Stop Searching, Start Fixing: How AI Can Cut Downtime in Government Operations

When IT goes down, the solution can be as easy as a reboot. But not everything has such a quick fix. Maintenance teams need to act fast when — or ideally, before — an equipment failure occurs, but they often spend precious time searching for parts, technical information or piecing together answers across disconnected systems.

Equipment readiness is especially critical at the Department of War. Yet it faces a $285 billion maintenance backlog, which "poses a risk to its missions and the quality of life of its personnel," according to an August 2026 report by the Government Accountability Office.

Artificial intelligence can cut equipment downtime and put it back in service quickly. At a recent GovLoop event, Maddie Wolf, General Manager and Vice President of Operations at Legion Intelligence, explained how AI helps.

What is Readiness?

At DoW, readiness is key. Congress defines that as "the ability of military forces to fight and meet the demands of assigned missions." It's up to the maintenance crew to enable readiness, Wolf said.

"Maintenance is the supply line for readiness," she said. "If you cut it down, everything else downstream goes with it."

3 Obstacles to Readiness & How AI Overcomes Them

Correcting inaccurate inventories

Waiting on parts is a major cause of downtime, Wolf said. AI can help agencies adjust reorder points, or inventory levels that trigger replenishment orders. Agencies can set the minimum number for reorders and the maximum number indicating that they have more than they need, but those numbers aren't always accurate, she said. AI can study historical usage and supplier lead times to make those numbers are precise.

Simplifying troubleshooting

When a problem arises, the maintenance team may consult manuals and colleagues to find a fix. An AI troubleshooting assistant connected to equipment guidance and past work orders can help quickly identify potential problems and solutions.

Getting fixes right the first time

While predictive maintenance has traditionally been the focus, Wolf emphasized prescriptive maintenance, or knowing the optimal way to make a fix and what tools to use. That requires giving AI access to common unclassified information from a content management system or even paper manuals, if your organization permits that.





Case study: AI for Troubleshooting

An aviation maintenance group needed to prioritize which aircraft fixes to make first. Factors include the time of the next sortie, whether parts are on hand and how long work will take. "All of those things are things that you don't need AI to figure out, but it can make it a heck of a lot faster," Wolf said. A worker can ask an AI assistant those questions, rather than make phone calls or check inventory manually.

AI: The Great Uniter

Disconnected systems, siloed data and legacy processes contribute to downtime and inefficiencies, making them areas where AI can shine.

Wolf used Formula 1 racing to explain how: "In the F1 race, it's all about these pit stops, where... [people] come out and they're switching the tires as fast as they can," she said. "I think of siloed systems like this pit stop situation, except imagine they're all on different radio channels." The workers can't communicate properly about what to fix and where to find the things they need — if they're even in stock.

"What you need is a layer that goes and grabs all those different parts," Wolf said. "How do you unite the information and then actually make sense of the information? Like, if this thing's happening here, this thing needs to be happening [over] here."

Ask the Right Questions

Many agencies, including DoW, throw AI at any problem and hope a solution sticks. That's the wrong approach, Wolf said. Instead, they need to ask themselves these two questions:

- What are the operational problems we have?
- Can we solve them with AI?

"**Don't just use AI to use AI**," she said. "Fix whatever problems you need to fix, and maybe AI can help."

Wolf said AI's benefits typically fall into two buckets.

1. **The feelings bucket.** This is about using AI to allow people to do the job they want to do. "Maintainers signed up to maintain," she said. "They did not sign up to go chasing a manual around for an hour."

2. **The operational business bucket.** This is about measurable outcomes, such as decreasing costs and downtime. But a "sleeper metric" Wolf said she sees often is technician capacity, or keeping qualified maintainers on staff.

No one can predict how AI will continue to change, Wolf said, so the best course of action today is to test the tools approved by your agency.

"What excites me about AI is rather than building these tools or these workflows...[and] having people go to them, we should be pushing the information towards people," she said. "We should be having AI tools push information to us so that we can make decisions, rather than making people go find a tool, go ask it the question. I shouldn't even have to know to ask the question. It should just come to me. If my reorder points are off, why doesn't it just tell me rather than me asking it? That's what excites me."

To learn more, watch the full session on demand.