

Executive Webcast Brief

Workflow and Automation: Adding Value to Defense Operations

Washington, DC

Introduction

Modernization is not just about upgrading or replacing old systems. It's also about improving and automating the workflow and processes that those systems support. If Department of Defense (DOD) agencies replace their outdated systems, but leave the workflows unchanged, they will only achieve incremental gains. The real opportunity is to leverage new technology to create more effective workflows and provide new services and capabilities.

With more than 1.3 million armed service members located in posts spanning the globe, the U.S. Department of Defense (DOD) features a scale and complexity unlike any other organization in the world. As such, Pentagon officials consistently search for opportunities to improve operations and workflow, not only to enhance department operations, but to also maintain a high-level of performance to protect the nation.

The DOD is turning more frequently to automation workforce solutions to achieve efficiencies. Defense technology leaders want to better understand and use the enormous amount of data collected about the DOD's operations and processes to find new efficiencies, make tasks easier for service members, and increase the connection between the many military departments, offices, and post locations.

Avaya recently gathered senior defense IT executives and thought leaders from government and industry to discuss the role of workflow and automation in today's military. Here's what they had to say.

Automation for Maintenance

Gregg Kendrick, executive director of the Marine Corps Forces Cyber Space Command, and Frank Konieczny, chief technology officer for the Office of the Secretary of the U.S. Air Force, voiced the desire to bring artificial intelligence (AI) to machine maintenance.

Both want to use analytics and AI to automate the maintenance of vehicles, aircraft, and other large equipment. For example, automating sensors for parts, whether for engines, turbines or tires, could help determine the effectiveness of preventative and corrective maintenance.

Automating the part reordering process can create efficiencies by having a part on hand when needed. Automation and AI can help predict when maintenance needs to occur. For example, by analyzing aircraft engine maintenance data and weather conditions during flight time, the parts replacement process can be initiated at the right time to replace the part right when it is needed.

“Data sensors can be placed on the parts of major equipment, providing a baseline for repairs,” Kendrick said. “This information can be used to streamline the entire logistics framework.”

Automation for Force Protection

Automating analysis of social media channels can identify key words that can detect if a service member or veteran is contemplating suicide. Response times can be greatly increased, and lives saved. AI can be used to search for hate speech across social media to identify any threats to any service members or national security.

Automation for Intelligence

New workflows can be developed to analyze available public information instrumental to carrying out a relief mission with non-governmental organizations (NGO). Automating the workflow process can help to determine what languages are used and which networks are operable from terrestrial and satellite aspects so stability can be brought to the region in need.

Automation and workflow processes can also help find key terrain that has gone undiscovered by the human workforce. AI can help shrink the amount of time it takes to determine whether the data is relevant to the decision-making process. If not, AI can help redirect to new decision points.

WHAT THE DOD NEEDS FROM INDUSTRY:

The defense leaders highlighted several areas where industry can help the DOD with automation and AI:

- Increase the creation, development and approval of mobile applications.
- Better organize the operational needs of the Army's more than 280 posts around the world, including the ability to meet different standards and objectives based on location and personnel.
- Improve systems and procedures for service members returning from military operations to help reduce suicide and improve mental health.
- Eliminate the traceable signal of wireless devices used in dangerous areas while still allowing for device functionality.
- Improve overall network security, automatically eliminating cybersecurity threats and detecting anomalies on the network.
- Facilitate interoperability so relevant data can be efficiently transported to exactly where it needs to go to enable informed decision-making.
- Automate mundane processes to increase efficiencies that can be reinvested into warfighting capabilities.

FINDING A BALANCED APPROACH

All the speakers wanted to use automation in ways that would spur further innovation. There is an argument that using closed systems would improve cybersecurity, but each argued that workflows and automation must make use of modern technologies and open source, while offering security without reducing services.

Today's soldiers grew up with technology as a key part of their lives,” said Maj. Gen. Garrett Yee, deputy chief information officer/G6 for the U.S. Army. “We need to empower them to use these tools. Artificial intelligence can help them protect the nation better. It can help us find the gaps in our workflows, but more importantly, it can help us find the gaps in our workflows faster.