Unlocking the Value of AI-Powered Government

JULY 21, 2021
By Nadim Abillama, Steven Mills, Greg Boison, and Miguel Carrasco

Governments need to start looking to—and learning from—the leaders when it comes to AI implementation. Many governments have begun to implement AI across various small-scale pilots. But they are still limited to experimentation, and few have achieved true AI at scale. In contrast, AI leaders have implemented AI broadly, transforming the business through higher-quality and more personalized services, enhanced revenue, and lower costs. They offer a point of contrast and a sense of what is possible through AI.
Implemented effectively, AI can generate benefits for public-sector organizations in three ways: smarter policymaking, reimagined service delivery, and more efficient operations. Thus, the technology can help governments better meet the needs of their citizens while making better use of taxpayer dollars.

**LEARNING FROM THE LEADERS**

While governments are still in the early stages of applying AI, some leading exemplars offer key insights into AI adoption and the potential benefits in service quality, customer satisfaction, and overall business efficiency (speed, cost, and accuracy). These leaders can help governments understand the art of the possible.

Starbucks, for example, has maximized its use of data and AI to create personalized experiences for its millions of customers, taking into account details like product preferences, store location, and time of day. Personalized services range from product offers to food and drink recommendations to brewing specifications. Apps and order history are used to simplify and streamline the ordering and purchasing processes. Behind the scenes, AI improves operational efficiency, allocating labor across stores and optimizing staffing schedules. These efforts have freed up employee time and resources for reinvestment in connecting with customers and, ultimately, in providing a better in-store experience. Customers have rewarded the effort with a three-fold increase in revenue per customer and a similar increase in marketing campaign engagement.

**A VISION OF SUCCESS FOR GOVERNMENTS**

With such global leaders providing examples of the transformative change brought about by AI, governments can begin to envision the full extent of an AI-powered government. There are three broad areas in which governments can apply the lessons of AI implementation: smarter policymaking, reimagined service delivery, and more efficient operations.
Implemented effectively, AI can generate benefits for public-sector organizations in three ways: smarter policymaking, reimagined service delivery, and more efficient operations.

**Smarter Policymaking.** AI has the potential to enhance the effectiveness and efficiency of each stage of policymaking by giving decision makers the tools to deliver more value to their constituents. AI and data analytics can make sense of demographic, consumption, behavioral, and other trends in nearly all government sectors, thus helping policymakers identify emerging issues and intervene with smarter policies and a more accurate understanding of their impact and costs. As policymakers formulate responses, advanced prediction, simulation, digital-twin, and optimization capabilities can help them evaluate a more comprehensive range of alternatives and find the best courses of action. Natural-language processing can identify similar or overlapping policies and eliminate conflicts prior to implementation. Once policies are implemented, social media sensing can scan for constituent sentiment and feedback. AI-enabled tools have the potential to provide regional and local leaders with the types of insights and analysis that were previously possible only at the national level, allowing policies to be better tailored to local conditions.

**Reimagined Service Delivery.** The second benefit of AI for governments is providing citizen services more effectively—and even developing new services. For example, governments can use job seeker data (such as work history, educational background, socioeconomic circumstances, and other relevant factors) to optimize the types of supplemental support that employment agencies offer, based on the interventions that have been most effective for similar job seekers. Traffic management optimization modeling can significantly reduce the amount of time
spent in traffic. Allocating health system resources using AI-enabled patient demand analytics can minimize wait times while reducing costs.

But the potential of AI-powered government goes far beyond these narrow examples. AI and digital technologies enable governments to create an entirely new citizen experience, with a single entry point connecting people with all relevant government services, personalized to their individual needs. Imagine the experience of a woman who loses her job. In an AI-powered future state, she would not need to apply separately for unemployment, food assistance, medical assistance, or other government services. Instead, her former employer would report the job loss to the government, and she would be automatically enrolled in all the relevant services for which she qualifies. In this same AI-powered state, when citizens contact their governments for support online, over the phone, or in person, a complete profile of all services used, recent life experiences, personal preferences, and other relevant data will be available to support improved service quality and faster resolution of their needs.

**More Efficient Operations and Processes.** AI-based process improvements have helped leading organizations increase the efficiency of internal operations and processes. For instance, AI-enabled procurement processes allow decision makers to identify inefficiencies and potential cost savings in the products and services they purchase. Other support functions can also benefit. AI can help learning and development organizations create customized training and education programs, it can help HR functions match qualified candidate employees to open positions, and it can help building maintenance predict problems for proactive remediation.
Imagine a future state in which every worker executing the myriad back-office administrative functions of government is paired with an intelligent assistant that can complete repetitive tasks. This robotic process automation tool fills forms, aggregates information from different government agencies and departments, and handles low-risk, routine approvals. The human worker is left with additional capacity to engage with citizens and address the most complex cases. The degree of engagement and personalized assistance citizens receive is dramatically improved, and government workers have far more rewarding jobs.

PRIORITIZING INVESTMENTS

One of the most fundamental challenges for government leaders is a lack of clear success metrics, which creates related issues in determining how to allocate financial resources. Corporations have profit and sales, but a housing and urban development department or ministry of justice has multiple outputs, many of which are incredibly difficult to quantify. Should a government’s next dollar be spent on drug treatment, reducing recidivism, policing, or urban renewal? And within those areas, should it prioritize smarter policymaking, reimagined service delivery, or more-efficient operations? AI can help governments by analyzing specific outputs and submetrics and then determining the initiatives most likely to make an improvement.

For example, consider a government working to reduce unemployment. There are multiple, potentially conflicting objectives the government must balance, including
minimizing the amount of time that individuals remain unemployed, maximizing placements in long-term positions, and maximizing the economic value of jobs. By breaking these objectives down into specific metrics and assembling them into a scorecard, an organization can apply AI-enabled tools to understand which ones have the greatest effect, and it can use data about past initiatives to understand the probable effect of future actions. This approach will provide decision makers with an understanding of which interventions are likely to have the greatest overall impact, the net effect of which will be to allow leaders to solve one of the core challenges of any enterprise: determining where to invest the next dollar.

“By breaking its objectives down into specific metrics and assembling them into a scorecard, an organization can apply AI-enabled tools to understand which ones have the greatest effect.”

**WHERE TO START**

Governments need to develop a strategy, governance structure, and change management approach for integrating AI into their operations. To maximize the benefits of AI and avoid some of the risks often experienced in the public sector, they should consider the following recommendations:

- **Determine clear ownership.** Implementing such a broad vision often means coordinating across departments/agencies, developing centralized expertise in AI, and addressing a range of ethical issues. Accordingly, someone in each department or agency should be designated as a point person to speak on behalf of the initiative, with clear lines of authority and ownership across the entire institution.
• **Align on the vision.** Starbucks met (and surpassed) its goal by setting a north star. The management team had a vision of what it wanted the company’s future to look like. It developed a strategy to create that future and used its vision as a guide throughout the journey. Governments need to do the same.

• **Start small and build the business case.** Developing a business case will become easier once early measures begin to prove the value of implementing AI. In the beginning, governments should focus on a small number of straightforward yet impactful use cases, build experience and capabilities, and then scale them across the organization. Initiatives need to begin with clear objectives and measures of success (some of which may not be financial in nature). Although creating a business case may be challenging, it will be critical over the long term in securing consistent funding and maximizing the benefits of scaling AI. Strong business cases and demonstrable successes will create tremendous support that transcends administration changes or leadership transitions.

AI holds tremendous potential to help governments better serve constituents through higher-quality service offerings, increased efficiency, and other advantages. Yet the current pace of implementation among governments is simply not sufficient. Given the pace of technology development, every day that governments wait to take decisive action is another day they fall further behind. To make faster progress, policymakers should study and take inspiration from the paths forged by global AI leaders.
ABOUT BOSTON CONSULTING GROUP

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and
digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.

© Boston Consulting Group 2021. All rights reserved.

For information or permission to reprint, please contact BCG at permissions@bcg.com. To find the latest BCG content and register to receive e-alerts on this topic or others, please visit bcg.com. Follow Boston Consulting Group on Facebook and Twitter.