

Evolving Use of Artificial Intelligence in Government

By Michael J. Keegan, Forum Editor

The use of artificial and augmented intelligence (AI) in government is expanding as the application of these tools and techniques continue to evolve. Governments are embracing AI for mission critical services that include identifying insider threats, supporting military deployment planning and scheduling, and answering routine questions about services. Agencies are considering additional uses that range from checking compliance with tax laws and regulations to assessing the accessibility of government products and websites.



The term artificial intelligence refers to machines and software able to perform tasks we typically associate with humans, such as recognizing speech or images, predicting events based on past information, or making decisions. Machine learning, another commonly used term, is a subset of AI that uses large amounts of data and information to continually improve how a system performs a task. While AI has a long history, it has begun to deliver real results, particularly with the recent rapid progress in machine learning and the increased availability of data and computing power.

The advent of AI has moved rapidly in government. In May 2017, Congress established the bipartisan Congressional Artificial Intelligence Caucus, and members have since introduced numerous pieces of AI legislation. In February 2019, the administration launched the American AI Initiative through executive order, and the U.S. Department of Defense also released its own strategy on how to incorporate AI into national security. As agency use of AI evolves, the federal government is leading a comprehensive initiative to maximize AI's benefits, while laying the groundwork for agencies to address risks responsibly. To increase the trust the public and

federal employees have in government's use of AI tools, the government's strategy deals with transparency, security, technological know-how, procurement, budgeting, and risk management.

Over the last two years, the IBM Center for The Business of Government and the Partnership for Public Service have collaborated on research focusing on the use of AI in government and its implications. The finding and insights from this joint effort culminated in the release of three distinct yet complementary reports:

- ***The Future Has Begun: Using Artificial Intelligence to Transform Government.*** This report offers four cases of organizations that have used AI. It distills findings from over a dozen interviews with thought leaders who are applying AI in government and demonstrates that government can use AI to solve real issues and meet their missions. This forum contribution will provide a synopsis of two of the four cases outlined in the full report.
- ***More Than Meets AI: Assessing the Impact of Artificial Intelligence on the Work of Government.*** This report addresses how government can best harness AI's potential to transform public sector operations, services, and the skill sets of employees. It draws on insights from a series of roundtables with government leaders and focuses on three areas: AI impact on a transformed workday, the potential for personalized customer service, and the increased importance of technical and data skills.
- ***More Than Meets AI, Part II: Building Trust, Managing Risk.*** This report discusses further steps agencies can take to manage risks. While taking advantage of the many anticipated benefits of AI, agencies must also manage real and perceived risks associated with AI to build trust in the technology.

The final contribution in this forum, **Agile and Inquisitive—AI Leadership**, explores two leadership qualities essential for meeting the demands and challenges of a continuously evolving technological landscape. With the promise of artificial intelligence no longer in some far-off future, government leaders must comprehend and harness both its perils and possibilities and doing that effectively will require these leaders to be agile and inquisitive.

This forum highlights the insights, findings, and recommendations derived from the IBM Center and Partnership roundtables and reports. Several of the contributions in this forum are edited excerpts of the reports referenced above. It is our aim to spark a conversation on the use of AI, help prepare federal leaders to assess the inevitable changes coming, and provide government leaders with insights on how to navigate this transformative time.