



LexNext Innovation Examiner

THE TECH AND NATIONAL SECURITY NEXUS

JUNE 13, 2024



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FIVE WAYS AI BENEFITS THE U.S. MILITARY

Artificial intelligence is a top priority for the military because it strengthens fighting capabilities and improves operational efficiencies. The Pentagon has 685 individual AI projects underway and requested \$1.8 Billion for artificial intelligence in its Research and Development accounts for 2025.

The numbers, however, do not tell the whole story. Pentagon Comptroller Mike McCord said AI is ingrained in so many aspects of defense that it is tricky to produce an exact expenditure number. And while China is the pacing challenge in AI, the Pentagon must watch out for a different kind of threat to AI innovation emanating from excessive, stifling bureaucracy.

Clearly the Pentagon has high hopes for AI, but what exactly does the Pentagon want? In brief, decision advantage. Deputy Secretary of Defense Kathleen Hicks describes a “more modernized, data-driven, and AI-empowered military now, to make our decision advantage even better than it already is.”

Better data on the enemy’s actions and operational choices pay off in combat. Here are five benefits the Pentagon is seeking from AI.

Newsletter Highlights

Five Ways AI Benefits the U.S. Military

1. Battlespace Awareness and Understanding
2. Adaptive Force Planning and Application
3. Fast, Precise, Resilient Killchains
4. Resilient Sustainment Support
5. Commercial Sector Expertise

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Battlespace Awareness and Understanding:

As outlined in the new Artificial Intelligence Strategy, battlespace awareness is a top priority. The ongoing reconnaissance and intelligence efforts can benefit greatly when AI assists tasking of sensors and speeds up processing of data collected.

Adaptive Force Planning and Application:

AI has the potential to help the Department of Defense (DoD) design individual systems features and to experiment with the right blend of forces. AI can affect decisions on the mix of manned and unmanned platforms, for example.

Fast, Precise, Resilient Killchains:

This is the key combat element, where targeting data comes together with rules of engagement at top speed, in any threat conditions.

Resilient Sustainment Support:

The Pentagon wants a data advantage from AI for combat support functions, too. As can be seen with Ukraine, fighting a major power adversary requires supply and resupply. The military logistics system moves fuel, ammunition, food, medical supplies, construction equipment and a vast array of spare parts.

AI can optimize the flow and step in to perform repetitive tasks. The resilience is needed to withstand cyber attacks or physical bombing at forward bases; AI can rebuild the logistics information supply chain quickly so action can continue. Paired with quantum and/or classical computing, AI offers a significant advantage. Expect the AI functions to take place within cloud services.

Commercial Sector Expertise:

The Pentagon realizes the value of America's free market economy in creating the world-leading environment for innovation in AI. Specifically, the Pentagon has pledged to follow an adopt-buy-create framework, explicitly seeking innovation from industry and commercial partners first. Dr. Radha Plumb, the chief digital and artificial intelligence officer at the DoD, brings significant private sector expertise from Google and Meta to her post, while her predecessor Dr. Craig Martell, led machine learning for Dropbox and Lyft before standing up the Pentagon's AI office.

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While the Pentagon is aware of the value of U.S. industry in the AI edge, the Pentagon's leaders also need to watch the other side of the Potomac. AI has expanded to the point where it will take the financial resources and commitment of leading American tech companies to ensure the U.S. stays ahead of China in technology development.

However, unpredictable and misguided regulation efforts by the Federal Trade Commission could create setbacks by slowing the pace of AI innovation. The FTC has already shown itself to be tone-deaf to defense priorities.

The Pentagon's senior leadership needs to keep a weather eye on such bureaucratic threats. Competing with China is tough enough without other parts of the U.S. government undermining Pentagon innovation.

The last word goes to Hicks. "We have better chips, better talent, better schools, better tech, better allies, and values that guide how we use data and AI. And we intend to stay in the lead."

