

# How Agencies Can Elevate Their Data Maturity

Agencies are looking to data to improve operations, elevate constituent services, and meet their missions more effectively. Ample data is available to support that ambition. What's needed is data maturity: a robust organizational capability to put that data to work.

What does data maturity look like? It's not just about having the technical ability to handle vast tracts of information. Maturity also means having the right skills and cultural mindset.

In a recent GovLoop roundtable, sponsored by Snowflake, government and industry leaders took a deep dive into the question of how government can achieve the level of maturity it needs to meet its data-driven ambitions.

## ROUNDTABLE PARTICIPANTS

### Melinda Cordero

Acting Chief Data Officer for the U.S. Government Accountability Office (GAO)

### David Carroll

Associate Director for Mission Engineering for the Cyber and Infrastructure Security Agency (CISA)

### Laura Cooper

Program Manager, Acquisition Data, in the Office of the Under Secretary of Defense for Acquisition and Sustainment at the Department of Defense (DoD)

### Kevin Griffith

Senior Director of Federal Sales at Snowflake



# Wrangling the Data

From constituent-engagement records and financial transactions to sensor data and network logs, government has no shortage of data. What agencies need now are more robust means for making sense of all that data. Speakers identified some key goals:

## ELEVATE DATA QUALITY

"We don't need bigger haystacks: We need shiny chrome needles," said CISA's Carroll. "If we just keep collecting the stuff, you can feel warm with all that, but it can't actually get anything done."

IT leaders must look for ways to ensure that data will not only be available, but actionable. As they collect and manage data, "there should be a quality line all the way through," he said.

To deliver quality data — data that supports mission-line leaders — IT needs to collaborate with those leaders to understand the goals of a given effort. It's about "knowing what questions to ask," said DoD's Cooper. "If you don't start with that, all the data scientists in the world are not going to help you."

## ACHIEVE ALIGNMENT

It takes a coordinated effort to ensure that the technology team is surfacing the data that supports effective outcomes.

"Some person gives you these 12 fields, and you go as far as you can go with it," said GAO's Cordero. "But you're missing this piece. We really need this piece. Who's got this piece? Oh, well, that's a different department."

Maturity here means that everyone is asking the right questions and looking for the answers together. "We need more people who are thinking about how to make use of data," Cooper said. In much of government, this remains a work in progress. "We're not quite to the point yet where we are effectively using that data to make decisions, to help us think, to make our thinking more efficient."

## STRENGTHEN GOVERNANCE

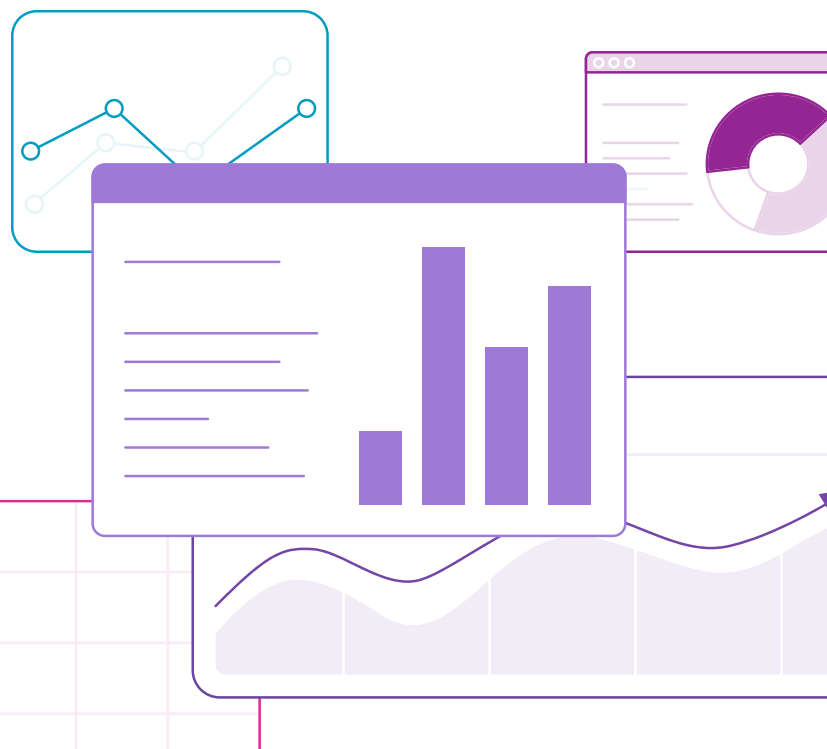
As government works through these hurdles, agencies will need guardrails to ensure that they're using data effectively and appropriately.

"We see a lot of data-sharing challenges across government agencies," said Griffith with Snowflake, whose data platform helps organizations gain seamless access to explore, share, and unlock the value of their data. "The hardest part of data sharing is getting the memorandums of understanding: the policy side of it."

Roundtable participants agreed that strong rules around data use are a key safeguard.

"You can't hack data governance," Cordero said. And achieving that robust governance isn't just a technical issue, it's also a workforce issue. In addition to data scientists, "you've got to have somebody who understands [the data] at a higher level so that they can see how all the pieces have to come together."

In fact, workforce considerations play a key role in developing data maturity.



# The Workforce Conundrum

At a basic level, agencies struggle to fill their ranks with experts who possess skills to use data effectively. Agencies can recruit based on things like a sense of mission and a flexible work environment, Griffith said, but industry can pay more, and shortages persist. Here are some key challenges to address:

## CLOSING THE SKILLS GAP

There are various ways to come at this. As a cyber talent management senior executive, Carroll points to the Department of Homeland Security's Cybersecurity Talent Management System, a personnel system launched in 2021 with the goal of recruiting, developing and retaining top talent.

Agencies also can look internally to help mitigate the talent gap.

"There are those unicorns who have remained in the organization, who have deep functional knowledge...and they also have picked up data skills along the way. They understand how data contributes to answering questions," Cooper said.

Leaders can leverage that nascent talent by telling workers: "If you can find someplace where you've got a person or a group that is operating effectively, go learn everything that you can from them," she said. As they upskill, these workers can help build out data maturity throughout the organization.

Leaders who take this route may find a breadth of individuals ready to support a data-driven effort. "We can train on technical deficiencies if they have the people skills, the organizational skills, knowledge of the customer base," Griffith said.

## KEEPING EMPLOYEES ENGAGED

Even when agencies can secure the talents of data-minded individuals, it can be a struggle to keep them engaged, however.

Cooper said it's important to give them the technology tools they need to do their jobs effectively. "We've got technical issues that we've got to overcome before we can make use of the data that we have," she said. "In our organization, we've started paving the cow paths," clearing the technical roadblocks to effective data use, she said. "That's a good place to start."

## PROMOTING DATA LITERACY

Technical skills alone don't amount to data maturity. It's also important for government leaders to focus on the end users' willingness and ability to look to data for answers. In short, it's important to promote data literacy.

"GAO is working on our own internal data literacy efforts to make sure that folks who've been doing policy work actually have the understanding to do the data work that they're doing," Cordero said.

"You need people who understand [both] the mission and the importance of the data that they're collecting," she said. When people understand the value of data, they're more likely to help put it to work. "If we can tell people how we're going to use their data...they're more willing to share it with us. The cultural barriers come down when we can be more specific about how we're going to leverage it."

Finally, the experts noted that contractors can play a significant role in rounding out data maturity. When it comes to the technical implementation of data-driven systems and processes, "the contract staff are force multipliers," Carroll said.

By addressing data availability and quality and cultivating a data-centric workforce, government can build the organizational maturity it needs to meet its mission more effectively going forward.

*Learn more about how Snowflake can help your agency achieve data maturity: [snowflake.com/government](https://snowflake.com/government).*

