

Where Do Agencies Still Struggle with AI Adoption?

Report found continuous challenges with government technology and data, workforce and risk management.

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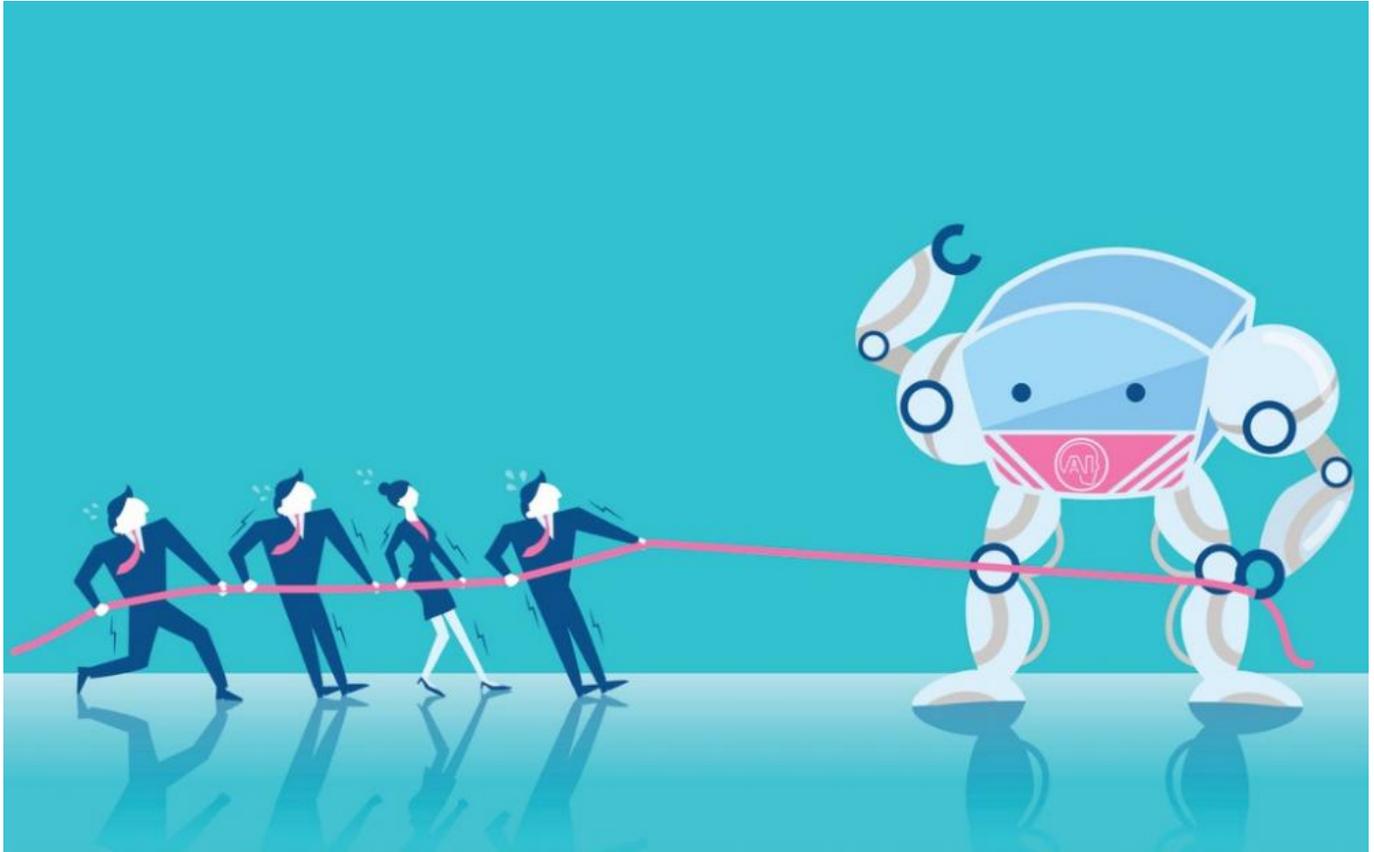


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There's no denying the disruption of artificial intelligence in government, which is why members of Congress are holding [hearings](#) with the private sector to learn more about the technology and how to adopt it. It's also why agencies have already started implementing basic automation and machine learning.

But the public sector still faces foundational challenges it'll need to overcome to increase its potential of entering the AI space. In IBM Center for the Business of Government's report, "[Delivering Artificial Intelligence in Government: Challenges and Opportunities](#)

,” those pain points are in technology and data, workforce and risk management.

Technology and Data

Agencies are set back by outdated systems and a legacy IT infrastructure. They’re still paying to maintain them, too, which can consume a large chunk of an already tight IT budget. IBM recommends investing in upgrading and modernizing internal IT. (With the recent passing of the [Modernizing Government Technology Act](#), agencies might have more flexibility to do so.)

Agencies also face limited IT interoperability because of siloed IT systems, misaligned agency-specific IT and data governance, and internally built stand-alone systems. This hurdle makes it hard to integrate data across systems, but cloud computing and open source tools can streamline internal IT processes.

And as the route of AI is data, agencies aren’t yet prioritizing data-driven solutions. IBM recommends identifying the data-intensive problems that can benefit from machine learning and cognitive capabilities, investing in data governance and ultimately, deploying AI systems that use data to improve public services.

Workforce

Agencies will have to reconsider its workforce management practices and human resource strategy. Automation and machines will replace low-skill and medium-skill jobs, but up quality and provide new work opportunities. To prepare, agencies should begin transforming its workforce to take advantage of AI capabilities, and assign human experts to design, train, test and evaluate AI systems.

Agencies are also used to owning and building their own systems. But with AI, the government will have to develop collaborative partnerships with academia for AI projects, and rely on the private sector to design and deploy AI systems for mission-critical priorities.

And because agencies have a limited capacity for system level redesign, AI systems will require them to rethink how to meet mission goals. It’ll mean stepping step away from patchwork short-term solutions, redesigning some processes to increase efficiency, and using AI to augment human decision-making.

Risk Management

The government still faces IT system breaches, and security problems can be magnified as AI applications are deployed, creating a “highly connected systems-of-systems,” according to the report. Cybersecurity issues will only become more critical, so agencies really need to develop the cybersecurity capacity and bridge any security gaps in even the simplest of AI applications.

The report recommends having clear security and privacy details on all elements of AI systems, including data, analytical engines, algorithms, computing platforms, networked systems and devices — and a plan to monitor them with tools, personnel and resources.

To successfully deploy AI systems, agencies will also have to rethink risk. The government is very risk averse, limiting its ability to experiment with new technologies. IBM recommends promoting innovation through crowdsourcing platforms, increasing awareness of the potential AI through projects and working with other agencies on common issues AI can solve.

And ultimately, the government will have to consider AI governance. Emerging technologies don't come with standards, and a lack of consistent policy can cause stalled adoption or even systems deployed without policy. So, it's important for agencies to monitor systems and keep track of any unexpected outcomes, and develop efficient audit and inspection mechanisms.

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