

Leveraging Data as a Strategic Asset: Insights from Caroline Kuharske, Acting Chief Data Officer, Defense Information Systems Agency

By Michael J. Keegan



The Defense Information Systems Agency (DISA) is considered the nation's premiere IT combat support agency and the trusted provider to connect and protect the warfighter in cyberspace. DISA provides, operates, and assures command and control (C2), information-sharing capabilities,

and a globally accessible enterprise information network that directly supports the U.S. Department of Defense (DoD) and its services.

"We have supported and enhanced," explains Caroline Kuharske, acting chief data officer, "the overall communication infrastructure at a global scale to support the warfighters. It operates in 4,300 locations and ninety nations worldwide with a workforce of more than 14,000 and an annual budget of more than \$8 billion." DISA continues to prioritize C2, drives force readiness through innovation, leverages data as a center of gravity, and harmonizes cybersecurity and the user experience. It also works to strengthen the security and resilience of networks and systems that enable U.S. military advantages.

Caroline joined me on *The Business of Government Hour* to discuss the establishment of DISA's Chief Data Office, its evolving data strategy, data management activities, knowledge management, and how DISA is leveraging data as a strategic asset. The following is an edited excerpt of our discussion, complemented with updated and additional research.

Would you provide us an overview of the history and mission of DISA?



DISA has been providing communication system support since the 1960s. It was originally known as the Defense Communications Agency (DCA). The creation of the agency was to designate a needed "strong focal point" for DoD development, integration, and operation of ground and satellite-based communications initiatives. DCA grew over the decades and supported many military efforts such as Desert Storm and Desert Shield. In those operations, it provided long-haul network support, voice switches, technical control facilities, and many other data support elements.

Around 1990, DCA underwent a major reorganization and was renamed the Defense Information Systems Agency to reflect its expanded role in implementing the DoD's CIM (Corporate Information Management) initiative, and to clearly identify DISA as a combat support agency. Since then, we have supported and continue to enhance, the overall communication infrastructure, at a global scale to support our warfighters, the Secretary of Defense, the White House, and all the other DoD information networks support elements.

Why was the Chief Data Office established? Where does it fit within the DISA organizational structure?



In 2021, DISA created the Chief Data Office (CDO). While we've been using and managing data and pursuing different data initiatives, we never had a dedicated office focused on dealing with data requests and information sharing. The DISA CDO portfolio consists of two branches.

One branch concentrates on the data management activities and the second branch concentrates on the knowledge management. The office was built specifically so we have influence over the entire data lifecycle components.

We began looking at what the organization should look like, and resources needed to start the hard work of evolving DISA's current view of data and knowledge management practices. Its purpose was to spearhead the agency's approach to the evolution of our data management: How to make use of all the vital data we have and turn it into information for the internal and external DISA components to leverage at the center of gravity. A key goal is to have the data high ground that will enable actionable decision-making capabilities for the agency.

The Chief Data Office resides under the direction of the DISA chief information officer, Mr. Roger Greenwell, and is in the newly created center, the Enterprise Integration Innovation Center. This center houses the chief information officer, the chief technology officer, and the chief data officer, and our risk and security management division, and our operations engineering division. So, having all these different entities together, it really helped to craft a center that is creating an ecosystem that starts with ideas and ends with realization.

The core intent of this office is to influence and lead DISA to use data that derives business and operations outcomes, working closely with all DISA directorates and providing guidance for data use across the agency. The CDO helps to develop governance and policy frameworks used in our programs and services. We want to ensure that the data—used internally and externally—is quality data that will help our mission partners to execute their tasks in an efficient manner. We are focused on creating a DISA Data Implementation Plan to meet the direction of the DoD Digital Modernization Strategy, DoD CDO Data Strategy, and the DISA Strategic Plan.

I am also focused on growing the use of knowledge management (KM) by providing KM best practice information to the workforce. Since we are asking those in the agency to change the way they use data, we've got to give them the resources to be able to do that. I can't tell somebody to do something if I'm not going to give them the training or tools to do it. We're really focusing on ensuring that the workforce can meet these data demands that we're putting forth.

We are also working across our cyber and business data custodians on how we can exploit our data to our mission partners in a secure and ethical manner. This will increase our data sharing opportunities to our DoD partners and elevate their ability to make decisions from the data we can provide.

What are your top management challenges that you face in your position and how are you addressing these challenges?

 With our first 100 days behind us, I'm at the point where I can take a step back and reflect on challenges we've encountered and pivot our responses to them. Acquiring the right resources from the beginning is a key challenge. We had to solicit data governance support resources and we wrote some documents with the words of an established CDO entity. We quickly learned we needed to pivot and adjust the support that was needed in the first phases of building this office.

The next challenge was the importance of communicating to the workforce. The CDO team is about innovation and not disruption. We are not here to completely turn data use upside down but to see how we can mature with our use of data—illustrating the case for change to them. This is very exciting. I'm so thrilled to be able to craft something out of nothing. It took about four months for us to create the plan and begin implementing that plan for the office. Though it may be very challenging, I very much enjoy watching things grow and seeing the need for a CDO component in DISA. Seeing it fulfilled has been a real privilege.



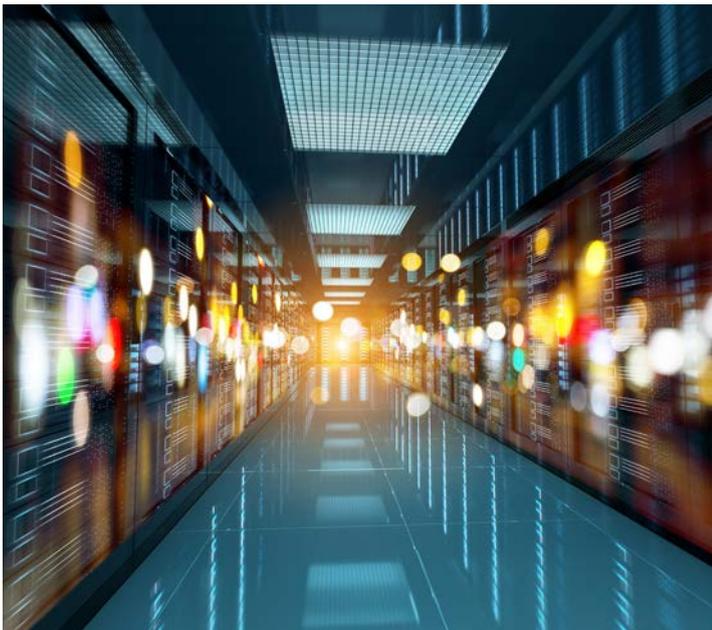


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Would tell us more about DISA's data strategy and your key implementation priorities?

 We are currently drafting and finalizing the DISA Data Implementation Plan, which is our data strategy to meet the DoD CDO Data Strategy and our DISA Strategic Plan. DISA Director Lt. Gen Skinner and DoD CDO David Spirk have laid out our strategies. Now it is up to the DISA components, OCDO included, to map the implementation plan to meet that strategy. Our key implementation priorities include the exploitation of DoD data across the DoD in a secure and ethical manner. We need to harness that data and share that information to the warfighters that need to make actionable decisions.

In the DISA Strategic Plan, data is outlined as line of effort #3; titled leverage data as a center of gravity. Accelerating data managed projects across DISA and the DoD is a large internal driver to collect and analyze data. Also on our radar—finding where data lives are, who the data steward is, and where we have deficiencies.



The DoD has worked in data silos for decades. This has led to the workforce of hoarding data and having a massive amount of redundancy data out there. We are looking to integrate those silos together, consolidate where data lives, and create a balance of governance and policies to increase data quality.

External trends are also an influencer. Look at how popular the CDO conversation has become in the last five years. We see how industry is changing the way they view data and the value of it, and we are right along with them. Extracting that value and using it to find gaps is where we see our paths converging. The DISA Strategic Plan says, “Leveraging cyber, business performance, and analytical data encourages our total force and mission partners to accelerate innovation by exploiting untapped efficiencies.” And that is exactly what our focus is.

What are you doing to advocate for and support the DoD enterprise in thinking differently about data? What does this entail?

 This is an area that I see being the big rock for all new CDO offices and data focus efforts. The DoD has always had the mission of keeping information safe from adversaries and based on “need to know” status. This has led to disparate, distant, and disjointed data efforts internally and externally. While the security of our data is important, we must expand the minds of the DoD workforce to want to share data in that secure and ethical manner.

Looking at data as an asset—as a tangible tool for DoD to capitalize on to enhance our mission effectiveness—is the mindset we are trying to craft. We are trying to craft a data-centric mentality, inspired by insights from General James Mattis, focusing on “what do I know, who needs to know, and have I told them.” This is what I am communicating across DISA. This entails loads of effort and evangelism from all areas of the workforce. We must provide robust training for the workforce to reengineer the culture to become

data centric. This will really help us all to understand the true lifecycle of data into knowledge and how we can help manage that entire lifecycle.

What are some of the key challenges to transforming the DISA culture towards a more data-centric one that looks at data as a strategic asset, but makes sure that it's discoverable, accessible, and decision-enabling?

 A key challenge that I always come back to is walking that line of risk and innovation. As DISA and our workforce matures with how we are changing some of the business strategies used for our capabilities, we will take risks to achieve innovation. We need to carefully craft and weigh these risks to ensure our investments and missions are supported and to enhance our day-to-day decision-making.

Changes to procedures and operation procedures can also be challenging. I had the privilege to work with a woman who has been a pioneer in the data world. She advised to not use the word change but use the word evolve or mature, because humans are nervous about change. Which is true! If we were to begin talking about all the changes to our business operations or our defensive cyber postures, we would be met with total apprehension.

One other key challenge is time. We are focusing on achieving small wins to provide that proof of value to leadership and the workforce that data management and knowledge management will drive efficiencies. Getting to a data maturity level where we can be trusted as an influencer will take time and lots of foundation work that isn't as fast or flashy as some other efforts.



Would you tell us more about yourself and your career path?

 I've been with DISA for about fifteen years working in various areas of the agency. I started in DISA Oklahoma City providing office, mobility and operations support. My family and I moved to Fort Meade about five years ago, when I began learning the business side of the agency. I've always asked "why?" about everything and that has helped me in my advancement. I am always trying to push for people to collaborate more and share data more. It has also given me the opportunity to learn a little about all the different services and areas of the agency.

DISA is a very important supporter of the DoD mission, and I couldn't be happier to be part of that. My career path is to continue solving problems and providing value where I can. I do have the desire to advance but continue focusing on where I can best provide value for the DoD.

What has surprised you most since taking your role?

 There have been surprises around every corner. The buy-in from leadership and the workforce has been a very pleasant surprise. It was that collective desire to assist in building this office and the willingness to provide needed resources when we didn't have any. This really proves the importance of having a single data management component in the agency to pull efforts together.

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