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EXPERT EDITION

Shifting AI into high gear

Insights from

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- Defense Chief Digital and AI Office
- Defense Department
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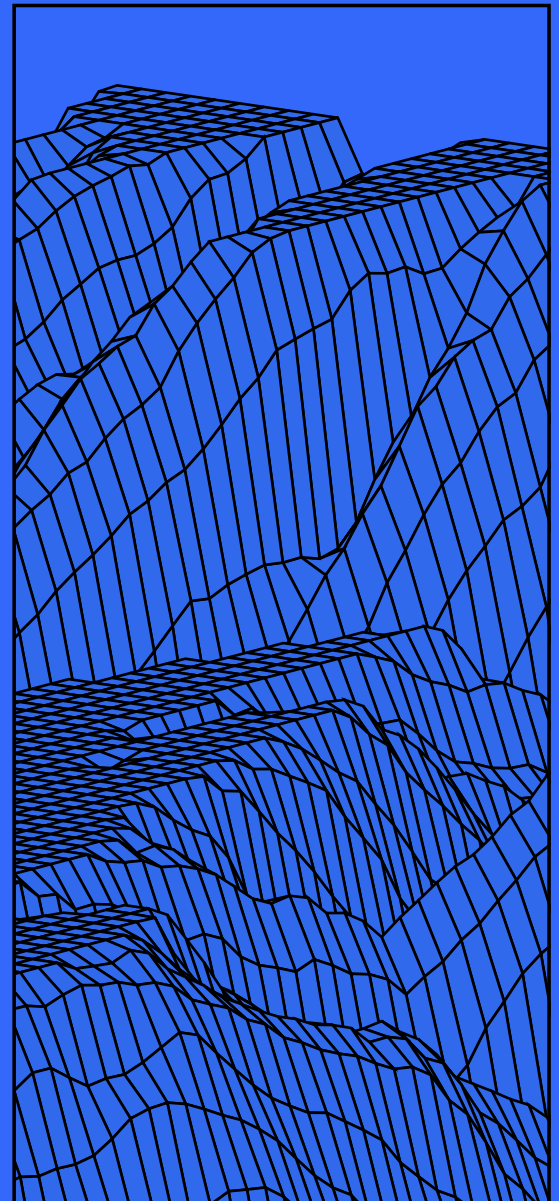
Reshaping AI approach to speed impact on mission

The Defense Department wants to use artificial intelligence and advanced analytics at a level and within a timeframe that require it to change how it acquires and develops these digital technologies.

It's as straightforward as that, notes Craig Martell, the department's first chief digital and AI officer, who the Pentagon recruited from his job running machine learning for Lyft.

"We're not going to grow the talent fast enough to have all of the coders in government to do what we need to do. We're not going to replicate these agile new AI companies," Martell noted when he spoke at the DoD Digital and AI Symposium this summer.

For that reason, he and his team of data scientists, coders and contracting leads — culled from organizations that DoD has so far seeded to drive AI efforts — plan to fundamentally reshape how the department tackles AI efforts.

"We really see the opportunity for CDAO to put together a different operating model for how you actually deliver these types of capabilities in a meaningful way to users," adds Deputy CDAO Margie Palmieri, "and create a more rapid feedback loop where requirements, acquisition and funding are all in response to that capability need instead of driving the pace, as happens today."

In this guide, we hear from senior Defense and CDAO leaders about these plans, as well as learn about use cases under way in the Army, U.S. Special Operations Command and Veterans Affairs Department. The aim is to help give you both a micro and a macro view of AI initiatives underway to support current warfighters as well as veterans.

Vanessa Roberts
Editor, Custom Content
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5 ways Defense's new digital and AI team intends to bring dynamic data analytics to the warfighter

BY VANESSA ROBERTS

Craig Martell has set his sights on creating a "virtuous cycle of change" within the Defense Department for developing advanced data analytics capabilities to support real-time decision-making — whether by senior leaders and brass or warfighters on the front lines.

DoD's first chief digital and artificial intelligence officer (CDAO) acknowledged that his new organization, which opened its doors in June 2022, will not overhaul the bureaucracy within the department overnight.

"That's not a challenge I want to put before the team," Martell said at the DoD Digital and AI Symposium this summer and reported by **Federal News Network**. "We need to find the right gaps, the right places where we can leverage value."

That said, Martell, other members of the CDAO organization and senior Defense leaders have been out promoting the new shop's early plans for ramping up data, AI and advanced analytics capabilities across the department. The organization represents an evolution of Defense's approach to data science and the culmination of early work by multiple forerunners within DoD.

The CDAO organization, as reported by **Federal News Network**, merges the staffs and technologies of the Joint Artificial Intelligence Center, Defense Digital Service, Office of the Chief Data Officer and the Defense Logistics Agency's Advanced Analytics (Advana) platform.

With Martell at its helm, the new organization has a leader with experience running point on machine learning and AI programs in commercial organizations, including Lyft, Dropbox and LinkedIn.

The merging of the teams will give the department a competitive advantage against near-peer adversaries, Deputy CDAO Margie Palmieri said at the symposium. "The good news is everything that the department has to do to scale digital analytics and AI is relatively known at this point," she said.

Here are five ways the team intends to reimagine how DoD develops and speeds access to digital and AI capabilities within DoD.

Tactic 1: Engage businesses and organizations leading innovation in the U.S.

For starters, the CDAO organization intends to tap into development and technical expertise not just within DoD but across the country's software industry, Deputy Defense Secretary Kathleen Hicks said at the symposium.

Hicks referred to the country's IT industry as an innovation ecosystem, one that the government has not engaged adequately when developing digital programs. Having a dedicated CDAO with ties to top Pentagon leaders will help ensure DoD takes advantage of leading-edge work being done by industry, she said.

"There's a power in bringing a vanguard organization, with direct reporting relationship to me and to the secretary at the four-star level, that can push us in these areas," she said. "They can build on work that's been underway."

Tactic 2: Expand the companies that DoD works with on data science

Not always going back to the same handful of large contractors will help drive innovation and let DoD gain access to available off-the-shelf technologies, Martell said at the symposium.

"How do we create a marketplace for startups, for medium-size, for small businesses?" he said. "Because particularly in the AI space, and I'm sure in many other spaces as well, there's a lot of innovation happening in two-person shops or five-person shops — you know, a good brain with a good idea. We want to be able to leverage all of that."

> "We need to find the right gaps, the right places where we can leverage value."
>
> **— Craig Martell, Chief Digital and AI Officer, DoD**

The contract vehicles exist now to make that possible, Hicks added.

"We have a number of procurement vehicles already available," she said. "I think there's five that are really focused on expanding our access in DoD to nontraditional companies."

Tactic 3: Identify technology opportunities early in the buying pipeline

DoD also wants to see if the CDAO organization can run procurements for these leading-edge technologies differently and more effectively, Kathrine Crompton, CDAO's contracting chief, told **Federal News Network**.

Instead of asking companies for multipage proposals and then following up with lengthy technical evaluations, the CDAO team plans to hear from businesses through video and oral presentations.

"We have done that before," Hicks said. "We called it a 'coliseum,' where in a very short timeframe, we were able to go through hundreds of evaluations and do almost 90 one-on-ones with industry in less than three days and make award decisions, which have now transitioned into warfighters' hands."

> "We really see the opportunity for CDAO to put together a different operating model for how you actually deliver these types of capabilities in a meaningful way to users."
>
> **— Margie Palmieri, Deputy CDAO, DoD**

Tactic 4: Develop new ideas quickly through government-industry collaborations

While DoD has been developing digital and AI capabilities on several fronts, simply merging these existing data and AI organizations into a new shop won't provide the brain power to make the advances that Defense leaders seek at the speed they seek, Martell said.

Instead, he intends to establish new collaborative Defense-industry partnerships.

"We're not going to grow the talent fast enough to have all of the coders in government to do what we need to do. We're not going to replicate these agile new AI companies," he said. "But if we have the authority to say, 'You're sitting with us, and you're our agile team, and you're going through the loop with us as we're building it,' I think we have a greater chance of success."

Tactic 5: Create a feedback loop that will allow for continuous improvement and development

The department also wants to move away from the budget process driving the pace of tech development and instead let user need and mission set the pace, Palmieri said: "We really see the opportunity for CDAO to put together a different operating model for how you actually deliver these types of capabilities in a meaningful way to users and create a more rapid feedback loop where requirements, acquisition and funding are all in response to that capability need instead of driving the pace, as happens today."

That's only possible if the CDAO team can interact on the fly with users and mission team leaders, she said.

Read more about the members of the new CDAO team in this article by Federal News Network's Justin Doubleday.

USSOCOM aims to break down data barriers to drive decision-making

BY JUSTIN DOUBLEDAY

The U.S. Special Operations Command is focused on breaking down barriers for sharing data across USSOCOM so it can use information to drive mission-oriented outcomes using artificial intelligence and other modern tools.

Former CDO Thomas Kenney says data stovepipes are "endemic" across the Defense Department. But USSOCOM is trying to tackle the challenge by using more agile acquisition processes that bring together critical people across the command to solve common challenges.

"We're doing a lot of work to break down those barriers by creating more collaborative teams that have multiple opportunities to work together across multiple fronts," Kenney said during a webinar hosted by C4ISRNet just before he stepped down from his post to work full time at Google.

Like many military organizations, USSOCOM is compartmented by missions, with different program offices focused on specific areas, like fixed-wing aviation or marine operations.

But multiple components benefit from full-motion video and object detection capabilities, necessitating a collaborative approach, Kenney said.

"There are things that we're going to learn in each one of our acquisition verticals that can inform and enhance what we're doing in other verticals,"

he said. "So breaking down those stovepipes is absolutely essential to us because it allows us as an organization, collectively, to move significantly faster because we're doing two things. One is we're really bringing the best and brightest minds to solve the problem, regardless of where they are in the organization. And we're creating both personnel and capital efficiency because we're not recreating the wheel across multiple different organizations."

Start by cataloging current data uses

Last year, Kenney's team began collecting information from units to catalog what kind of data is being used across the command. He says USSOCOM is just starting to understand what kind of data it has available and what it can do with it.

"One of the things that is clear to me is data is only a piece of an equation, and data by itself without context is really not helpful," Kenney said. "We need to take those individual pieces of data that we have and turn them into information, so that that information can then drive decision-making for the future. As we see our teams maturing over time, we're really starting to not just understand what data do we have, we're starting to ask the questions of what data do we need to do our jobs today?"

Those questions are also informing the five-year budgeting process to help the command determine

> "Data is only a piece of an equation, and data by itself without context is really not helpful."
>
> **— Thomas Kenney, former Chief Data Officer, U.S. Special Operations Command**

what kind of systems it needs to support that data, he said.

Officials are also developing a Special Operations Force (SOF) data fabric. The approach involves application program interfaces (APIs) that allow different computer programs to communicate with one another.

"How do we make sure that our data layer, our data fabric, really can execute at the speed of relevance for the things that we want to be able to do?" Kenney said. "But what's really important is that we are taking that same API-centric approach. How do we ensure that, internally, our data operates through APIs so that for external data we may need access to or internal data we may need to share, that API-centric focus creates the extensibility we need in our data fabric to extend across the DoD data fabric."

USSOCOM has already been able to develop and deploy artificial intelligence projects, including preventative maintenance algorithms and analytics that Kenney says should be "graduated" to the broader DoD force.

The command is also looking to harness data to better analyze and understand human performance, a critical consideration in the recruitment and promotion of special operators. And it is also looking to be a key player in the Pentagon's pursuit of a Joint All Domain Command and Control Concept, Kenney said.

The people factor of expanding AI capabilities

Kenney talked with other chief data officers across DoD, not just about obvious issues like data interoperability and security but also about things like education. At USSOCOM, many personnel have had the chance over the past year to participate in programs run by Carnegie Mellon University and the Massachusetts Institute of Technology focused specifically on AI and data management.

"The focus of those was really to help educate our force in a couple of ways," Kenney said. "One is to recognize what is some of the really interesting research that's going on in the academic sector today that we could look to the future to be able to develop? But even more importantly, from USSOCOM's perspective, is developing that mindset of why this is important."

Ultimately, USSOCOM wants individual special ops officers to use these opportunities inside of their own formations. Kenney said he sought to encourage staff sergeants and lieutenants who have computer science degrees and give them the tools and the capabilities to do great work on their own. The goal? "Develop that bottom-up capacity."

> "How do we make sure that our data layer, our data fabric, really can execute at the speed of relevance for the things that we want to be able to do?"
>
> **— Former USSOCOM CDO Thomas Kenney**

DoD adopts 'crawl, walk, run' approach to AI-driven predictive maintenance

BY DAISY THORNTON

One common refrain when talking about artificial intelligence in Defense Department applications goes: "In future conflicts between two opposing forces, whichever side can make decisions faster will win."

Although quite likely true, that hypothetical state exists at the end of a continuum of small, incremental advancements that require continuous investment in the data, the level of analysis it undergoes, and confidence in AI and its decision-making processes to make accurate risk assessments.

For example, predictive maintenance is generally regarded as one of the more promising early use cases for AI in DoD. It comes with a low risk to human life, while providing significant return on investment. But the department is still in the earliest stages of experimenting with using AI to improve maintenance capabilities.

In the DoD Office of Inspector General report that came out in June 2022, the "big finding was that we lacked accurate and usable data," said Tim Goddette, deputy assistant secretary of the Army for sustainment. "And the recommendation was that we develop a more long-term plan that can scale and bring predictive maintenance across the enterprise over time and not try to bite it in one bite."

In other words, DoD needs to take a "crawl, walk, run" approach to predictive maintenance.

Army moves away from paper maintenance documentation

One initial improvement the Army is working to make is moving from a paper-based system to a digital system to better leverage data, Goddette said. For its air capabilities, the Army is implementing the Aviation Notebook, a tablet-based system for digital manuals and information. A roughly equivalent program for ground capabilities is called the Digital Logbook.

But the quality of the data available also has to improve incrementally, he said. One change the Army is looking to make now is shifting from unscheduled to scheduled maintenance. This would involve regular maintenance intervals based on data involving the expected and observed lifecycles of various components. That's the first step toward predictive maintenance, Goddette said.

But a major downside of scheduled maintenance is it's not one-size-fits-all. DoD operates in a variety of environments, where climate may have an effect on degradation. It also operates at varying tempos: Active duty units will put more wear and tear on their equipment than National Guard units, for example. That's why DoD has to get to condition-based maintenance, he said.

"We talk about the trucking industry or the construction side of the house, which is very similar,"

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> **— Margie Palmieri, Deputy CDAO, DoD**

Goddette said. "They've done things with telematics, for example, and trying to pull information off of the systems. But again, this ... is probably not so much predictive as it is diagnostic. What it's trying to do is find problems on the systems and then flag the customer in the commercial world, to say, 'Hey, you're running hot. I think you probably have a clogged radiator.' "

Condition-based maintenance can help reduce expenses by solving issues before they escalate. In this example, the clogged radiator, if unaddressed, could lead to a blown engine. It also saves diagnostic and repair time because AI would make decisions about whether operations need to halt or how long they can safely continue until a problem must be addressed. It can also save time if the data is linked to supply and logistics, so that the parts are ready when equipment does come in for maintenance.

Eventually, as data accumulates, the additional variables can enhance the department's predictive maintenance, Goddette said. AI and machine learning algorithms examine all available variables — expected lifecycles, climate, tempo and diagnostics — and flag likely issues so operations never need to halt.

"We can't get to predictive maintenance in a big bang," he said. "In some ways, we have to make sure that we do all of the things. And for certain data, if you don't have the conditions in which you have the failure and all you have is failure data, you know that 14 water pumps failed, but you don't necessarily know why. And so becoming predictive is very difficult."

Building confidence in AI platforms

The "crawl, walk, run" approach also has other advantages. Katharina McFarland, former assistant secretary of Defense for acquisition, said it allows DoD to build confidence in its AI platforms, to understand how it makes decisions and to validate them.

"What we have in the problem set is that much of what the government does is regulated and has very distinct procedures associated with it," McFarland said. "And it's according to risk. So if I risked my fleet by introducing technology that I cannot prove in a safe environment, I will never be able to build that confidence again. It's gone forever."

For example, car companies didn't begin experimenting with autonomous vehicles in urban environments with lots of external factors like pedestrians and traffic lights. They started small, with collision warnings and keeping within lanes on the highway. Small, low-risk wins make the technology more palatable and provide momentum to move forward. Similarly, Goddette said the Army started with a program called Leader Follower, where autonomous and semi-autonomous vehicles followed a lead vehicle.

"So when I'm saying build it 'crawl, walk, run,' that doesn't mean that it's not fast," McFarland said. "Choose where you're going to bring technology to bear and choose where it's got a low-risk factor, so you can do it faster."

VA outlines AI, optimized data as 'next frontier' for health care

BY JORY HECKMAN

The Veterans Affairs Department is laying the foundation for its clinicians and artificial intelligence tools to give continuous feedback to one another about patient care.

To prepare for the "next frontier" in health care, Gil Alterovitz, director of VA's National Artificial Intelligence Institute, said the agency is developing a trustworthy AI framework and creating an inventory of AI use cases.

VA is drafting the framework in partnership with White House Presidential Innovation Fellows. It aligns to recent executive orders and White House guidance on considerations for responsible AI use.

Alterovitz said AI's emerging role in health care represents a paradigm shift in human-computer interactions – a largely one-way relationship so far.

"The human tells the computer what to do and gets a response," he said at a health IT summit hosted by the Advanced Technology Academic Research Center. The next frontier of health IT, however, will focus on human-AI collaboration.

"What we're starting to see is really the beginning of more two-way interactions on a more equal playing field — almost like a conversation, if you will — the sharing of ideas in a two-way, peer-like communication type of approach," Alterovitz said. "AI may have its own ideas. It may share its own thoughts, and that can lead to essentially different types of experiences and interactions."

Establishing AI rules of the road — early

To accelerate the adoption of AI tools across VA's network of medical centers, he said the department is piloting a trustworthy AI checklist.

"What we've found is that it's often much easier to essentially make changes to your project, to make sure that there's no issues with bias and the right data is used and so forth, at the beginning of the project, rather than at the end, when the model has already been built," Alterovitz said. "And so to do that, we developed this checklist that people can think about as they're starting a project."

The checklist includes questions on R&D, quality improvement, and procurement and contracting. Alterovitz said VA piloted the checklist with a few VA medical centers and wants to expand it to additional sites.

"Just having the list itself is educational, and the results and the decisions that were made, in terms of which type of software to use, which approach to go in terms of the data, was different in the medical center that did have that compared to another one that did not," he said.

VA developed the checklist to get internal feedback from its medical centers, but Alterovitz said other agencies have expressed an interest in borrowing the checklist concept for their own AI use cases. "We may see a wider use," he said.

> "AI, in many of the current architectures, is emulating the brain, and AI can also be used to learn more about the brain."
>
> **— Gil Alterovitz, Director, National AI Institute, VA**

VA also plans to seek feedback from industry on AI use cases. Through its AI Tech Sprint on Challenge.gov, the department has teams developing prototype learning platforms that can assess an employee's skills and understanding of AI as part of workforce development planning.

"If they have the right kind of knowledge or skills, you can potentially have them learn and work on artificial intelligence, even though they may not have come in with that training in the beginning," Alterovitz said.

VA expects the tech sprint will culminate in November with a demo day of award-winning projects. Alterovitz said some award-winning submissions from prior tech sprints have led to contracts.

Leaning into AI care applications

As to care issues, VA has efforts underway on the human brain as well as managing veteran care.

Breakthroughs in AI may lead to a deeper understanding of the human brain, Alterovitz said. VA in September will host an AI BRAIN Summit, which will focus on how AI research intersects with brain cancer, mental health and traumatic brain injury research.

"AI, in many of the current architectures, is emulating the brain, and AI can also be used to learn more about the brain itself," he said.

VA is also looking at streamlining veteran health data to optimize care. Lauren Alexanderson, health portfolio lead for VA's Office of the Chief Technology Officer, said her team is working on a modernized patient check-in application for veterans coming in for appointments.

Alexanderson said VA is having veterans complete some pre-visit questionnaires to update their address or insurance information, as well as check in for appointments using their mobile phones.

VA is also looking to pull together a veteran's service history data and health history data to give agency clinicians a better understanding of each patient's needs.

"We're working on a lot of clinical decision support applications, incorporating clinician feedback to make sure that we're delivering them the data that they need — the right amount, at the right time, in the right place," Alexanderson said.

Making the connection back to VA benefits

A comprehensive view of a veteran's data will also improve a veteran's access to VA benefits.

Alexanderson said the agency is looking at ways to streamline or pre-populate some areas of the 10-10EZ application for VA health benefits.

"If we know you're 50% service-connected disabled, how can we make it easier for you to get through this form? Are there parts of this form that maybe you don't have to fill out because we already know this information about you?" Alexanderson said. "How do we take the onus out of having to ask veterans over and over again to tell us about themselves, to tell us data that they know that we know?"

In the end, she said, "a goal that my office has is to never have to ask a veteran the same question twice."

Can the Pentagon reimagine how it buys and implements AI to compete with near-peers?

Mark Brunner,
President of
Primer Federal

In our new world order, we need to be prepared to compete with near-peer adversaries across all domains, from space to sea to cyber.

Technology capabilities today underpin nearly every aspect of modern defense strategies and objectives. Artificial intelligence can help decision-makers and operators understand this exponentially complex battlespace better and faster so they can gain an edge. Our adversaries too are investing in sophisticated AI, and they are racing to parity and, in some cases, are ahead of us. We have to identify the strategic advantage and out-compete them, or we risk our adversaries outmaneuvering or acting faster than us.

To understand the AI arms race for decision dominance and position the U.S. and allied nation states and partners to win, we can't afford to revert back to business as usual. What we need is a radical new disposition, systems, processes and an ecosystem of innovation that optimize on speed and performance. This disposition needs to be anchored on a deep understanding of the components that underlie modern AI systems.

Specifically, algorithms, computing power, human-labeled training data and the deployment of AI.

Algorithms

Algorithms underlie our most powerful neural networks. In the AI arms race, the U.S. has a clear advantage: The R&D capabilities of our universities and the research labs at the biggest technology companies in the U.S. remain ahead of the rest of the world. But that gap is closing fast. Six years ago, among the research papers in AI that had a significant breakthrough or scientific impact in our field, there might have been 2% or 3% of those papers a month that were from Chinese research institutions. Today, in 2022, that number is closer to 20%. The advantage still lies with the U.S., but China is rapidly gaining ground.

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> **— Mark Brunner, President, Primer Federal**

Computing power

The second component of the AI arms race is computing power. When we are building cutting-edge AI, we need graphics processing units, or GPUs, to train our neural networks. U.S. and Taiwanese companies dominate the manufacturing of these components, and the best locally produced Chinese GPUs are still only equivalent to 2016-level technology from the likes of NVIDIA.

And much like you wouldn't launch a war without securing your fuel and energy supply lines, you won't initiate a war in the future without securing your advanced GPU supply. Of course, all of this changes if TSMC — which currently produces more than 90% of the most advanced chips in the world — is taken as part of an invasion of Taiwan, and TSMC supply and talent is secured for the People's Liberation Army. In the battle for AI dominance, Taiwan is a very important component.

Human-labeled training data

The third component of the AI arms race is data. Specifically, human-labeled training data that is fed into the neural networks to allow AI to learn. This labeling process is where subject matter experts teach machines what they know so that the machines can perform at a scale and speed that humans cannot achieve. When a computer vision model knows how to distinguish between tanks and missile launchers from drone footage, it is because a set of human experts literally sat down and labeled tens of thousands of images to teach the machine. This is what is known as supervised learning

> "AI must sit at the heart of all new software applications, vehicles and weaponry that the Defense Department purchases. We must build these solutions from the ground up with AI in mind."
>
> **— Primer Federal's Mark Brunner**

Having a huge amount of labeling capacity inside your country is crucial for the performance of AI in warfare. The ability to deploy this labeling capacity quickly during battle is even more important. We see China playing with adversarial technical capabilities to disguise tanks as construction vehicles to confuse potential computer vision algorithms. In labeling, the advantage goes to China, with the sheer volume of people that can be deployed to label data.

Deployment of AI

The fourth component is the deployment of artificial intelligence. All of the advantages in algorithms, compute and labeling are of no real use to the warfighter until AI is embedded within applications that solve mission-critical tasks. AI must sit at the heart of all new software applications, vehicles and weaponry that the Defense Department purchases. We must build these solutions from the ground up with AI in mind.

This is where we are struggling.

Procurement cycles designed with a 10-year development process for a new fighter jet make no sense in the world of AI, where technology must continuously evolve to not become obsolete within months. If we have a three-year procurement cycle to build and deploy AI, then we open ourselves to the likelihood of being beaten by an opponent with inferior AI but with a quicker path to deliver into the hands of their warfighters.

The national security community faces challenges in the adoption of AI:

- Acquisition regulations are archaic, evolved to benefit the defense industry giants. These make it difficult for smaller, newer companies to compete, which outperform the giants by sheer data science and engineering talent and tangible contributions to AI R&D.

- Larger companies can survive the slow acquisition and funding cycles that can often require years to fund a new program. Smaller, newer companies are going out of business waiting for revenue from government programs.

- The deck is stacked for insiders. National security acquisitions usually involve byzantine bureaucratic processes, which introduce complexity that can overwhelm a small, emerging technology company. The established contractors can navigate them with ease given their years of experience and an army of contracting staff.

Further barriers impede the adoption of AI technology. For example, the Federal Risk and Authorization Management Program (FedRAMP), Cybersecurity Maturity Model Certification (CMMC) and other compliance requirements are expanding. The federal government itself estimates it can take up to two years to achieve FedRAMP certification, at an average cost of $2.25 million and a further $1 million a year (every year) to maintain it.

That's bad enough, but we layer on top the requirements to achieve authority to operate (ATO) processes. Certification can take anywhere from six months (for less complex software on systems with lower classification) to several years (for more complex software on higher classified networks). To compound these issues, agencies don't honor each other's ATO certifications.

When the Defense Intelligence Agency grants ATO after a roughly 12-month review, the Air Force will not recognize DIA's ATO and initiates its own certification process — from scratch, delaying time to deploy AI.

All of this is not conducive to moving fast. It's conducive to ensuring the current large defense primes maintain their advantage — and this is not how you win an AI arms race.

However, in a very positive development, DoD's Chief Digital and Artificial Intelligence Office (CDAO) is establishing an AI and machine learning solutions marketplace to make it easier for startups and small businesses to work with DoD. The Tradewind Solutions Marketplace will provide a venue for DoD organizations to search, compare and procure data, analytics, digital and AI/ML capabilities solutions through rapid acquisition procedures. This is exactly the type of initiative that will help us change the odds in our favor.

To summarize: Of the four key components of the AI arms race, the U.S. has the advantage in two (algorithms and computing power), while China has the advantage in the other two (data and labeling, and speed of deployment). To play to win, we need to get out of our own way. In this race, speed is of the essence.

We need to work together to improve our odds. 🌀

About Primer

At Primer, we build and deploy mission-ready AI applications that meet rapidly evolving defense and security needs. We differentiate ourselves by our speed to deployment powered by our ML infrastructure, and the performance and accuracy of our models required to inform critical decision-making. Our mission is to deliver mission-ready AI to those who protect our security and democracy.