Grand Challenge

- 12. Make Government AI Ready-

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Introduction

This memo presents three services related to the use of AI in government and suggests ways to implement them. AI is widely used in the private sector and the current administration is also emphasizing the development and use of AI through executive orders. Many government departments are exploring its pros and cons, and some are adopting it for specific purposes. While there are numerous plans, including guidelines and risk assessments for AI implementation, specific examples of full-scale implementation remain relatively limited. It is hoped that the recommendations of this memo will be beneficial for the next administration in the beginning stages of implementing AI in government.

The applications of AI are extensive and widely used in the private sector for tasks such as translation, customer service, face recognition, coding assistant and AI chatbot. If properly utilized, AI can greatly benefit public services and improve people's lives. This potential is expected to accelerate with recent advancement of AI technology. In the post-COVID-19 era, when contactless services have become more important, AI can help make these services more convenient. COVID-19 has also taught us the importance of preparing for new grand challenges, which will require administrative reforms that go beyond traditional government. Addressing these challenges will require the use of new technologies and it will require governments to trust their citizens to effectively adopt them (Ansell, 2021).

In 2010, a symposium on the future of public administration predicted information technology in 2020, including the increase in the amount of personal data and the use of IT in education (O'Leary, R., 2010), but it did not predict the use of AI, a new trend that is changing the world. AI gained significant public attention in 2016 when DeepMind's AlphaGo defeated Lee Sedol, and various applications emerged with the launch of ChatGPT by the openAI in 2022. Although AI has evolved rapidly, its adoption by public administration has been limited.

AI Services

The first recommendation is to apply AI technology to public health. People often avoid hospital visits due to concerns like cost, distance and inconvenience. Many tolerate minor symptoms until

they worsen, leading to more effort and expense if it's a serious issue. Given the wealth of diagnostic data available, AI could proactively detect conditions, reducing health costs. To achieve this, a federal public health platform could assist citizens with photo-based diagnoses and symptom questions. Health information, like hospital X-rays, could be managed alongside personal data and used continuously on this platform. For instance, if someone uploads a skin rash photo, AI could suggest medication or a hospital visit if needed. Additionally, symptoms described in text could receive preliminary AI analysis. Regular, AI-assisted imaging (X-rays, MRIs) could detect issues early, promoting better public health and lowering overall treatment expenses. AI-enabled diagnostics are already available in the private sector, which might lead some to think that this is not a government responsibility. However, in the current situation where the government is already spending significant funds on healthcare, it will be beneficial for people's wellbeing to regularly use AI services to conduct health checks and encourage others to ask questions about their condition.

The second recommendation is to automate procedural administrative services such as those at the DMV, except for the final decision. Since most of the documents needed to obtain a driver's license are downloaded and printed online, the DMV could get the documents from other agencies. If the documents required to apply for a driver's license are transferred as data from the relevant departments, the DMV office will only need to verify the applicant's identity and take a photo to issue a driver's license. Adding a booth that measures height, weight and captures a photo would reduce the process time. An AI or RPA's role would be to get the applicant's documents from other agencies when the applicant comes in, make an initial determination of the appropriateness of issuing a driver's license, and provide them to a human operator. This service process improvement would reduce DMV staff workload and dramatically reduce waiting and document preparation time for applicants. As a result, the final decision could be made based on the information provided by the AI, and the work that was previously handled by about 10 counters can be handled by 2 or 3 counters. Similar improvements could be made to passport issuance, national health insurance enrollment, and SSN applications.

The third recommendation is to use AI chatbots to handle government complaints. Currently, agencies such as the IRS and the U.S. Citizenship and Immigration Services use chatbots to answer questions about complaints, but the public is not fully satisfied. To improve these

services, chatbots would need to continuously learn from data to improve their performance, which will require collaboration with the private sector. Also, if a chatbot cannot answer a question due to insufficient data, it needs to acknowledge its limitations and seamlessly connect to a human agent. While there may be a learning curve at first, after a learning period, chatbots would be able to replace humans well enough in many tasks. Chatbot service technologies have advanced enough to satisfy the public, and the key for government use is continuous management and updates through collaboration with the private sector, which will be discussed in the implementation section.

Implementation

To successfully utilize AI in government, it is necessary to secure specialized talent and collaborate with the private sector. Since it is challenging for a particular federal, state, or local government to have all the capabilities to adopt AI on its own, it would be desirable for a specialized organization such as the U.S. Digital Service (USDS) to secure and train AI experts to assist other federal, state, and local governments. It will be difficult for organizations within the government to have private-level development capabilities, but based on their high understanding of technology, they will be able to greatly help other government organizations apply AI.

Even specialized organizations like USDS need to collaborate with private AI companies. AI technology evolves rapidly, and people accustomed to private services would expect government services to become as effective as private ones. Collaboration with private companies could be expanded to more public services, as Palantir, an AI company, currently does with the Departments of Defense and Homeland Security in security-critical areas.

As a specific example of USDS's role, first, USDS can collaborate with private firms for ongoing updates, streamlining access to AI services for state and local governments and making integration simpler. This approach would allow them to integrate the latest AI technology into their operations more easily. Second, USDS could create widely needed services, such as those for DMVs, which local governments could then tailor to meet their specific needs and local

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characteristics. Since AI services required by state and local governments are often similar, this model enables shared development and broader, more efficient use. Third, USDS can assist government agencies interested in adopting AI by providing strategic consulting throughout the planning process, helping them develop more effective and efficient AI-driven services. By offering solutions not only to improve the performance of AI services but also to address potential ethical and security challenges, USDS can empower these organizations to utilize AI more confidently and proactively.

Challenges

For AI to be applied to public affairs in earnest, the public needs to trust the use of AI. Since AI's internal decision-making process cannot be explained and carries bias depending on input data, it is necessary to build public trust by applying AI as an auxiliary tool or in areas where there is no risk. In addition, as the public service environment could change significantly due to the reduction of public servants due to the use of AI, it is necessary to find other ways to utilize them.

Conclusion

The use of AI is an irreversible change of the times. Companies and countries that effectively utilize AI will advance, while those that do not may suffer. It is not easy to decide which public services to introduce AI, what data to use to create a model, and through what procurement process to implement services, but if the private sector and the government work together and make efforts, they will be able to effectively utilize AI for public services. The public administration could take the public sector to the next level of service by preemptively embracing the change of the times called AI.

References

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