

Technology Is Advancing Every Day; Oversight Should, Too

By Taka Ariga

Throughout modern history, humankind has experienced many major inflection points marked by revolutionary technologies. Think how steam engines, electricity, the internet, cloud computing, and smart phones have all reshaped our expectation of productivity. Today, we are on the threshold of yet another enduring inflection, this one driven by an exceptional confluence of abundant data, powerful computing, and ingenious math. If you guessed artificial intelligence (AI), you would be right! In fact, most of the devices used to produce the *Journal* are powered by AI.

As I have testified before Congress, we are truly living in a golden era of algorithmic renaissance. AI allows us to do things that were confined to the realm of fiction only a few years ago. With its mainstream ubiquity, we can now use common descriptions to create novel images or functioning software codes with AI, or transform user experience, fight fraud at scale, and extrapolate existing research into exciting scientific findings. New job titles, like prompt engineer and chief AI officer, now appear everywhere because of AI. To underscore the importance of this technology in the public sector, the Government Accountability Office (GAO) recently identified more than 1,200 AI use cases in active development across federal agencies. It seems like plenty of feel-good promises are exerting pressure to drive AI to solve every problem.

At the same time, these incredible advances are offset by real impacts on jobs, privacy, liability, equity, and other

societal consequences. A **soon-to-be-released** AGA survey strongly reflects these worries among its members. While I don't subscribe to the dystopic narrative that AI will replace us all, I do believe the future will be demarcated by those who learn to use AI well versus those who refuse to adapt.

Trust but Verify

Taglines such as "responsible AI" and "the ethical use of AI" have made a lot of cameo appearances at recent conferences and forums. At AGA's PDT 2024, for example, I was invited to speak at six separate sessions on variation of these topics. It serves as an important reminder that governments at all levels need to harness the opportunities of AI within the context of preserving our democratic values.

Nothing I have laid out should be news to even the most casual observers of this technology. While I am a big fan of AI, I also wonder: how do we really know whether AI is being used appropriately? In our rapidly evolving, unnervingly algorithmic world, robust oversight must stand as a singular constant to manifest the important ethos of *trust but verify*. Demonstratable performance and meaningful accountability must coexist as the bedrock of AI implementations, ensuring they are effective, efficient, economical, ethical, and equitable. (Bonus points if this reminds you of the Yellow Book principles!) An organization that grasps the ability to assess AI at the pace of advancing technology likely can best capitalize on the lofty promises of AI.

It is, therefore, both ironic and troubling that relatively few auditors and evaluators have experience with conducting algorithmic assessments. Moreover, it is rare to find oversight entities that proactively integrate AI capabilities to enhance operational productivity. (*No, regression doesn't count as AI.*) Given the shifting behaviors underpinned by an ecosystem of machine learning models, the oversight function of this technology cannot rely solely on reactive and retrospective approaches. Doing so risks losing long-term relevance of oversight because AI technology is progressing much faster than an audit report that could take a year to produce.

Write a New Playbook

If robust oversight is needed to balance performance with accountability, then the approach must change from an episodic one to continuous monitoring. (For more information on the concept of continuous monitoring, take a look at GAO's *AI Accountability Framework*.)¹ This, of course, is easier said than done, as it touches on longstanding tenets in the way auditors and evaluators traditionally operate. Since this is likely my last opinion piece as GAO's Chief Data Scientist and Director of Innovation Lab, allow me to stand on my soapbox with a few suggestions for building the foundation of AI oversight:

- Upskill Your Digital Literacy.** Know how AI works — *and how it doesn't!* There is no shortage of free, high-quality online training content available. This doesn't mean you are expected to become a data scientist or technologist; however, if your knowledge of AI is superficial, you can only ask superficial questions. Conversely, if you have a more nuanced understanding of AI, you begin to develop sensible professional judgment that enables you to probe more meaningfully.

- Integrate Oversight Early and Routinely.** There is no rule that says auditors and evaluators must wait until an implementation is complete to initiate assessments. Independence doesn't have to be adversarial. In fact, there is so much value in addressing emerging accountability challenges upstream, at the procurement, research, design or prototyping phases. If done with agility, it creates the possibility of incremental adjustments as opposed to large-scale recommendations that can be difficult to implement post-facto and can often languish.

- Play a Team Sport.** Ensuring AI accountability is not your problem to solve — *alone*. One of the key themes from GAO's *AI Accountability Framework* is the need to bring along friends with varying expertise, including data scientists, technologists, lawyers, privacy experts, civil rights advocates, and acquisitions professionals. Addressing the complexity and diversity of risks associated with AI requires careful orchestration of different players and perspectives.

- Be Entrepreneurial.** Why must auditors and evaluators assess a 21st century digital technology using 20th century analogue tools? Innovating new capabilities using AI is equally as important as conducting oversight of AI. The ethos of entrepreneurship and experimentation is critical in figuring out use cases that can quickly bring measurable value. However, it is also often true that while everyone wants innovation, nobody wants change! I am sorry, but that rigidity does not work. Using AI successfully will require reimagining existing processes, recalibrating risk tolerances, and accelerating decision-making governance.

As I transition into an exciting new role at the Office of Personnel Management (OPM), I remain optimistic and energized about AI's potential to redefine the civic tech landscape. My experience at GAO has taught me that we will master AI. Frankly, there is no going back to the analogue world, so we might as well find a way to shape our future. Oh, I do feel obliged to point out that, despite access to a variety of AI prototypes developed by GAO's Innovation Lab, this article was written with 100% human intelligence and 0% artificial intelligence. 🤖

Endnote

1. GAO. *Artificial Intelligence: An Accountability Framework for Federal Agencies and Other Entities* (GAO-21-519SP), June 30, 2021; <https://www.gao.gov/products/gao-21-519sp>



Taka Ariga was the first Chief Data Scientist and Director of Innovation appointed by the Comptroller General of the United States for

GAO. He also led the development of GAO's Accountability Framework. He is now the Director of Enterprise Data and AI at OPM, helping to distill value from data for the benefit of over 2 million federal employees. He has spoken at many AGA national and local events, and is the recipient of AGA's Relmond P. Van Daniker Government Transparency Award for his work at GAO. A native speaker of both Japanese and Mandarin Chinese, Taka is also a serious classical chamber musician and competitive tennis player in his spare time.