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CDAO

Business Analytics

CDAO Industry Day



VISION: Be the DoD enterprise shared service provider for world-class data management, analytics, and AI/ML capabilities to accelerate decision advantage.



MISSION: The CDAO Business Analytics (BA) team enables all DoD organizations to leverage data, analytics, and AI/ML to accelerate innovation and mission impact. We aim to provide the enterprise capabilities and services that allow business and warfighting operators to tap into data to achieve decision advantage.

OBJECTIVES:



1: Institutionalize data, analytics, and AI-driven decision advantage
Drive timely, data-driven decisions and actions that support mission success by embedding accessible and approachable products and capabilities into the daily operations of our customers.



2: Deliver a positive and reliable customer experience
Provide an intuitive, interactive, and pleasant customer experience across applications and tools that make it easy to get work done, request assistance, and provide feedback.



3: Provide secure, scalable, and cost-effective solutions
Deliver scalable, secure, and audit-compliant architecture solutions and maximize our return on investment by operating as a secure, cost-effective shared service provider on multiple security domains with ATO (NIPR, SIPR, and JWICS).



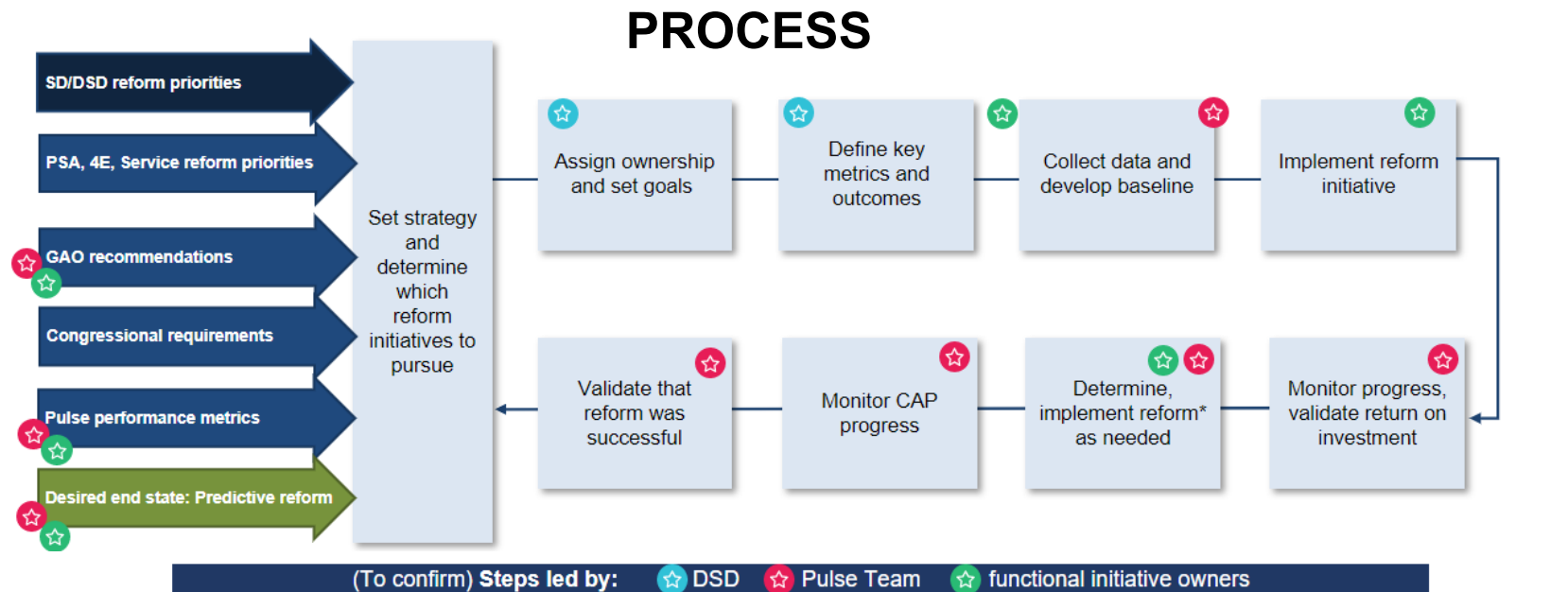
4: Accelerate DoD's data, analytics, and AI capabilities with world-class enterprise offerings
Deliver world-class capabilities that lead DoD to adopt leading transformative solutions (e.g., predictive/prescriptive methods, emerging capabilities) to drive data-driven decision advantage at scale and enable mission and warfighter success.

Key Takeaways: Pulse



DoD is committed to using data and analytics to track progress on strategic priorities in an outcome-driven, metrics-based manner that drive improved performance. To enable the shift to a data-driven approach for performance management, CDAO designed an analytics capability, called Pulse, that uses metrics informed by authoritative data to give senior leaders a strategic view of how DoD is performing against its top priorities.

Pulse integrates data and analytics across National Defense Strategy Implementation (NDS-I), Strategic Priority Metrics (SPM), Business Health Metrics (BHM), and any additional applications aligned to communicating progress towards executing the SD priority areas.



DELIVERABLES

- SMP application
- Performance Improvement Initiative analytics
- NDS-I task tracker
- BHM application
- Overarching Secretary of Defense dashboard

Through the Pulse framework, DoD aims to:

- Develop and integrate data-informed, outcome-based metrics to show how DoD is performing against SD/DSD strategic priorities
- Enable the SD/DSD to proactively monitor how DoD is performing and be notified if there are areas where they need to engage
- Ensure performance improvement efforts across DoD align to SD/DSD top strategic priorities and performance goals/objectives

Industry can help with tools to:

- Tools to visualize performance at enterprise scale
- Collect and combine analyst input with performance indicators
- Capture new data in an agile and scalable manner
- Flexible customization to allow different views based on user needs

Additional Strategic Priorities

- **Advana Platform Engineering and Tools**

- Establishing parity across NIPR, SIPR, and JWICS for existing enterprise capabilities
- Application and infrastructure management engineering services
- Service delivery capabilities and tools
- Security engineering services and automation tools

- **Data Engineering and Enterprise Tools**

- Creating new data pipelines using Advana platform
- Data federation solutions
- Data management solutions

- **Data, Analytics and AI Tools**

- **Data labeling**
- Federated data and **model cataloging**
- **Common library of AI packages**
- **MLOps capabilities**
- Data engineering tools and support
- Dashboard and visualization tools and administration support
- Userform development and data integration into Advana

- **User Experience**

- Improved UI/UX of products
- Automated service desk processes

- **Supporting Services and Expertise**

- Software engineering tools and support
- Project management tools and administration support
- Content management tools and administration support
- Functional expertise (e.g., people and health, natural disaster response, etc.) to support functional area or business domain-aligned topics and best support our partners, particularly in DoD OSD Principal Staff Assistant organizations
- License reuse and management

BA's Key Analytics Projects



- **Deliver core enterprise platform and operational capabilities on Advana:** Provide sustainable, scalable, and secure enterprise platform technical architecture operating on NIPR, SIPR, and JWICs to deploy all enterprise data management, data analytic, and AI/ML development capabilities
- **Accelerate API development to improve data and model sharing/federation:** Design, prototype, test, document, and publish a secure API infrastructure to support data federation on-demand across NIPR and SIPR (cross-domain)
- **Deploy and improve MLOps capability:** Provide customers with an industry leading enterprise AI/ML operations technical architecture that includes the ability to deliver automated end-to-end predictive modeling solutions and model card tracking in NIPR, SIPR, and JWICs
- **Deliver operational logistics analytics:** Provide visibility (What do we have? Where is it? What condition is it in?) for each supply class (e.g. fuel, munitions, PPE, small arms)
- **Use data to drive better CAPE analysis:** Provide core products to support the Analysis Working Group, Program Budget Review, transaction level budget to execution, and Climate Change
- **Take care of our people by understanding installation risk:** Provide the ability to link DoD and non-DoD personnel and health data to understand behavior risk at each DoD installation (e.g., suicide and sexual assault prevention)
- **Enable and accelerate global force management decision support:** Provide access to core global force management data required to analyze force laydown, sourcing, and movement
- **Improve strategic data-driven decision making:** Provide a capability used in DoD governance processes to improve DoD performance by linking and automating the National Defense Strategy implementation, Strategic Management Plan, Business Health, and Dynamic Campaigning
- **Make progress towards an unmodified audit opinion:** Complete the universe of transactions and funds-balance with Treasury reconciliations.
- **Predictive readiness:** Provide the ability for the DoD to predict how ready the force will be for a near-term and long-term fight against multiple adversaries
- **Data driven insights into experimentation and innovation:** Provide visibility into the research and experimentation that has been conducted and related spending
- **Improve DoD buying power:** Provide the ability to understand what DoD is spending money on and where there might be efficiencies (deliver: contract categorization, budget categorization, and services categorization)



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Backup