

How to Set Up Your Agency for AI Success

The field of AI is evolving so rapidly, it's difficult to remember how new this technology is to so many agencies. In most cases, agencies are trying to strike a balance, encouraging employees to explore the potential benefits while also reminding them about the risks.

Alan Fuller of Utah said this task is all the more challenging because AI is ubiquitous in everyone's personal lives, with a wide range of tools ready to download onto our computers and smartphones.

So, when state officials created a policy last year on the use of generative AI (GenAI) – a prevalent form of AI that creates new content, such as text, images, music, audio, and videos, in response to a prompt – they began with the assumption that employees already use many of those tools, either personally or on the job.

"Our policy was not saying, 'No, no, no,'" Fuller said. "Our policy was to say yes, with but with some cautions."

At a recent GovLoop roundtable, thought leaders from government and the IT industry discussed how to balance innovation and caution. Here are highlights from that event.

Opportunities Abound

Here are some early use cases for AI in general and GenAI in particular:

Assisting agents. One of GenAI's strengths is the ability to ingest, analyze and distill large volumes of information. That's just what call center agents need when working with the public, said Fuller. GenAI could incorporate a knowledge base for call center employees that draws on information from sources agencywide. For example, call center agents for a tax agency could use an existing knowledge base by using GenAI to tap into its own website, training documentation for call center agents, the body of tax laws and other resources.

One important technology for this use case is retrieval augmented generation. This can enhance the accuracy of a large language model by fine-tuning it using an organization's own data. This approach makes GenAI a much more powerful tool for call center staff fielding questions from the public. "We want to give those call center agents superpowers," Fuller said.

The participants:



Scot Barker
Chief Innovation Officer,
Burlington, Vermont



Ben Caruso
Field Chief Technology Officer for State
and Local Government, Juniper Networks



Alan Fuller
Chief Information Officer, Utah



Renoir Pope
State Enterprise Architect for California
and Head of the California Department
of Technology's (CDT) Office of
Enterprise Architecture



Stephen Savas
Vice President for U.S. State, Local
and Education, Juniper Networks



Improving employee productivity.

Similarly, AI could help employees do basic tasks more quickly and effectively. For example, purchase orders (POs) are often a pain to process because there is such little consistency among them, Vermont's Scot Barker said. "I wouldn't mind automating [accounts payable and accounts receivable] and finding a way to get smart POs, so that we don't have to use these crazy processes."

Although GenAI has a lot of potential, Barker said his team is focused more on AI-based robotic process automation (RPA), software that can perform tasks humans typically do, such as extracting data, running calculations, filling in forms and moving files. AI enables RPA to automate increasingly complex tasks and workflows.

"For the next 12 to 18 months, for Burlington at least, my guess is we'll see more progress on the RPA and automation side of AI than we will on generative AI," Barker said.

Automating IT operations.

IT staff often work reactively, responding to problems as they pop up, rather than addressing underlying causes to prevent future issues, said Juniper Networks Stephen Savas. Automation has always helped handle some basic tasks and processes, but AI-based automation can do so much more. For IT staff, typically "70% of the day is reactive, but we can flip that to where they can be proactive because we've taken the firefighting from them."

Many trouble tickets relate to fairly mundane problems, such as slow Wi-Fi connections, said Juniper Networks Ben Caruso. AI could handle them quickly, "so now the IT help desk has more time to [do] more of that serious troubleshooting."

Juniper Networks has found that AI-based IT operations, known as AIOps, can reduce the time staff spend responding to trouble tickets by up to 90%. A key focus of AIOps is automated troubleshooting. By using AI to identify and mitigate potential problems before they begin to undermine performance or security, agencies can create a more reliable IT environment.

Pushing hard on innovation. Part of what makes AI so powerful is its ability tackle so many different challenges, said California's Renoir Pope, so it's important not to settle for the simple stuff. In an executive order issued last year, California Gov. Gavin Newsom directed agencies to study both the technology's uses and pitfalls. Pope's team, which focuses on innovation, has created what they call CDT Sandboxes, which are secure, isolated IT environments in which employees can test AI tools.

Pope said his team is working with agencies on several use cases. In health care, they are looking at improving facility inspections by using GenAI to distill information from inspection-related documents. In transportation, they are looking at how AI can deliver new insights into roadway congestion. In both cases, they are considering the risks involved.

"I'd say we're taking an optimistic but very cautious approach," Pope said.



Piercing the AI Mystique

In testing and rolling out AI, agencies need to be conscious of how employees and the public perceive the technology, participants said. Currently, people tend to have an exaggerated view both of its potential benefits and its risk. Here's what people should know about AI, they said.

Point Out the Obvious

Barker said his team has spent the past few months doing an "AI demystification tour" around Burlington, talking to people about AI's role. He likes to point out that many people have benefited from GenAI without even knowing it.

"You have people raise their hands if they have an Alexa smart speaker, Google Home or anything like that, and you say, 'All right, then, welcome to AI,'" he said.

Establish Clear Boundaries

It's not enough to teach employees how AI works, how to apply it to their jobs, and how to mitigate the security and privacy risks. They also need to recognize the boundaries of acceptable use, said Pope. That means defining acceptable use clearly in writing and ensuring everyone is trained accordingly.

Agencies went through this same process when they began using the Internet, he said, teaching people about what websites or applications to avoid. In the case of GenAI, Pope said, employees must understand that some prompts are not appropriate in the workplace, e.g., "How do I take off 365 days a year without getting into trouble?"

Know What's Happening With Your Data

Agencies will find many innovative products on the market, but not everything is appropriate for government use, so they need to be wary of how those products use their data. To minimize problems, Fuller said Utah is sticking with enterprise solutions from trusted vendors.

"These solutions can be used safely and securely, where anything entered into a prompt and anything coming back in response stays within our enterprise and is visible only to us," he said.

Find High-Impact, Low-Risk Use Cases

Experts often advise organizations getting started with AI to look for low-hanging fruit — that is, use cases that can be delivered quickly and easily. But a quick win won't impress anyone if it doesn't deliver meaningful results. Caruso defines low-hanging fruit as use cases that provide maximum impact with minimum risk.

For example, in network operations, an agency might show how AI-based automated troubleshooting can reduce "truck rolls," or the need to send network technicians to remote offices, he said.

Another good use case across the public sector is facilities management, said Savas. "With all the data we have today, we can optimize for sustainability, for use of footprint, for proper use of space," he said, resulting in a lower total cost of ownership. "That delivers results directly to the constituency."

Help Employees Keep AI in Perspective

Pope said it's important to keep in mind an often-unspoken concern about AI among employees: It might end up taking their jobs.

Agencies must evaluate that concern as part of their risk assessment when rolling out AI-based applications, he said, and they need to address it as part of end-user training. The goal is for employees to recognize that AI, rather than taking jobs, "is the thing that will make you a superstar," Pope said.

