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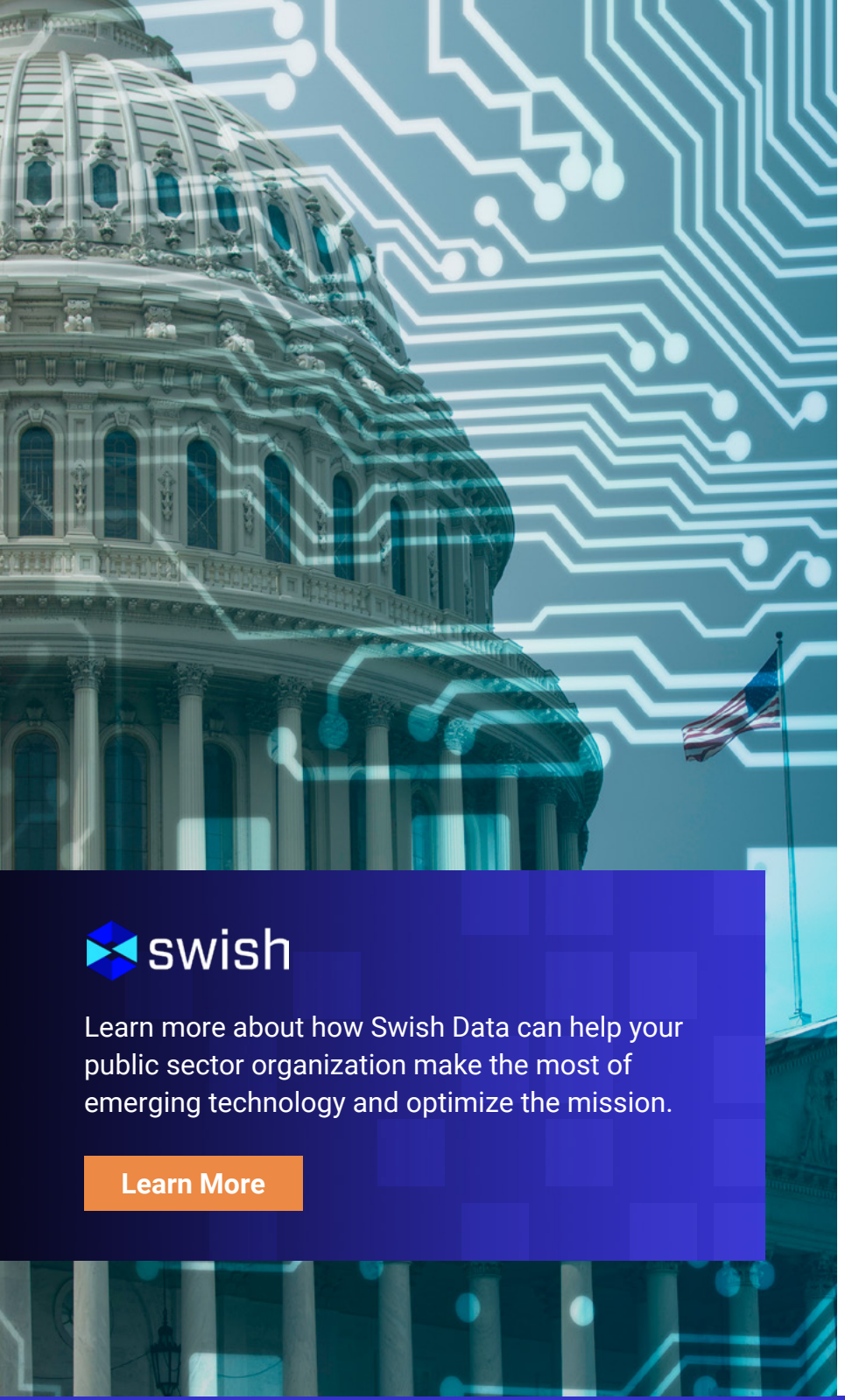
Empower and innovate:

Transformative government strategies at GIST24



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Learn more about how Swish Data can help your public sector organization make the most of emerging technology and optimize the mission.

Learn More

Introduction

The public sector is undergoing a transformative shift as government organizations work to modernize operations with cutting-edge technologies like AI and bolster decision making with streamlined data insights.

At the 2024 Government Innovation, Strategy and Technology (GIST) conference, sponsored by Swish Data and produced by GovExec, esteemed leaders from government and industry gathered to discuss some of the most pressing topics facing agencies today. Discussions surrounded current and future challenges and explored key strategies and technologies necessary to deliver successful mission outcomes.

This ebook highlights the conference's core sessions, which focused on accelerating innovation with engineering excellence, pioneering technology for citizens' empowerment, gaining momentum in the global race for AI advantage, and how agencies are leveraging the TMF to finance high priority projects. Check out what experts had to say and which technologies and strategies can help the public sector keep pace with evolving mission needs.

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Chapter 1

Tech-driven transformation: U.S. Digital Service's mission to modernize government operations

Over the past decade, the United States Digital Service has played a pivotal role in the development and launch of over 100 transformative programs across 31 agencies, including healthcare.gov, MACRA for the Centers for Medicare and Medicaid Services, U.S. Citizen and Immigration Services' Electronic Immigration System, and many more.

"Our job is to use technology and design thinking and best practices and bring those into a government context so that we can better deliver services to the public," said USDS Administrator Mina Hsiang during the recent "Scaling New Heights in Government Innovation" keynote address at GIST24 on April 10, 2024 at the International Spy Museum

As agencies increasingly seek out new solutions that streamline mission operations, understanding USDS' guidance is critical to properly evaluate and implement these cutting-edge tools. Throughout the session, Hsiang spoke about the agency's work to help the public sector navigate modernization. Here's what she had to say.

Take the steps to ethically embrace AI

Artificial intelligence has long been a mainstay in the government ecosystem, currently supporting numerous projects with the promise to streamline a variety of services in the near future. But as new capabilities like generative AI proliferate, agencies must be thoughtful about what tools they choose to implement.

Moving forward, USDS' top priority is ensuring agencies thoroughly vet new AI-backed technology and adhere to ethical, responsible best practices in accordance with federal recommendations.

"I do think AI will be incredibly important," said Hsiang. "We're definitely in the process of working with many agencies and thinking about more places that it can be applied safely and appropriately."

Start small when introducing new programs

When it comes to rolling out new tech initiatives, it's easy for agencies to feel overwhelmed. Hsiang used USDS' recent collaboration with the Social Security Administration on the International Revenue Service's Direct File site to highlight some core strategies.

Rather than trying to build a program that meets the needs of every constituent as soon as it launches, start small, catering to a few use cases and building in scalability for incremental growth over time. With Direct File, "we have built a more scalable and simple backend system so that you can add new screens as we need to add new use cases," said Hsiang.

Thousands, if not millions, of constituents rely on government platforms, so ensuring user-friendliness is key. "We started doing user research from day one … every single design, every single flow has been through rigorous user testing," Hsiang noted.

Engage in continuous collaboration with all necessary stakeholders, including industry partners. "We all work for different vendors and different sub teams within an agency," said Hsiang. "But the more that we can operate as one team, the more our product will look like a single team with a unified vision really built it, which is important."

Bolster teams with the right talent

Before agencies can integrate new technologies into operations, they need the right talent in place. Since finding that talent is easier said than done, USDS is working on recruiting and matching individuals to agencies that can most benefit from their skills.

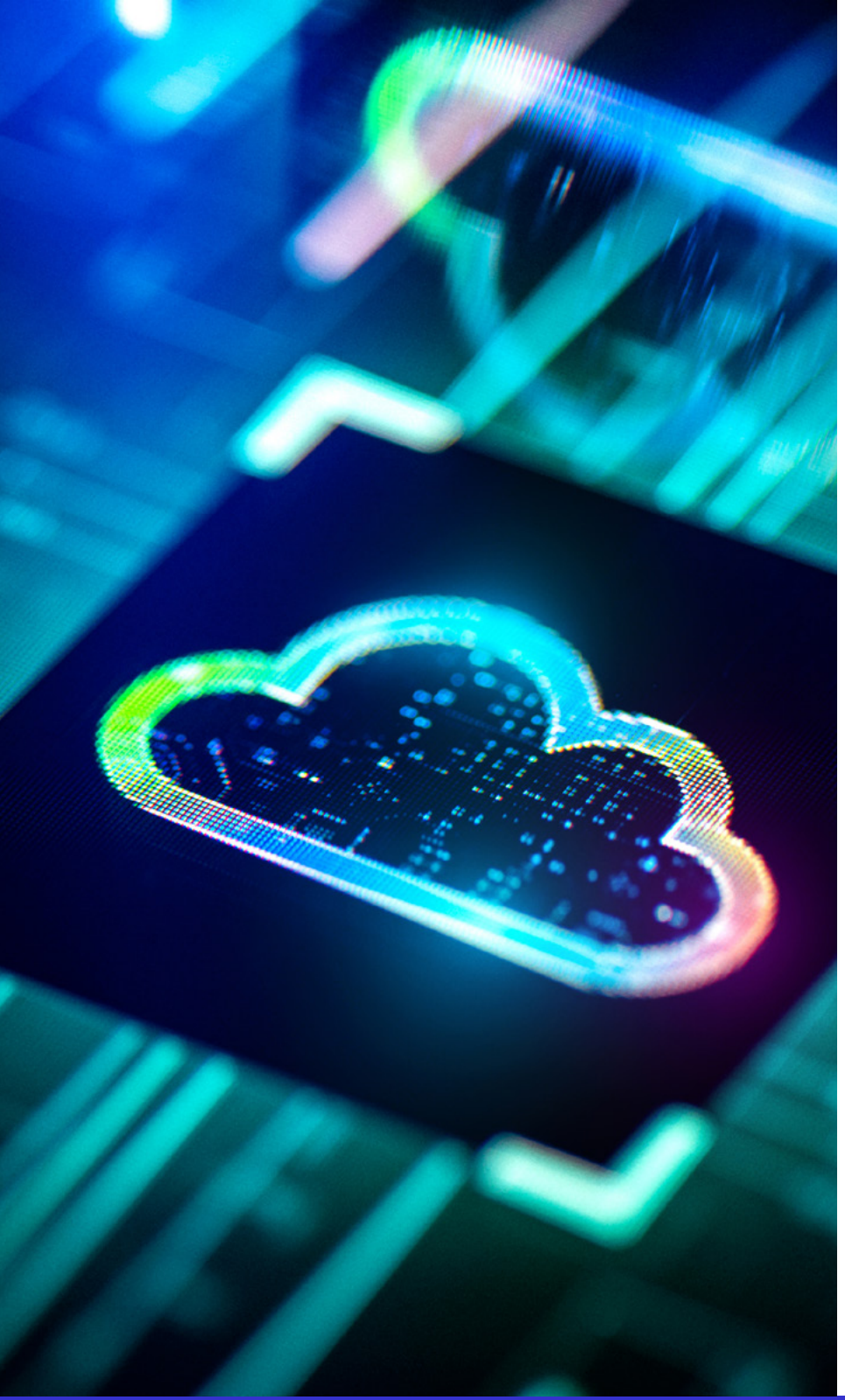
"We have been standing up some work across the interagency to support agencies and hiring … and make it easier for them and to provide support," she said.

Ultimately, with fully equipped agency teams working in collaboration with USDS on impactful projects, the public sector can successfully lay the groundwork for a technology-driven future.

"Our theory of change is … small wins, invested consistently over time," said Hsiang. "Then that helps the agency and the contractors develop a new perspective on how we can work well together in an integrated, iterative way, in collaboration with users and the public from day one," she said.

Chapter 2

How agencies are leveraging the Technology Modernization Fund to transform government IT



The Technology Modernization Fund (TMF) represents a significant opportunity for federal agencies to modernize their IT infrastructure and enhance service delivery, making them more efficient, secure and adaptable to the demands of the digital era. The TMF provides financial resources to agencies undertaking projects aimed at improving their technology capabilities, such as cloud migration, cybersecurity enhancement and legacy system modernization. By leveraging TMF funding and adopting innovative approaches, agencies are paving the way for a more efficient, agile and constituent-centric government.

As the TMF continues to evolve, it's designed to drive transformative change and unlock new opportunities for innovation and progress for agencies across the federal landscape. During a panel interview at GIST24, industry experts shed light on how agencies are leveraging the TMF to revolutionize their IT infrastructure.

Driving innovation and efficiency through modernization

The TMF, established under the Modernizing Government Technology Act, aims to assist federal agencies in modernizing their IT systems and processes. With a focus on cost savings, streamlining operations and incentivizing innovation, the TMF has become a critical tool for agencies looking to upgrade their technology stack.

The National Archives and Records Administration (NARA) and the National Transportation Safety Board (NTSB) serve as prime examples of agencies successfully leveraging the TMF to achieve their objectives.

According to NARA Chief Information Officer Sheena Burrell, NARA tapped into TMF funding to modernize its case management system, transitioning outdated legacy platforms to more agile and efficient solutions. By leveraging cloud technologies and adopting agile methodologies, NARA aims to improve search functionality and information accessibility, benefiting both internal users and the public.

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>
> **Chris Daniels** | Federal Sales Director, Confluent

Similarly, NTSB received $16 million for digital service delivery, accelerating its efforts to modernize its infrastructure and improve customer experience. By consolidating disparate data sources and implementing modern cloud-based solutions, NTSB aims to streamline its operations and enhance access to critical information for users and stakeholders.

"A lot of our applications and processes were developed in a disparate environment, so there's a lack of information sharing between them," said NTSB Chief Information Officer Michael Anthony. "With TMF, we can improve all of these communities of interest by putting all of our information in one central secure repository, getting that information mapped appropriately and finding more modern and secure ways to share information with other federal partners."

The TMF's impact extends beyond individual agency projects. It fosters collaboration and knowledge sharing among agencies, enabling them to reuse code, share best practices and learn from each other's experiences. Playbooks and resources developed through TMF-funded projects provide valuable insights and guidance for agencies embarking on similar initiatives, facilitating a culture of innovation and continuous improvement.

"We're really excited about TMF because it can influence what we see on the DoD side as people move to embrace AI," said Chris Daniels, federal sales director for Confluent. "Having the framework in place gives traditional players and folks that are not as apt to be on larger programs a way to actually get in front of their own customers and access the budget so they can be effective."

Chapter 3

Engineering the future: How government tech leaders can cultivate innovation

Amid a constantly evolving technological landscape, government tech teams face a herculean task: Engineering modern platforms and systems that underpin all their agency's operations. But high-performing teams don't shape themselves; leaders must take the necessary steps to create organizational cultures that foster continuous improvement and innovation.

During the "Accelerating Innovation with Engineering Excellence" session at GIST24, senior technology leaders from public and private sectors discussed strategies and tools that help employees deliver mission outcomes effectively and efficiently. Here are some highlights from their conversation:

Transformation through people and processes

As leaders work to integrate modern solutions, change management is crucial to ensure teams can fully reap the benefits of a new technology. A data-centric approach can help track progress, as well as set measurable benchmarks and goals.

Jennifer Swanson, deputy assistant secretary for the U.S. Army for Data, Engineering and Software, discussed implementing an agile methodology timebox approach to help her team see the value in transitioning from manual to automated workflows. Teams had a set period of time to complete a number of tasks using automation, and evaluated results afterward.

"They were able to really see the value to them [and realized] 'I have all this time back … because I'm not doing all this stuff manually anymore,'" she said.

Moreover, the sheer size of many agencies can be an obstacle to large-scale innovation. Nathan Sanfilippo, executive director of multi-channel technology for the Veterans Experience Office in Veterans Affairs, explained that his strategy is to focus on isolated successes and find ways to scale that benefit the organization as a whole.

"I think what we're trying to do is foster that local innovation, because that's where some of the best ideas come from," he said of his team's work to improve technology and processes for VA. "But make sure at the beginning of that process, you're also thinking about … the balance between fostering that innovation and being able to scale it."

Building an environment for innovation

To establish and maintain workplace innovation, leaders must encourage creativity and collaboration.

"You have to give your employees air cover so they know they've got a safe, high-trust environment where their leadership has their back," said Sean Applegate, chief technology officer for Swish Data. "They're going to try something new, they can pitch the idea. You can talk them through it, coach them, and then provide them the automation and the technical platform to execute very efficiently."

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From modern software practices like CI/CD and agile development to advancements in artificial intelligence, cybersecurity and cloud, as well as solutions like coding libraries and observability platforms — there is a seemingly constant proliferation of technologies and methodologies that can bolster innovation.

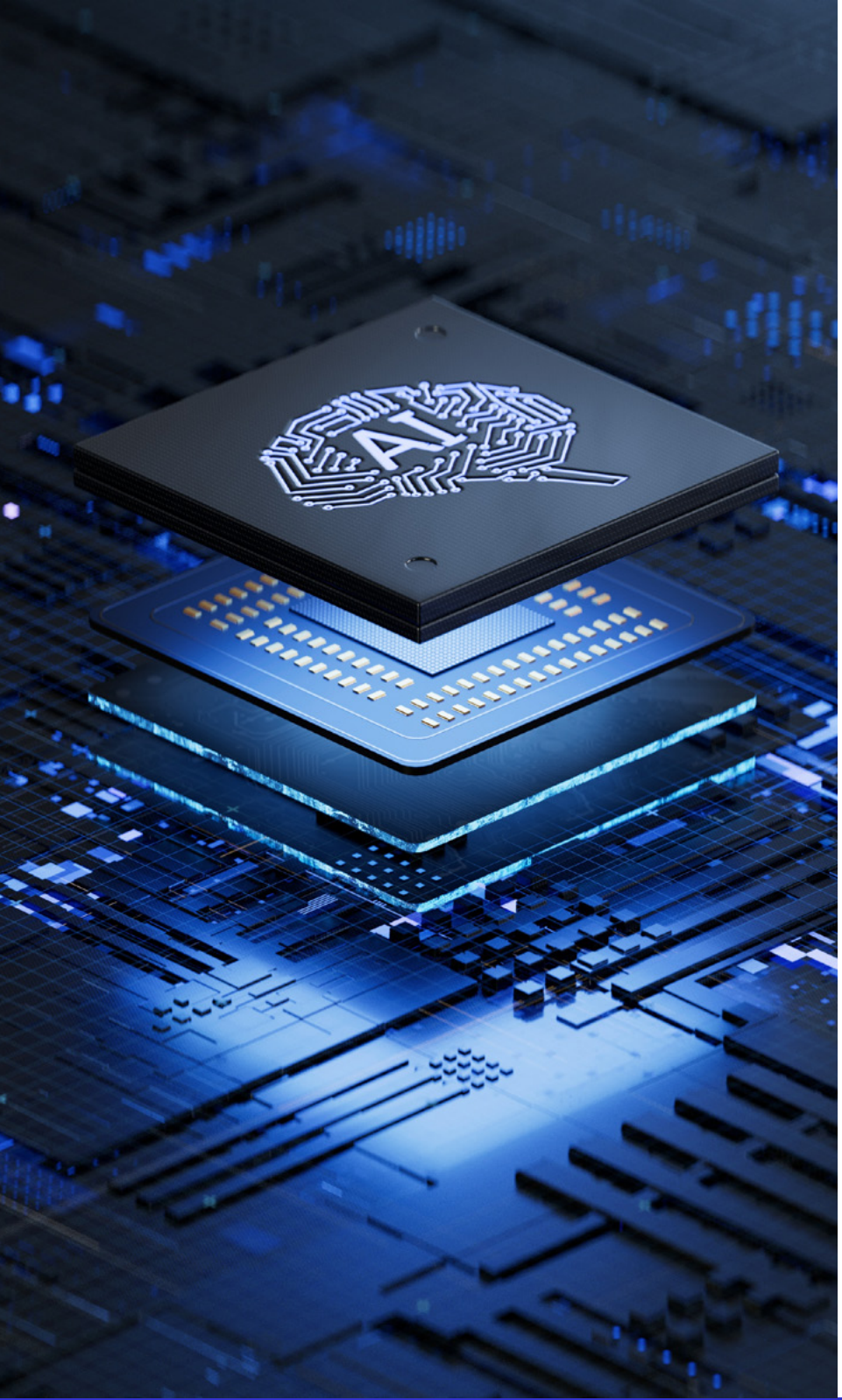
However, choosing options that best support the mission and successfully deploying those tools can prove to be a heavy lift for agencies. Luckily, industry partnerships can help guide the way forward, according to Nathaniel Parks, senior solutions engineer for Dynatrace.

"Being able to provide those best practices that we've developed over years working inside of the private sector … we can take that knowledge base, that technology that we built around those practices and apply it … to the critical agencies that need those the most," he said.

Empowered by industry and continuously innovating under the right leadership, government tech teams can create streamlined processes that ultimately lead to a stronger, modernized public sector.

Chapter 4

Securing the future: Navigating the global AI race



Artificial intelligence is becoming a fundamental tool in government operations, with Gartner's 2024 forecast projecting that over 70% of agencies will use the technology to improve decision making. Although the U.S. currently has a leg up in broad AI development and responsible practices, staying ahead of the curve to maintain this position is critical amid the increasingly competitive global cyber arms race.

"The onus is on us to maintain that lead … by continuously working on how we are adopting these technologies, and bring them into the government," said Jon Elliott, chief of test and evaluation, and director of AI assess and assurance for the DOD, during the "Gaining Momentum in the Global Race for AI Advantage" session at GIST24.

During the session, Elliott and top industry leaders delved into key challenges and strategies for the U.S. to harness the power of AI. Here is an overview of their discussion:

Data security is king

Clean, reliable data is paramount in government AI deployments. However, many of today's emerging tools don't provide the necessary levels of security. For example, large language models train on data gathered from the internet and store all inputted information in parent company servers — a process that could put mission-critical data at risk of corruption or exfiltration.

"From the IT side, we in the government have a lot of problems transitioning state-of-the-art [commercial technology] into government use cases … especially with

the DOD, our data must be protected because it's national security related, it's things that cannot be let out of our hands," said Elliott, explaining that his team is working to leverage new AI technology in ways that are more conducive to a military environment.

Establishing data governance is currently a top priority for U.S. leaders, but because data exists on the open internet, Ron Thompson, former chief data officer and deputy digital transformation officer for NASA and founder of West River Consultancy, noted that protecting it requires international cooperation.

"The regulations need to be less regional and more global because the data is now global," added Glen Deskin, head of engineering and cyber security evangelist for the office of the CTO at CheckPoint. "As that data is released, it's available everywhere. So all geographies … need to adhere to the same type of standards in the use, and modification or changes to that."

Public-private partnerships pave the way for innovation at speed

As the public sector works to integrate AI in a more comprehensive way and maintain a strategic edge, strict compliance and authorization requirements can slow procurement, hindering the speed of innovation.

"We have to improve that process [so that it] doesn't get in the way of our folks in agencies being able to adopt these leading technologies, and get … quicker to solutions and be able to utilize them," Deskin said, "because it certainly is going to put us at a disadvantage if those technologies are not in their hands."

Closer partnerships and increased information sharing with the private sector can aid in faster, more agile implementation. Moving forward, Deskin also advocated for U.S.-based companies to give government partners the advantage of securing new capabilities before the international market.

"The government will then look to those innovative approaches and applications and go, 'given my pain points and workflows, where can I leverage those … and then merge them into my workflows?'" Elliott said. "You do that through public-private partnerships, understanding the data and how we want to share it and leverage it."

Working hand-in-hand with industry to consistently provide functional tools to users will allow government to maintain a culture of trust and transparency around AI that will drive innovation and ultimately help secure dominance in the future global landscape.

"One of the goals of how we employ and use anything in the government, and then especially in AI, is … we want our users to have confidence that it will work, that they can trust that it will work when they need it to work," Elliott said.

Chapter 5

Empowering constituents with human-centered design

Empowering constituents through seamless digital interactions with the government remains a longstanding goal, yet outdated systems and complex platforms often impede progress. However, a shift toward human-centered design offers a promising pathway to overcome these challenges and enhance user experience.

Human-centered design principles prioritize the needs and preferences of users throughout the design process, ensuring that digital services are intuitive, accessible and efficient. By actively engaging end-users and incorporating their feedback, agencies can create interfaces that are not only user-friendly but also foster rapid innovation.

Data-informed design improves CX

Citizens have come to expect the same quality of customer service from the government that they receive in the commercial sector where they can get what they need quickly, efficiently and in a language that they can understand. But according to Aaron Stienstra, a senior customer experience specialist at the Office of Management and Budget (OMB), there are gaps between what the public expects and what the government delivers. For Stienstra, the key to bridging those gaps and being able to deliver effective government service lies in designing for the citizen experience.

“Human-centered design, if done thoughtfully and intentionally, can really improve the equitable access of service delivery for all of the people that you’re designing for,” said Stienstra in a panel interview during the GIST24 Conference. “Some of the ways that we’ve done that is by

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being extremely deliberate about talking to a variety of people in different places, ages, gender, races and tribal folks to hear different perspectives on accessing services."

Stienstra stressed that when agencies take into account user satisfaction data and usability testing, they can identify pain points and implement targeted improvements, resulting in a more intuitive and user-friendly interface. And by considering diverse perspectives and conducting inclusive user testing, agencies create digital experiences that are truly inclusive and equitable.

For instance, between 2020 and 2023, the U.S. Air Force's IT systems saw a remarkable improvement in user satisfaction. Initially, dissatisfaction outweighed satisfaction by 5%, but according to Founder and CEO of BRAVO 17 and former CXO for the Department of the Air Force, Colt Whittall, satisfaction doubled after shifting focus to human-centered design.

"We see a lot of disparate systems that lead to a number of challenges for the users, the citizens and the employees," said Joseph VanDyke, deputy chief technology officer of federal civilian agencies at Riverbed Technology. "Where we tend to get the call is in helping [users] understand where the problems are, where the interactions are causing problems, whether it be software systems or hardware systems, and how we can measure the responses that the users have."

With an integrated view of user experience and performance data, IT can focus efforts on areas with the greatest potential for rapid improvement, leading to a significant increase in user satisfaction. By prioritizing user needs, fostering innovation and embracing inclusivity, agencies can deliver digital experiences that meet the evolving expectations of the American public and drive meaningful impact in the public sector.