



DoD Tech Talk: JAIC

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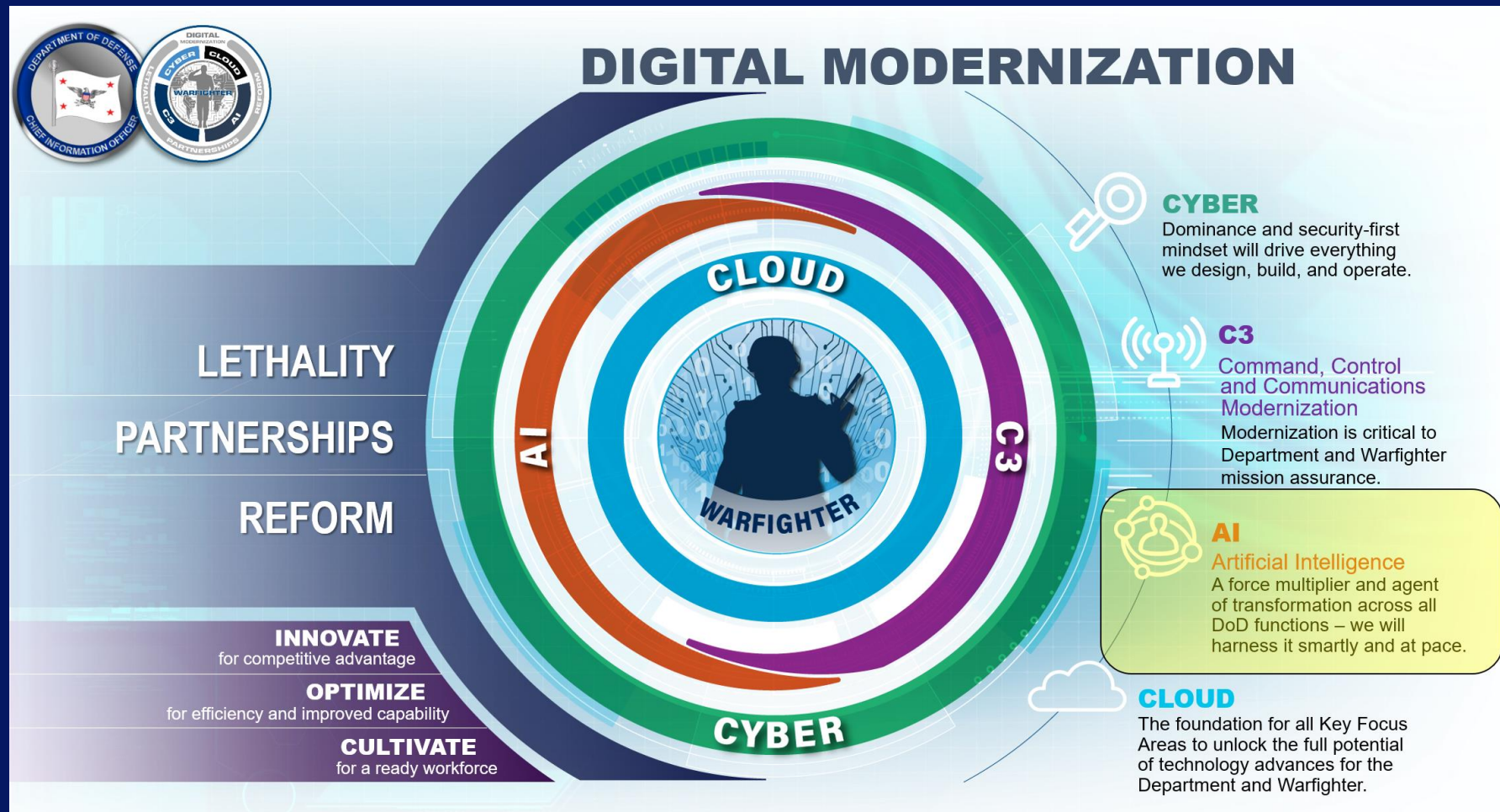
Department of Defense
Joint Artificial Intelligence Center

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Leading the DoD Through AI Modernization

The DoD AI Strategy “directs the DoD to accelerate the adoption of AI and the creation of a force fit for our time. A strong, technologically advanced Department is essential for protecting the security of our nation... **The Joint Artificial Intelligence Center is the focal point for carrying it out.**”



Joint Artificial Intelligence Center (JAIC)

Accelerating the Adoption of Artificial Intelligence (AI) for the Department of Defense (DoD)



Mark Esper
Secretary of Defense

"I think artificial intelligence will likely change the character of warfare, and I believe whoever masters it first will dominate on the battlefield for many, many years.

We have to get there first."

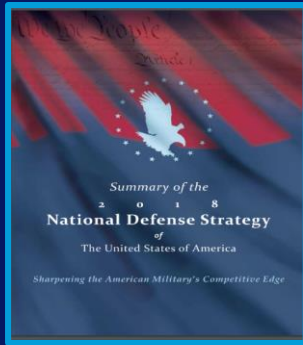


David Norquist
Deputy Secretary of Defense

"One of the challenges that is facing the department... is to ensure that we are investing in those cutting-edge technologies that not only are just advances to warfare, but may change dramatically the way warfare is fought..."

So we're in position to win the next war, not just the last one."

JAIC's Foundations



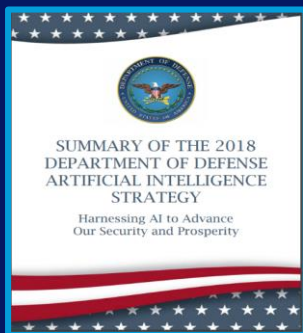
U.S. National Defense Strategy (2018)

“The Department will invest broadly in military application of autonomy, artificial intelligence, and machine learning, including rapid application of commercial breakthroughs, to gain competitive military advantages.”



White House Executive Order (2019)

“Continued American leadership in AI is of paramount importance to maintaining the economic and national security of the United States and to shaping the global evolution of AI in a manner consistent with our Nation’s values, policies, and priorities.”



DoD AI Strategy (2019)

“The DoD AI Strategy directs the DoD to accelerate the adoption of AI and the creation of a force fit for our time. A strong, technologically advanced Department is essential for protecting the security of our nation.”

Key Pillars of DoD AI Strategy

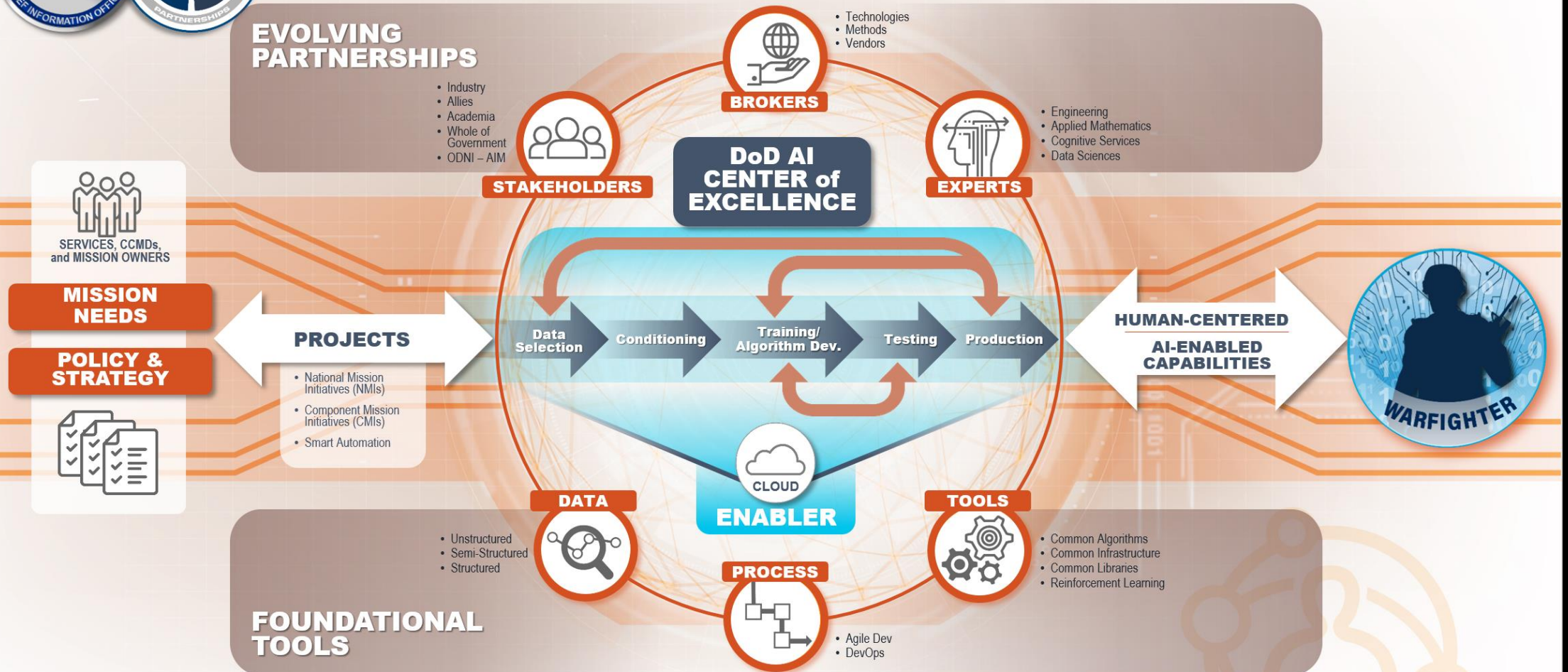
- 1 Deliver AI-enabled capabilities rapidly to address key missions
- 2 Scale across DoD with centralized foundation to enable decentralized development and experimentation
- 3 Cultivate a leading AI workforce
- 4 Engage with commercial, academic, and international partners
- 5 Lead in military ethics and AI safety

The DoD AI Center of Excellence



JOINT ARTIFICIAL INTELLIGENCE CENTER (JAIC)

Accelerate DoD's Adoption and Integration of AI to Achieve Mission Impact at Scale



AI Now and AI Next

*Operational AI Insights, Data, User Feedback,
Testing and Assessment Results*

JAIC “AI Now”

- Mission Initiatives
- Tools enabling DoD-wide Execution
- Operational prototyping
- 0 – 3 year aperture

USD (R&E) “AI Next”

- Foundational AI research
- Technology creation
- Concept creation
- 4 – 20 year aperture

Leading-edge AI Technology and Concept Transition

Mission Initiatives



**PREDICTIVE
MAINTENANCE**



**HUMANITARIAN
ASSISTANCE AND
DISASTER RELIEF**



CYBER



JOINT WARFIGHTING



**INTELLIGENT BUSINESS
AUTOMATION,
AUGMENTATION AND
ANALYTICS**



WARFIGHTER HEALTH

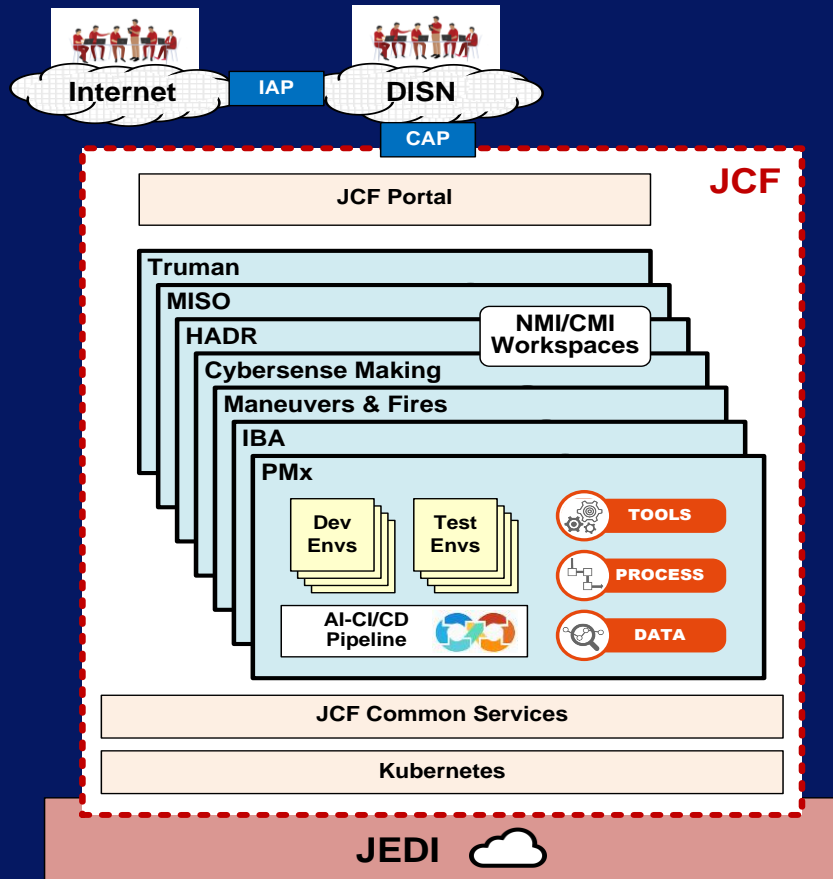
 FY19 Underway

 FY20 Accelerated

 FY20 Problem Framing

 FY20 Underway

Joint Common Foundation (JCF)



Through an enterprise cloud-enabled environment provide data, tools, environments, and certified platforms to enable AI engineers to rapidly develop, evaluate, test, and deploy AI-enabled solutions to the DoD

Lower the barriers to entry, democratize access to data, eliminate duplicative efforts, and increase value added

Transitioning From Research to Operations



Joint Common Foundation / CoE

Research



Operations

Program Offices

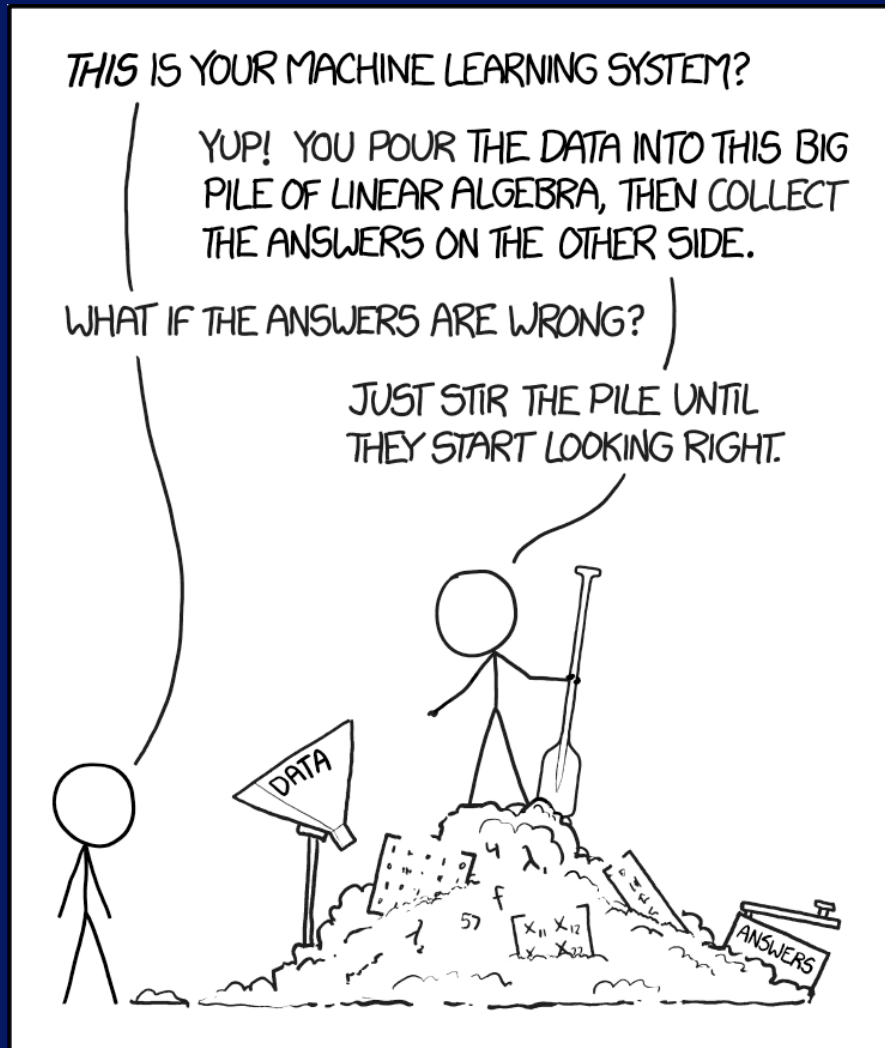


Mission Initiatives



The Chasm

Questions?



We need these skills:

- Technical Product Managers
- Data Scientists
- AI Experts
 - Computer Vision
 - Human Language Technology
 - Reinforcement Learning
 - Robotics and Intelligent Systems
- Cloud System Architects
- Software Engineers
- User Experience Designers



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