NDIA Emerging Technologies for Defense Conference & Exhibition

PEO
IEW&S
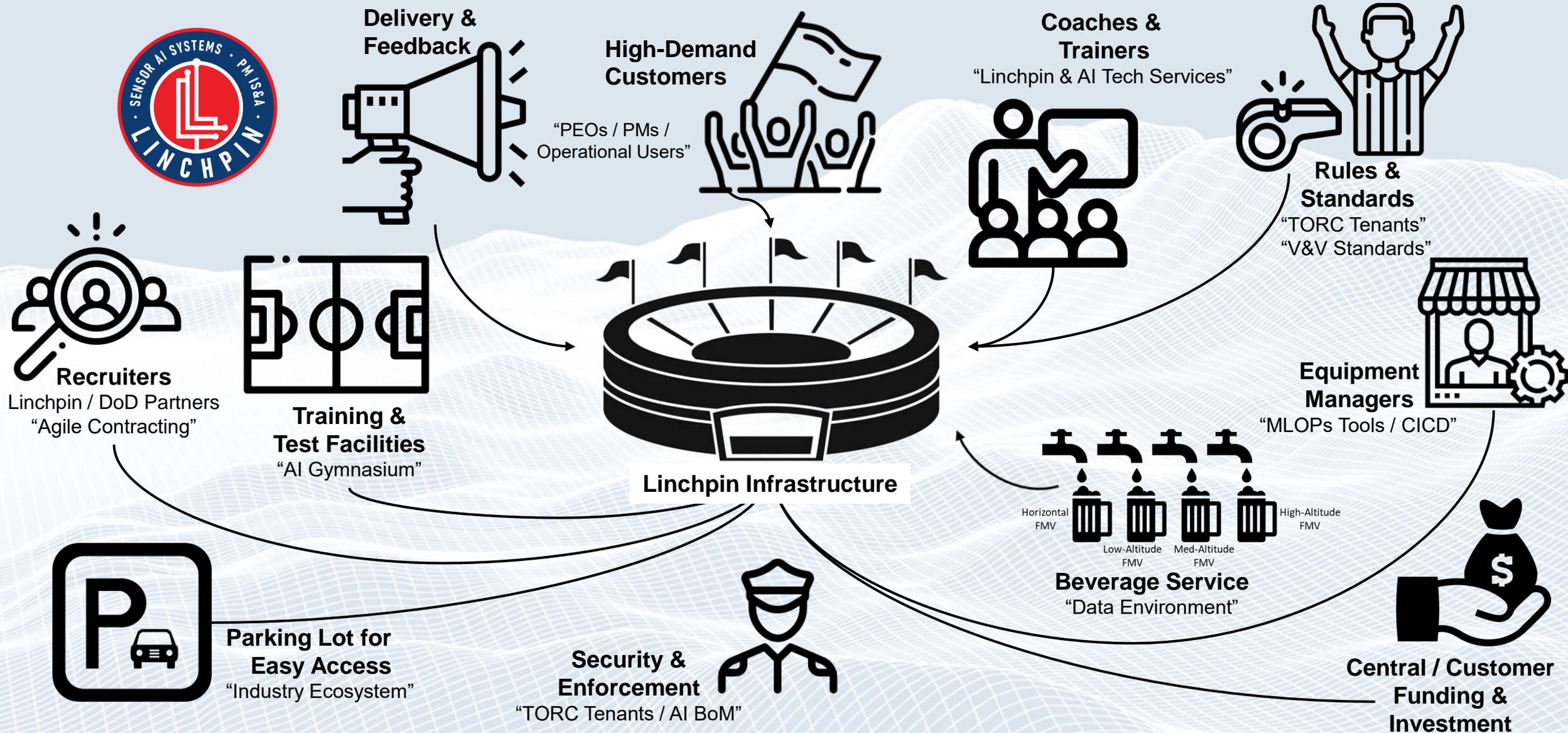Program Executive Office
Intelligence, Electronic Warfare & Sensors

29 AUGUST 2023

PEO IEW&S

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Project Linchpin Delivering Trusted AI

Delivery & Feedback

High-Demand Customers

"PEOs / PMs / Operational Users"

Coaches & Trainers
"Linchpin & AI Tech Services"

Rules & Standards
"TORC Tenants"
"V&V Standards"

Recruiters
Linchpin / DoD Partners
"Agile Contracting"

Training & Test Facilities
"AI Gymnasium"

Linchpin Infrastructure

Equipment Managers
"MLOPs Tools / CICD"

Horizontal FMV

Low-Altitude FMV

Med-Altitude FMV

High-Altitude FMV

Beverage Service
"Data Environment"

Parking Lot for Easy Access
"Industry Ecosystem"

Security & Enforcement
"TORC Tenants / AI BoM"

Central / Customer Funding & Investment

SENSOR AI SYSTEMS · PM IS&A
LINCHPIN

Project Linchpin delivers infrastructure, tools/technologies, standards, process that allows AI to "play the game"

PEO IEW&S

Bharat C. Patel
Project Linchpin
PEO IEW&S / PM IS&A
APG, Maryland

#letsgoooo!!!

"I wear sunglasses at night"

Bharat Patel currently serves as the Product Lead for Project Linchpin, an effort he spearheaded in July 2022. Project Linchpin is the Army's strategy to decouple Artificial Intelligence (AI) from Software through a standards-based approach and design principles. These design principles include Traceability, Observability, Replaceability and automated Consumption (TORC), increased security through the initiation of the AI Bill of Materials, and creating partnerships across the Department of Defense (DoD) and Intelligence Community to maximize investments and breakdown stovepipes of excellence. Project Linchpin is the Army's first Program of Record (POR) responsible for delivering Trusted AI and Machine Learning (ML) capabilities through a collaborative and competitive ecosystem of industry and government partners in support of Program Executive Office Intelligence Electronic Warfare & Sensors (PEO IEW&S).

Prior to this role, Mr. Patel led all studies, pilots, and prototyping efforts for Project Manager, Intelligence Systems and Analytics (PM IS&A). In this position, he led the ground station modernization effort that informed the Tactical Intelligence Targeting Access Node (TITAN), the Army's next-generation Intelligence, Surveillance, and Reconnaissance ground station and the Army's major contribution to Joint All-Domain Command and Control. TITAN is enabled by AI and ML to process sensor data received from Space, High Altitude, Aerial, and Terrestrial layers. TITAN will provide intelligence support to targeting and situational awareness and understanding, ultimately reducing the sensor-to-shooter timeline and enabling Multi-Domain Operations. He was also the Army's technical lead in support of the Algorithmic Warfare Cross-Functional Team (a.k.a Project Maven), deploying Full Motion Video (FMV) computer vision AI/ML in operations and assisting Project Maven conduct 3rd party test & evaluation of the FMV models prior to deployment. Mr. Patel also managed all Science and Technology (S&T) efforts spanning across the IS&A portfolio. In this role, he worked closely with the DoD and Army S&T community to shape strategy, manage efforts, and author transition opportunities. In his spare time, he served as the lead engineer for a software intensive acquisition category 1 POR that fielded capability to the entire Army Intelligence Warfighting function, integrating numerous Industry and Government capabilities including S&T efforts.

Mr. Patel started his career supporting PEO IEW&S Headquarters, during which time he guided critical efforts in support of Army Modernization. At the PEO level, he was the Strategic Technology Manager working across the PEO portfolio to identify technology gaps to inform the Army requirements community, Industry, and the S&T community. Mr. Patel also developed long range technology roadmaps informed by Industry and Government investments. Mr. Patel leveraged the roadmaps to communicate technology evolution, leading to shaping modernization efforts including the Army's Signals Intelligence and the Terrestrial Layer Portfolios.

https://peoiews.army.mil/

What have you learned working with the S&T community over your years?

What are your biggest concerns working with AI/ML?