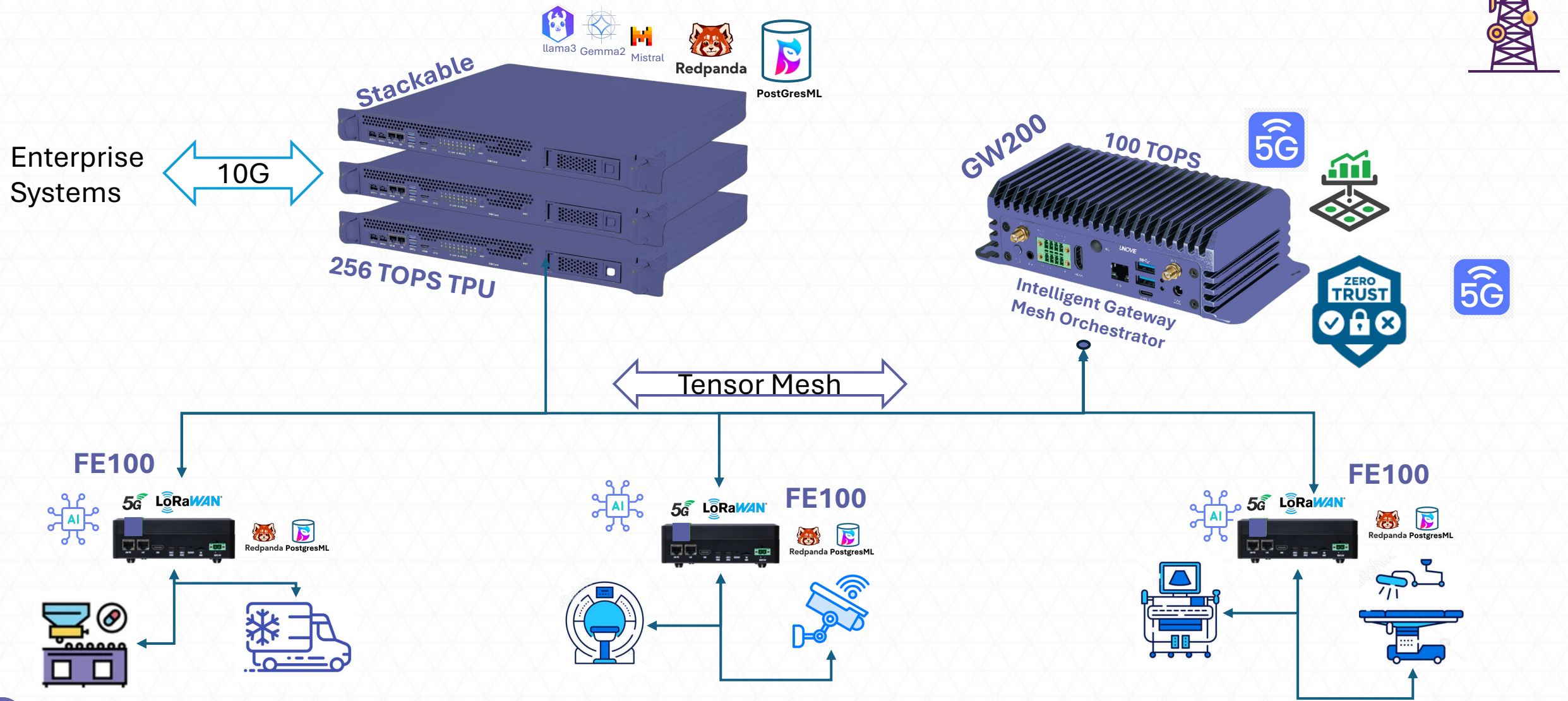
So Reliable, it's Boring

- Local Deployment
- Improves Data Quality at Source
- Low-Code Processing
- Fixed CAPEX / OPEX AI Token/Spend costs
- Resource Efficient
- Domain Composable Services
- Local Mesh - Scale
- Deploy your own container Apps / K8S
- Compliance Ready
- Cloud Control Plane
- Plug-n-Forget – 5G Provisioned.

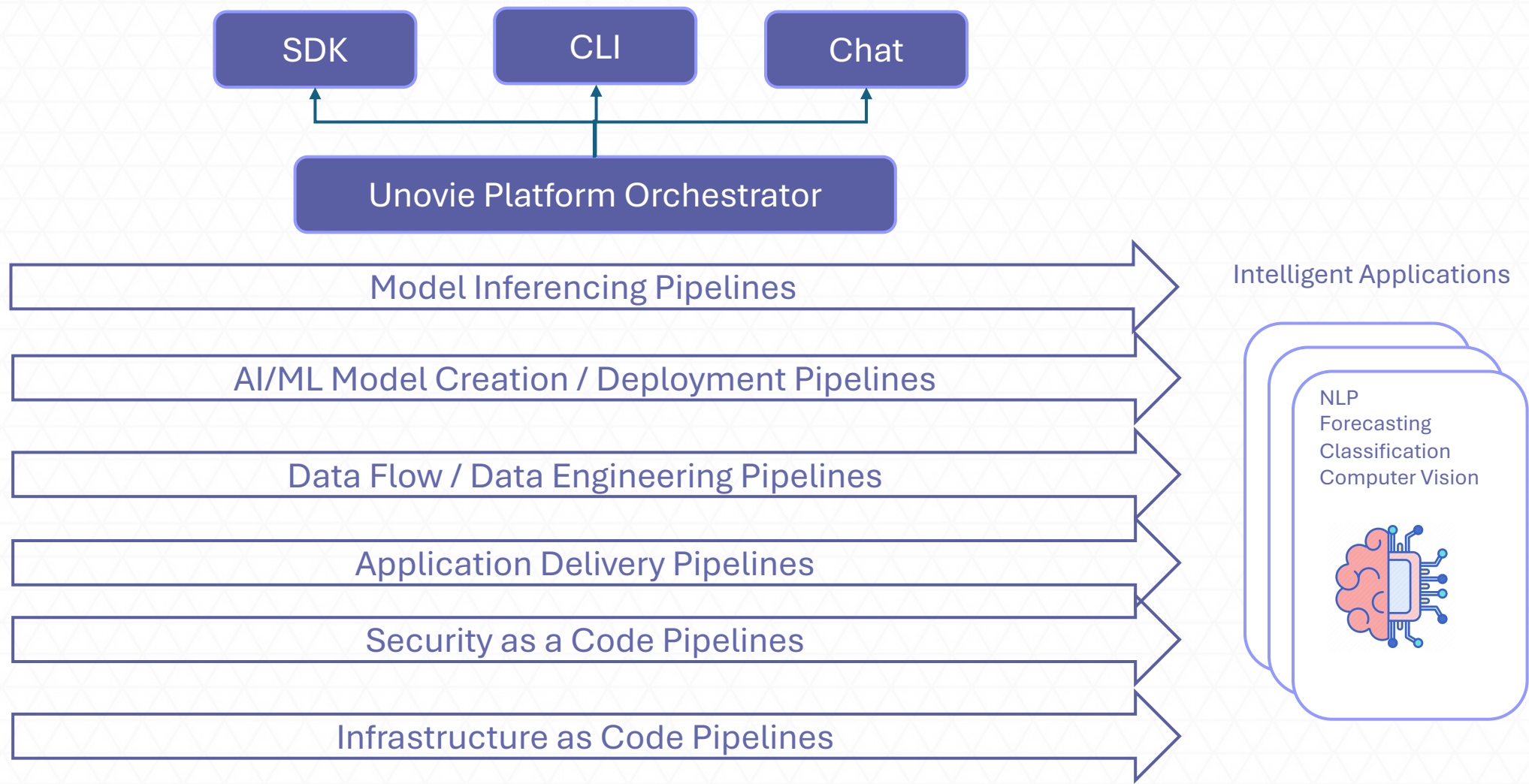


GENAI Powered – Edge Intelligent Streaming Analytics Platform

UNOVIE

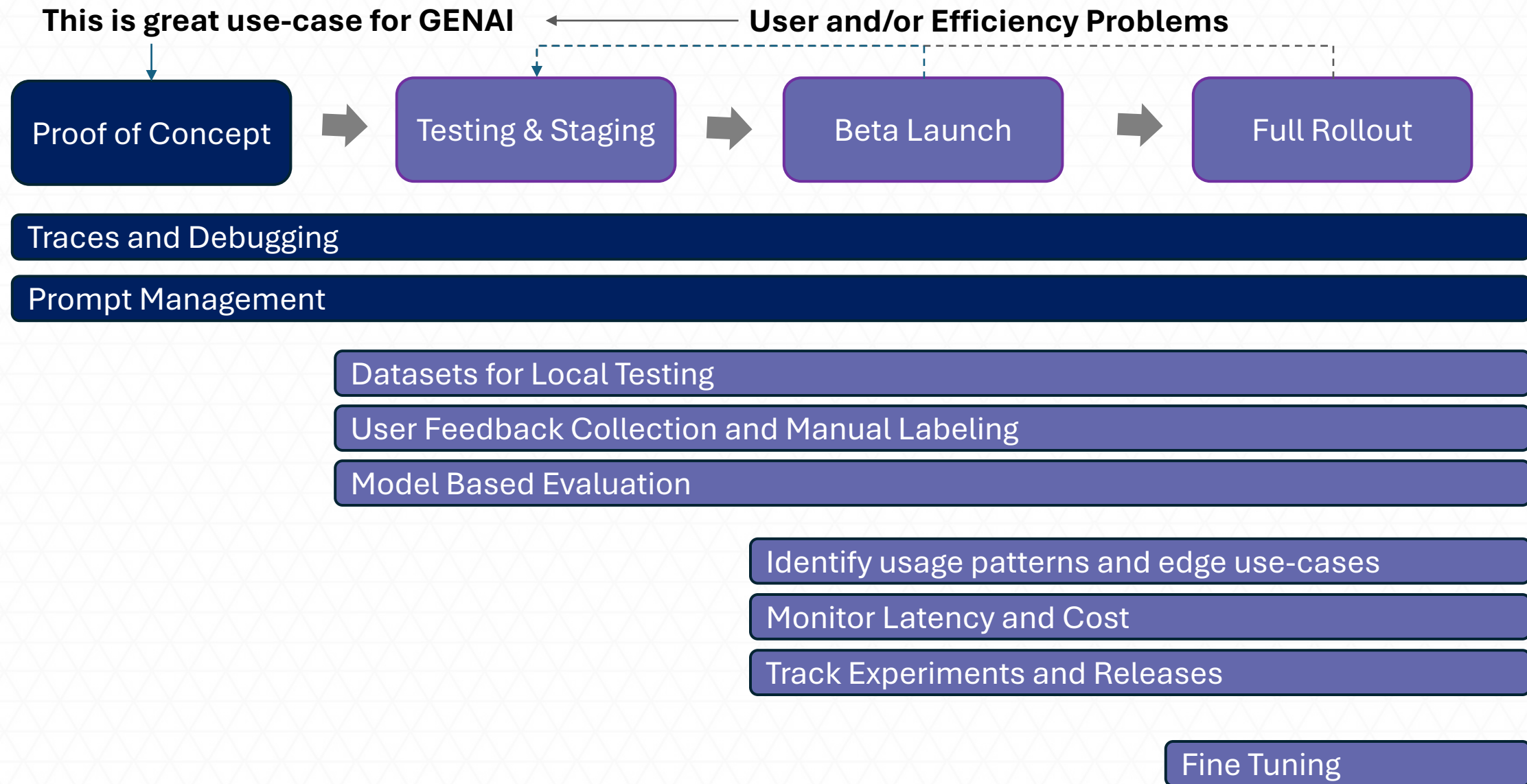


Unovie: Platform Orchestrator



Enterprise SRE Scale Ready | Fully Managed Hybrid PaaS / SaaS Services | NIST/Hi-Trust Compliance
Multi-Tenant | Container Native | Cloud Cost Optimized

GEN-AI Project Phases



Custom Platform Engineering Consulting and Advisory Services



- SLA driven Projects Delivery
- Linux Foundation / CNCF Open Architectures and Industry Best Practices
- Wireline / Wireless / Telco Domain Expertise



Customer Success Stories

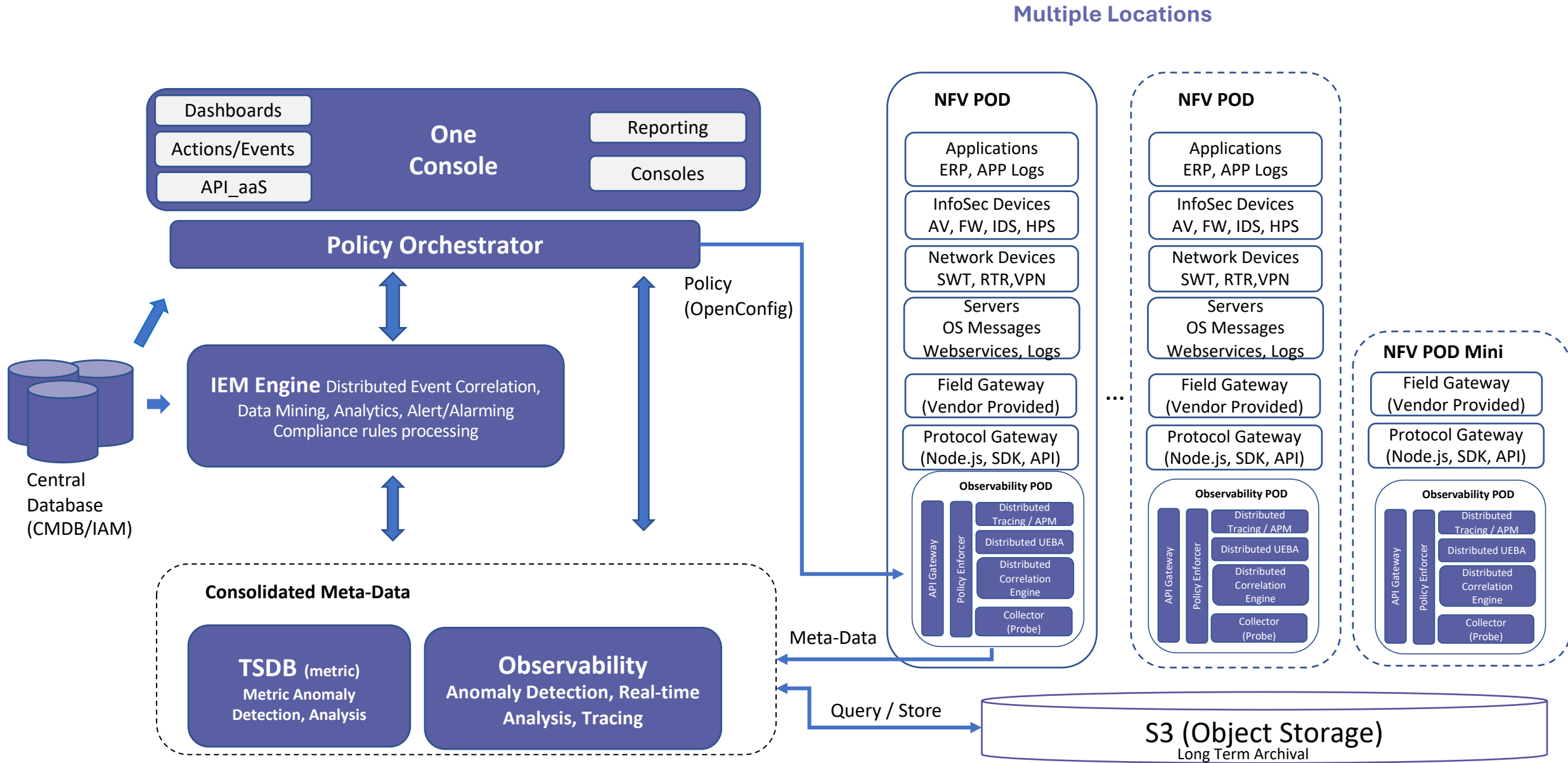
Tier-1 Telco : Challenges

in Applying Enterprise NOC Models for Carrier Networks

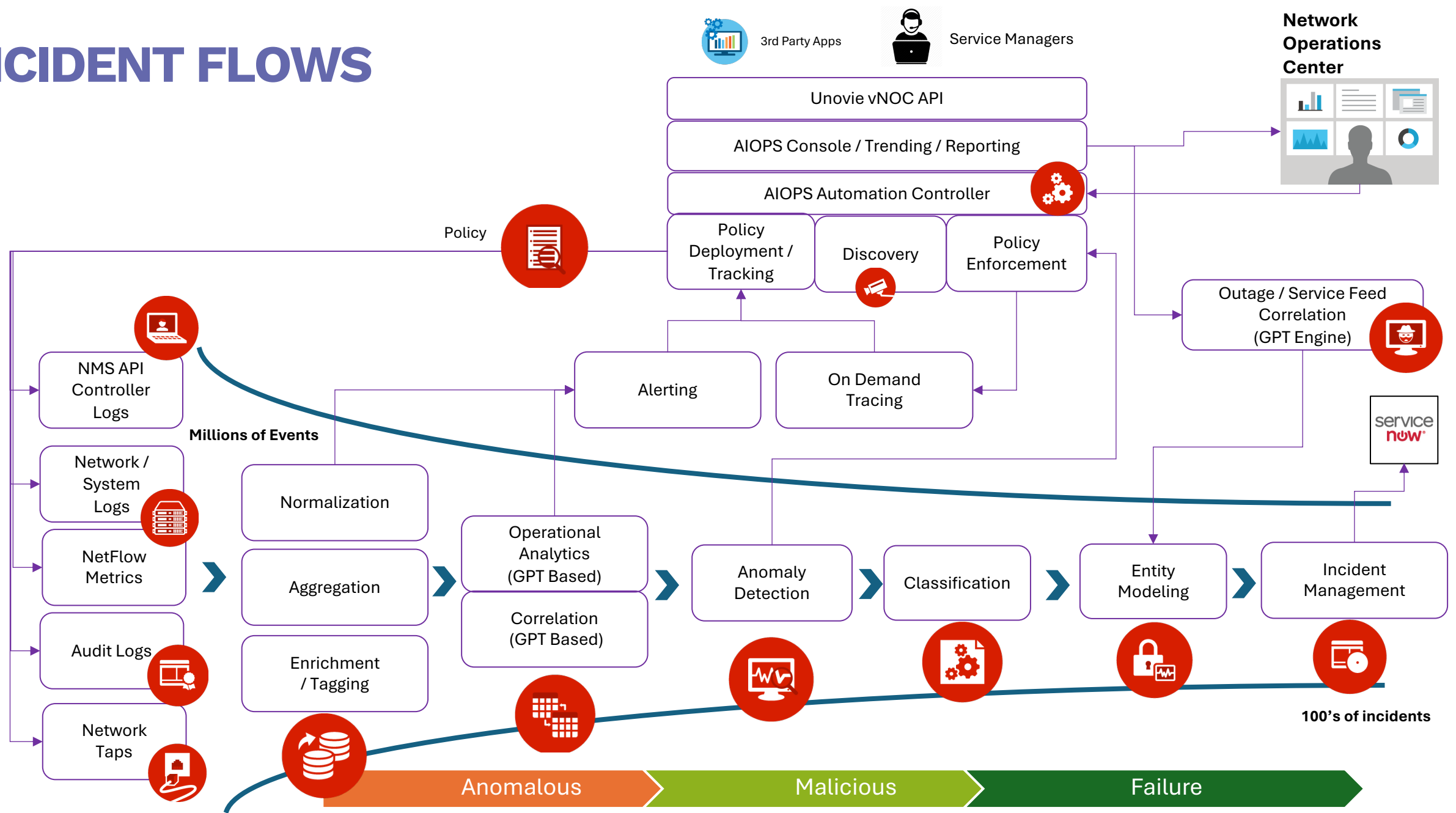
- **Carrier Networks Profile**
- ~70 Million Subscribers for 4G, near term ~120+ Million
- ~1 Billion Subscribers for 5G (IoT devices) predicted
- Multi-Regional Implementation
- Multi-Vendor Implementation
- Rapid Technology Industry Changes (Every ~3 years)
 - 3g – 2Mbps, 4g – 200Mbps, 5g – 1.4 Gbps
- Rapid Innovation in End Points ~ 1 year
 - Smart Phones, Connected Vehicles, Randomly connected systems
- Latency Inducing systems non-acceptable

- **Challenges for Traditional NOC in Carrier Networks**
- 4V's : volume, variety, velocity, and veracity.
- Needle in Haystack, Humanly unmanageable.
- Bandwidth/Spectrum for Consumers
- Couple of Millions of Events per Second.
- **NOC Nightmares for Carrier Networks**
- Zero visibility, you cannot respond to what you don't know.
- Is there Logs for this systems / application / function. Where are they at, are they normalized, have they been truncated, NAT source fidelity
- Un-enforceable Policy = No compliance.
- In-consistent Asset Inventory, CMDB accuracy

De-Centralized Monitoring Architecture

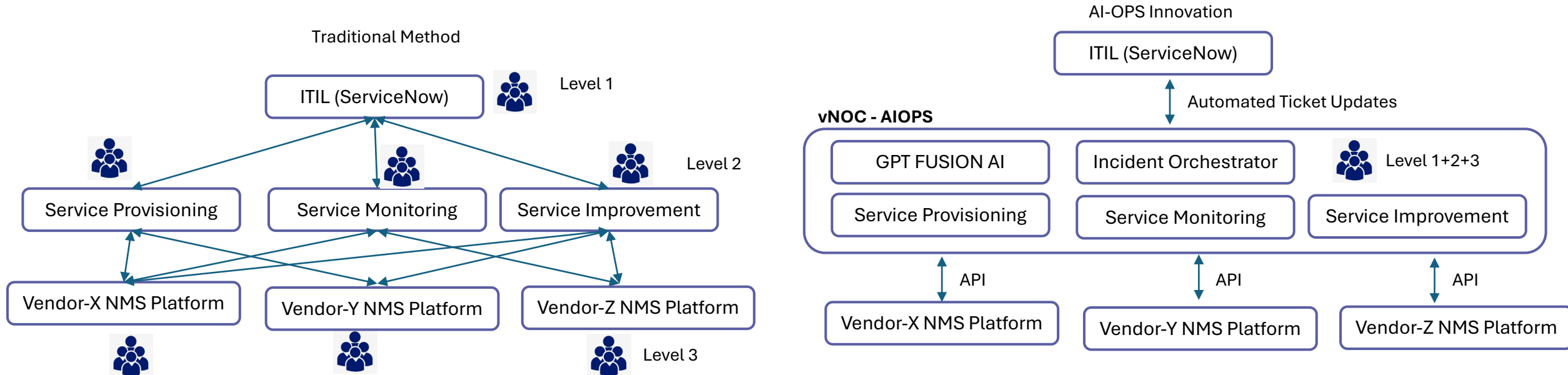


INCIDENT FLOWS

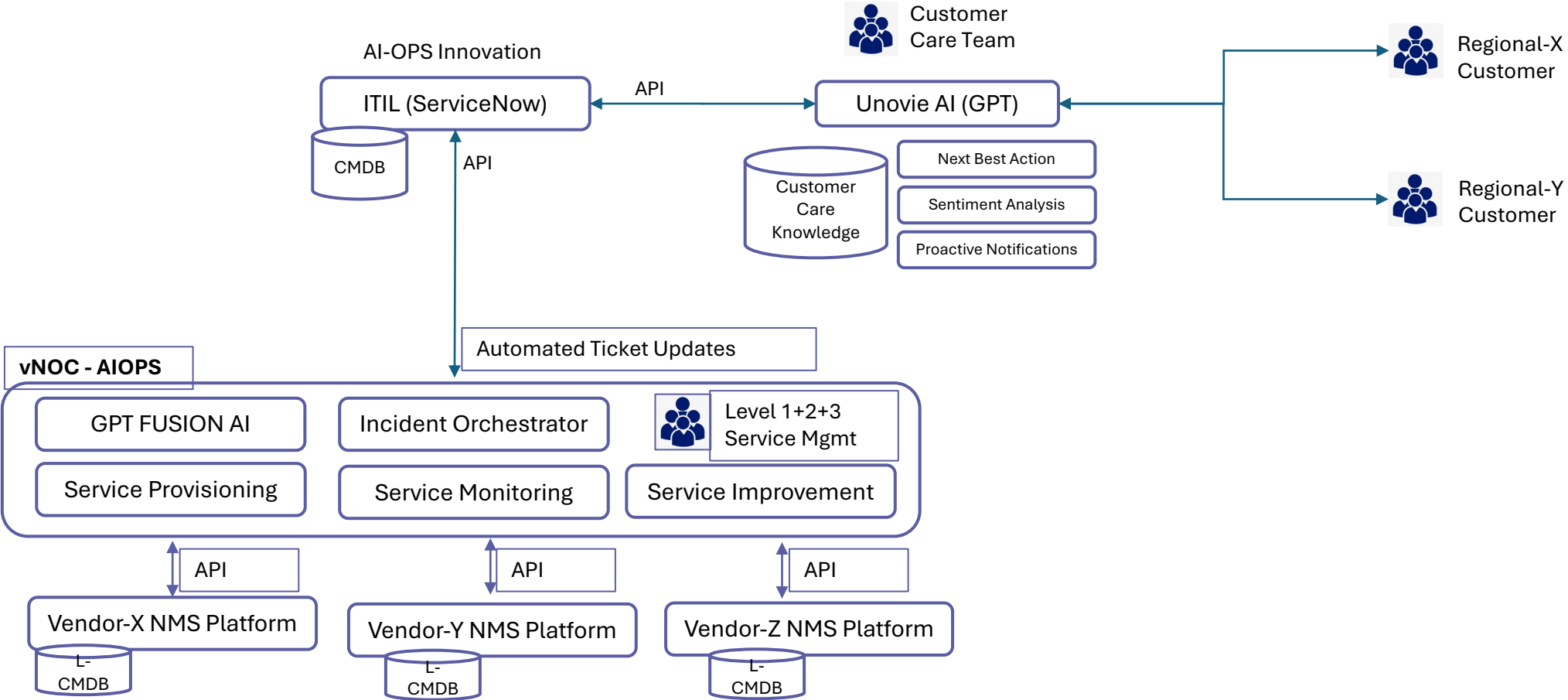


AIOPS : Optimizing the Service/SLA Management in Complex Multi-Vendor Network Environment

- **Challenge** : It's typical that Telco Service Provider's have complex Multi-Vendor Provisioning / Service Management / Service Performance Monitoring systems. Each system has various stakeholder team involved in managing the typical day-to-day maintenance actions to keep smooth operations of activities. Over last decade these systems has morphed into complex platforms and are capable of delivering complex functions, with self-service interfaces, and require complex set of training for Level 1 and Level 2 operational teams to participate for smooth running operations.
- **Objective** : With the Advent of GPT like AI systems, and Complex API led Observability and Tracing Platforms, it's now possible to optimize the cognitive overhead of managing complex alarms and workflow systems using "AI Assisted Guard Rails" to speed up the automated systems handling complex interactions to improve service delivery.



AIOPS : Optimizing the Care Management in Complex Multi-Regional Network Environment



PCF to Kubernetes (OnPrem/AKS/EKS)

PCF to Kubernetes: Business Benefits



Lack of Product Focus

VMware bought Pivotal. Broadcom bought VMWare. Customers being driven to Tanzu. Tanzu is not as mature.



High License Renewal Cost with PCF

Unclear future pricing (often increasing by multiple) and licensing terms. Customer being forced into longer term deals.



PCF Renewal & EOL

PCF support EOL mid 2024. Uncertainty on the level of service that will be provided.



Significant Cost Savings

Save entire SW renewal cost. Significant operations savings

03 Improved Performance

20% improvement in application performance by migrating to Kubernetes.

02 Agility

30% faster application development life cycles with Kubernetes.

01 Cost Savings

40% cost savings by avoiding PCF licensing over the course of 3 years.
40% reduction in Operations Support team size.
25% reduction in compute cost on target platform.

Business Benefits

04 Faster Time To Market

Meeting milestones faster with speed-up development time which in turn helps in completion ahead of schedule.

05 Future Ready

Take advantage of the latest cloud-native technologies, like Istio, ArgoCD, and more, available through the Cloud Native Computing Foundation (CNCF) which was not possible with PCF.

06 Stable Roadmap

Kubernetes has a clear forward-looking product roadmap and adopted across industry.



Thank You



Austin Texas