

Agencies Size Up AI Use Cases (and AI Concerns)

It's become impossible to escape AI, and why would you want to? With promises of saving workers four hours a week in the next year and up to 12 hours per week within the next five years, according to Thomson Reuters, and “great benefits to our social wellbeing in areas such as precision medicine, environmental sustainability, education, and public welfare,” according to the State Department, it seems that AI can make everything better — as long as officials know how best to apply the technology.

That was the focus at a recent GovLoop virtual event, which brought together three thought leaders from the government to discuss potential AI use cases. Here are some highlights from that event.

EXPANDING INSIGHTS' REACH

*Ryan R. Eddy, Director, Homeland Security Programs,
Pacific Northwest National Laboratory*

One way that AI can be helpful is in expanding the reach of insights from nontraditional and technical data streams, Eddy said. "We often hear [that] AI is here to assist us and help make things easier, but it's also looking at those nontraditional ways we can combine things," he said.

For instance, at the Pacific Northwest National Laboratory, experts are combining their know-how in nuclear non-proliferation and artificial reasoning to detect and mitigate nuclear threats. "Their aim is really to use data analytics and machine learning to monitor nuclear materials that could be used to produce nuclear weapons by analyzing the process data from reprocessing facilities," Eddy said.



REALITY CHECK

Eddy urges caution against getting sucked into the mindset of "AI can solve everything." Instead, it works well where it augments or supports trained end users, becoming another tool in their toolbelts, especially for tasks that might bog humans down in minutia.

At "the Department of Homeland Security, we're working with the people that are frontline on the border or in the air corridor or intelligence center, and the fact of the matter is they do their job exceptionally well," he said. "The last thing we want to do is have AI take that over, but how can we help to augment and make that maybe a little bit easier for them?"

ENHANCING EDUCATION

*Kevin Johnstun, Management and Program
Analyst, Office of Educational Technology,
Department of Education*

Discussion about AI in schools often focuses on students' use of it to do their work for them, but the technology has a legitimate place in classrooms – if it's built responsibly, Johnstun said.

"Teenagers ... can get help from generative AI systems," he said. "They [just] need to know that help is good help."

AI benefits teachers, too, Johnstun added. The technology shouldn't be used to grade papers, for instance, but it can input teachers' most likely comments. "This could be as much as a 10%, 20% time savings for teachers," he said.

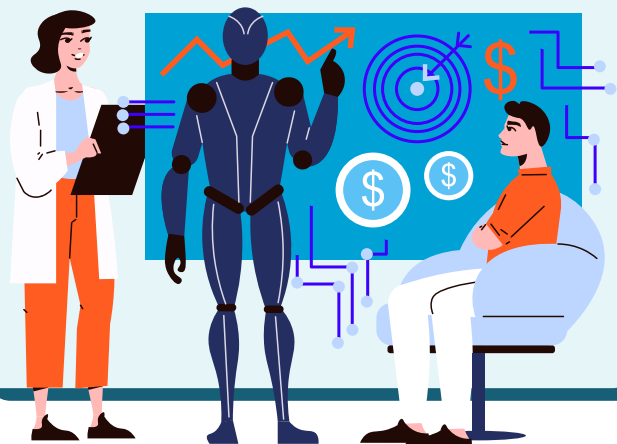
In 2023, Education released a [guidebook](#) on implementing AI with topics such as privacy and safety in mind. "We wanted to write this developer's guide [to] ... say, 'Look, there's a lot of activity right now. If you've got a team working on something, you should know about some of these things,'" Johnstun said. "It goes through issues around privacy that people should be thinking of, some issues around safety that people should be thinking about."



REALITY CHECK

"AI is never going to take the role of a classroom teacher," he said. Instead, it should be "a supplement and a tutor. Those are definitely places where people are thinking about how do we help augment the resources that are available to students and to teachers by using what is essentially a form of automation."

For AI to work best, it must be responsible. "That means doing the actual testing, both before it's deployed and after it's deployed, to make sure that it's not doing things like leading to discriminatory outcomes, to make sure that it's safe, that it's interacting with students in an age-appropriate manner, that is providing teachers sound pedagogical advice," he added.



AUGMENTING THE WORKFORCE

Kevin Walsh, Director, Information Technology and Cybersecurity Team, Government Accountability Office

AI can help, not replace, workers, Walsh said. “I don’t see Arnold Schwarzenegger in Terminator coming to the fore, but I also don’t see Wall-E and the ‘let me carry and do everything for you AI’ [coming] to the fore,” he said. “I think it will be more like sitting on your shoulder and saying, ‘Hey, can you write me an example of this,’ and it will just go forth and do it, which I think is great and helpful.”

For instance, the National Oceanic and Atmospheric Administration uses AI to count the number of seabirds in drones’ pictures. “If a person had to do that, [by] ... the 42nd picture, you’re going out of your mind and there’s no way you’re going to be accurate, whereas using AI to do something like that can be very, very good,” Walsh said.

The Homeland Security Department uses AI to determine whether a sensor is picking up a human or an animal crossing the border, and NASA is using AI on rover imagery. “Rather than waiting for the long delay back and forth to a rover, it can say, ‘Hey, that rock looks interesting,’ and start trundling over towards the scientific specimen on its own,” he said.



REALITY CHECK

Excitement and enthusiasm around AI abound. A simple way it can have a big impact: summarizing government reports. “Rather than having to wade through pages and pages, you would get a short, concise summary,” Walsh said.

But there’s cause for concern, too. “Generative AI sometimes is so eager to please that it hallucinates and lies,” Walsh added. “You should probably at least do some background research on your own. ... That’s why I think having humans in the loop is going to be important going forward.”

To learn more, watch the [full event here](#).

