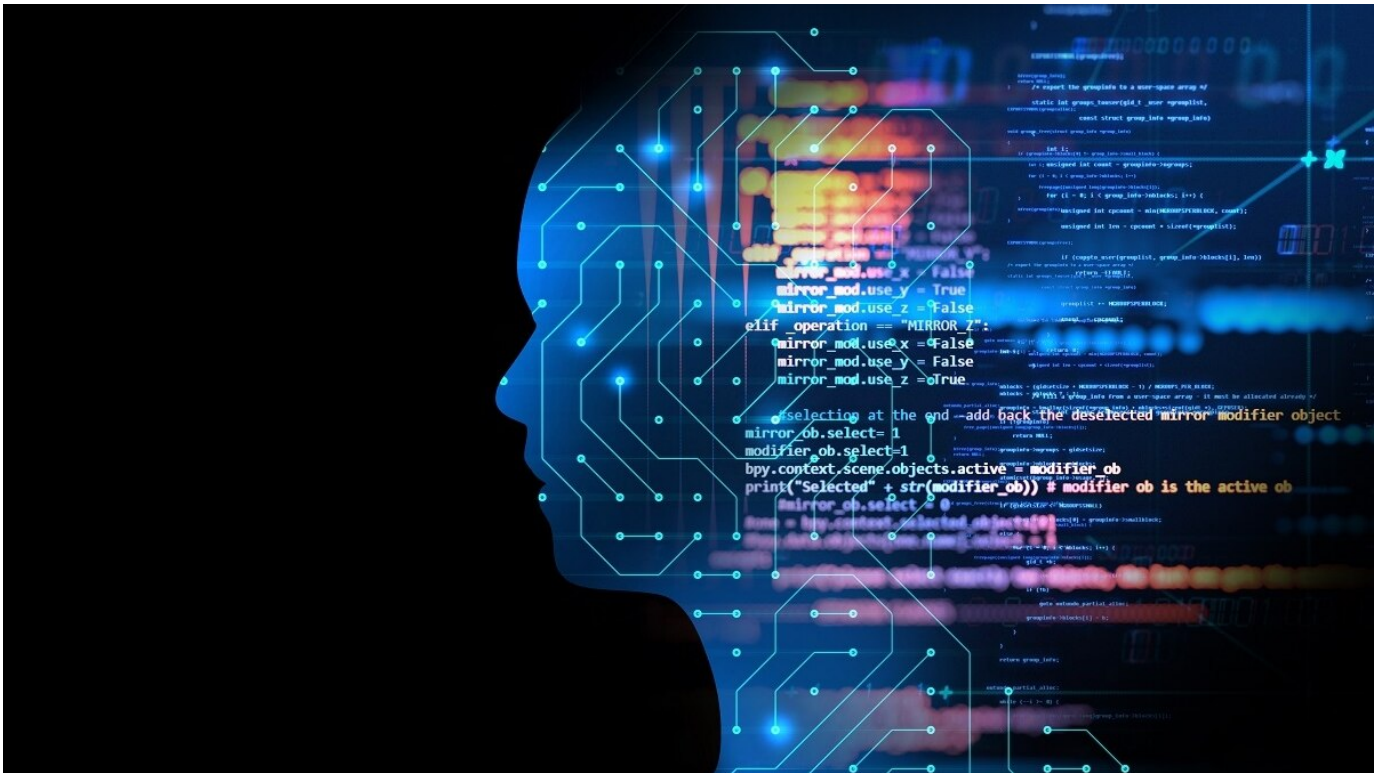


Opinion

Unlock AI to transform the Pentagon

By: Dan Naselius
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After decades of leading the world in sophisticated technological advancements, the United States is now in a precarious position. Our near-peer competitors are [catching up](#), and we can no longer afford to operate in silos, using old formulas that waste precious time and resources. With significant national security consequences on the line, the Department of Defense is embracing enterprise data and decision management to address its specific, unique challenges and to make impactful decisions at a moment's notice.

The Joint Artificial Intelligence Center is an exemplary group that demonstrates how the Department of Defense needs to [work across departments and units](#) as an enterprise. There is no federal agency that faces as many unique business scenarios as the DoD. Its challenges include the highest security requirements, legacy systems, multiple platforms vendors and departments, dark data, interconnected programs, multiyear projections, and fluctuating funding and budget exchanges.

Most government agencies default to spreadsheets, consultants and PowerPoints to make decisions while also using unstructured content documents and data calls to gather [enormous columns and rows of information](#). For the DoD, these decisions are literally foundational and fundamental to operating our armed forces and protecting our citizens from adversaries on physical and digital fronts.

Complex challenges arise from volumes of sensitive information, most of which are siloed due to disparate data sources, insular departmental protocols and legacy systems that cannot keep up. Processes are laden with one-dimensional IT systems, spreadsheets and presentations that require laborious manual edits every time there is a change in budget or a budget drill. Investment decisions are drawn out due to the difficulty of keeping track of authoritative data and the rationale behind decisions, as well as decision parameters at the time of decision.

This is not a criticism but a statement as to the inherent problem of too many sources, platforms and objectives. It's not easy to take non-structured information and make sense of massive amounts of "dark" data that are not recorded in spreadsheets, such as conversations or the reasons behind decisions found in email, Word documents and correspondence.

The solution is before us: leveraging artificial intelligence and its more nuanced partner, natural language processing. What AI and NLP can do for the DoD is nearly endless, from optimizing existing talent and tracking security threats to synthesizing enterprisewide data for real-time information. What is pivotal is that NLP allows us to integrate dark data, rendering it discoverable and justifiable.

Enterprise-wide AI systems create a "brain" that optimizes data and connections to accomplish the mission and keeps other information in a state of readiness, like nodes and synapses of the nervous system. By leveraging these technologies, entire departments of spreadsheet jockeys or time- and labor-consuming data calls are no longer needed for reporting.

Ingesting the data from multiple sources as well as removing the human factor from data handling and reporting protects it from error corruption. Better still, reports can be generated in moments with real-time data, while still allowing departments the autonomy to manage projects in their existing platforms.

Traditional approaches are inadequate to process the DoD's massive amount of data and sources. Treating the DoD as an enterprise and leveraging AI and NLP will maximize staff capabilities and make data available, accessible, reliable and secure while providing optimized decisions for budgets, intelligence and actions. Departments can save millions of manhours and dollars so other programs can be funded and staff can utilize the exacting analytics produced.

This solution can also be applied to the budgeting and the "program objective memorandum" processes. Imagine being able to make precise and specific trade-off analyses to see the effects of budget cuts and their consequences. Solving point solutions around data and automation to get answers, and pulling those applications together, is the formula that the DoD can use to know where programs are connected systemwide. Digital workflows of that information could also assess trade-offs during budget builds, and the real-time data would allow movement within the timeline to inform the current situation and manage decisions.

Our enemies are leveraging technology to work against American defenses. We need to use AI, NLP and other advanced technology to collaborate content and innovate in support of our security and operations. When there is so much innovation and opportunity in the digital stratosphere, matters of national security need every tool at our disposal. Let us not forget the mission is to arm departments and the war fighter with tools for defense, response, communication, action and lethality. Using innovative technology will give our leaders accurate and timely scenarios with a single source of truth and perspective so they have the confidence in the decisions that affect and protect us all.



ABOUT DAN NASELIUS

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