A Definitive view of the edge of technology

...when you’re powering mission support outcomes at the edge of technology

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Digital Transformation in Government

Context

- New consumer experiences ⇒ new citizen expectations
- New fiscal year ⇒ new budgets
- New Congressional sessions ⇒ new laws
- New Administration priorities ⇒ new policies

Vectors of Change

- Shifting people & culture from experience-centered to evidence-centered
- Shifting processes from manual handoffs to digital integration
- Shifting policy from static to dynamic
- Shifting partners from banal to break through
- Shifting tech portfolio from tightly coupled to plug-and-play platforms

Outcomes

- public health & safety
- economic growth
- social welfare
- racial justice
- environmental stewardship
- human dignity
- equity
- investment in future generations
Innovation & your tech² platforms
Taking mission support to the next level

**Context**
- OMB A-11 Sec. 280
- Bridging the physical and the digital
- Evidence-Based Decision Making
- President's Management Agenda
- Federal Data Strategy

**Changes**
- Evidence-centered decisions at the speed of relevance
- Attracting digital natives
- Agile, flexible capital planning
- Predictive decisions, automated interventions
- Data leakage & mosaic effects

**Goals**
- Access to innovation ecosystems & data
- Reduced friction
- Hyperscale capacity
- Accelerated learning curves
- Effective complexity management
Tech² Strategy – plug-and-play platforms
What is the IntelligentEdge?

Future Mode of Operations:
› Data engineering for SCADA and sensors
› Algorithm deployment pipeline for NPUs/TPUs/A14s
› Common utilities for date/time/geospatial stamping
› Training quality datasets
› Culture of evidence-based decision making

Preventing data gravity before it happens… because distance is measured in milliseconds
Where is the edge of tech for the IntelligentEdge?

Today’s bleeding edge
1. Internet of things (IoT)
2. Drone management
3. Digital sensors
4. Digital SCADA
5. Smart buildings systems integration

Tomorrow’s bleeding edge
1. Neural processing units (NPUs/TPUs/etc)
2. Geo-enabled visualization
3. Qbits
4. 5G implementation services
5. Edge computing, analytics & design services
Meanwhile…out in the real world

- The edge computing market was $500 B in 2020
- 50 B IoT devices were in use in 2020
- The global smart cities market will be $237.6 B by 2025
- The emotion-detection and -recognition market was $12 B in 2018; will be $90+ B by 2024
- 1.4+ B devices will have Neural Processing Units (NPUs) in them by 2024

Preventing data gravity before it happens….because distance is measured in milliseconds

How will you leverage the IntelligentEdge in the future?

Looking at the geographic edge of your enterprise, where would real-time image recognition improve operational performance?

With occupancy levels of your office buildings fluctuating due to the pandemic, are you able to optimize your HVAC and utility spending?

Which of your campuses and facilities are experiencing drone incursions, and would benefit from drone suppression / management capabilities?

Do you have a real-time geolocation view of your vehicle fleet and its level of utilization?

Are your facility LANs secure enough to prevent a target-like cyber attack?

Which workers in your field force could perform better if supported by augmented reality?
Who are the major IntelligentEdge players?

Wearables
- Misfit
- Withings
- Athos
- Sproutling
- Owlet
- Narrative
- Thync

Connected Home
- ring
- C
- IOT
- iHome
- DOCK
- SONOS
- Scout
- notion
- SENTRI

Connected Car and Fleet
- ISRU
- CLOUDCAR
- Cubital
- Peloton
- Zobi
- SMARTDRIVE

IoT Infrastructure & Sensors
- mCube
- SIGFOX
- KaKan
- SOMNO

UAV/Drone
- RINGLY
- OM signal
- Thync

Retail
- cloudTags
- Theatro
- IMIN
- Estimate

Industrial IoT (IIoT)
- TACHYUS
- APX
- GROUNDMETRICS
- Egan
- meshify
- KITU

Smart Utilities & Energy
- Watt
- e
- View
- Sensity
- GRIDNET

Healthcare
- QUANTUTUS
- AUGMEDIX
- AS
- AlivCor
Who are the major IntelligentEdge players?
Thank You