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From laggard to leader: Generative AI can put government in front of the change curve

Do what matters

The first thing we need to make clear about this point of view on generative artificial intelligence (AI) is that it is merely a snapshot taken at a particular moment. Everything around generative AI is changing so quickly that any current events we try to include are likely to be obsolete by the time you are reading this.

As we write, Italy has offered conditions under which it would allow ChatGPT to operate again. The Japanese government has announced intentions to embrace the technology fully.[1] And the Australian government announced plans to leverage ethical AI in programs as sensitive as the National Disability Insurance Scheme.[2]

The advent of generative AI will have a huge democratizing effect on organizations and people. Massive supercomputing power—once the domain only of organizations who could pay for it—is now available to help us as we work and live. We are moving into an era of AI-first, which will redefine relationships between businesses and consumers, between governments and citizens, and between humans and how we relate to products and services.

It's this very hype around this emerging technology that calls for an informed and balanced perspective to help government and public service executives understand what they can—and should—be doing now to channel the power of generative AI.

While generative AI feels new to most of the world, Avanade has been working with Microsoft on OpenAI since 2021 to understand the technology's capabilities, limits, and digital ethics considerations. Additionally, Avanade has supported industry and government efforts to guide a responsible approach to AI and related digital technologies, providing input and feedback on important frameworks from organizations including NIST, IEEE, and the World Economic Forum.

Generative AI is that once-in-a generation technology that marks a clear line between everything that came before and a new, AI-first world. Governments and public service agencies have an opportunity to shed their

images as technology laggards to become early adopters in this space. Generative AI, when used strategically and thoughtfully, can transform how agencies operate internally and how they interact externally with citizens and the constituencies they serve. The smart phone gave citizens the opportunity to report on downed limbs in parks or potholes in the moment, giving agencies many more eyes in the community. We expect generative AI to open up new possibilities in this vein. And early adoption also gives government an inside track on understanding the technology that many agencies and entities are being asked to regulate.

Of course, as governments step into this brave new world, they will want to bring citizens on the journey with them. Citizens must be confident in the protection of the data being used and in the algorithms that are processing it. Transparency can go a long way in maintaining public trust.

[1] OpenAI CEO Sam Altman Visits Japan As Its Government Embraces ChatGPT | Observer
[2] Shorten backs 'ethical' automation for NDIS assessments (innovationaus.com)

Something for everyone along the generative AI journey

Addressing government and public service agencies as a cohesive market is tricky given the many different types of organizations each with its own priorities, challenges and unique journey of innovation. Some executives haven't yet begun the journey to cloud and others are quite advanced in the digitization of government and citizen services.

The good news is that generative AI can benefit agencies wherever they are in their technology evolution.

For those who may feel left behind in the journey to cloud, IoT, machine learning, and the insights driven by data and AI, generative AI could help you leapfrog into vastly improving insights, analytics and citizen services quickly and without a lot of upfront investment. For example, simply putting your public-facing information into ChatGPT capabilities could enable citizens to find relevant information quickly and easily using natural language prompts. Even better, generative AI capabilities can instantly translate into many languages. Generative AI offers an individualized experience without the need for massive investment and a new IT infrastructure or platform.

Organizations that are more advanced in their digital enterprises can look at generative AI as a connection point to partners, including other agencies, to expand their knowledge bases and inform better decisions. Consider the many different agencies coordinating to serve the unhoused population in an urban environment. Each agency has information about an individual when he or she is in their care or jurisdiction but lacks insight into that person's status if he or she is using county services in addition to municipal ones, for example. With a generative AI system, all partners in an area could connect the dots, share data safely and create a bigger and stronger net for people in need of help. Having a legislative framework that sets the parameters for sharing is a step that Australia took last year.[3]

[3] Data Availability and Transparency Act 2022 | Office of the National Data Commissioner

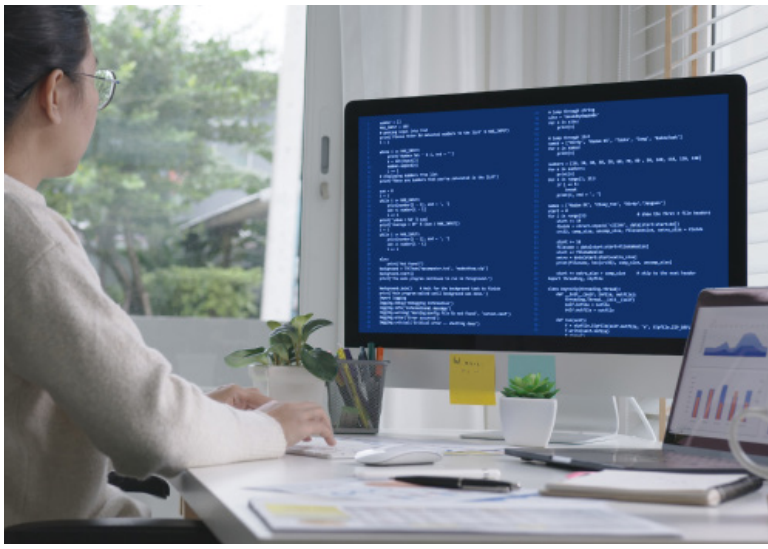
A public and closed case for innovation

The distinction between public generative AI and closed generative AI systems is crucial in understanding the potential benefit to governments.

Public systems—like Chat GPT or DALL-E 2—are pulling from the vast store of publicly available information on the Internet. It's here that issues around data privacy, copyright infringement and amplified biases come into play, along with model hallucination—which produces wrong but convincing results—and blackbox thinking or a lack of transparency on how/why results are produced.

Enterprise systems use the same fast data scraping and processing capabilities on a defined knowledge base. This allows for greater assurances that the sources are valid, and, even more important, that the data used and the results produced are significantly more secure. Microsoft is currently embedding its OpenAI Azure service into Microsoft365, Dynamics365 and Power Platform. This will enable enterprises to use pre-trained or custom models for their horizontal / vertical use cases based on existing data models. For example, customer service for citizens can be quicker and more effective if agents are equipped with a vast knowledge base they can rely on for information.

Public sector organizations have vast quantities of data and have always put a premium on keeping it secure. Trust is after all, the bedrock of good citizen relations. Now, generative AI offers a way to draw insight from that enormous data pool in a closed system. And setting up the knowledge base through which to filter the queries is straightforward and easy to learn.



Jumping in to experiment with AI

The barriers to entry into this new, exciting, and sometimes scary world are low. Microsoft is already embedding generative AI capabilities into its flagship products, and the ease of use of the capabilities have the potential to make experimentation low risk and low cost.

One quick win scenario, as described above, is pulling all the public-facing information aimed at citizens and visitors/tourists seeking information. People are accustomed to online self-service; generative AI can deliver a next-level experience that is intuitive and responsive.

Generative AI also opens up opportunities to engage with citizens. Agencies who seek public comment on rules and regulations before enacting them can now hear from people in their native languages. And citizens can use ChatGPT to help them draft their input—something that may seem too intimidating to do on their own. Additionally, if the city permitting office sees an uptick in inquiries around a specific topic, say requirements for water runoff, they could proactively put out relevant information, including workshops or how-to videos.

In addition to citizen services, generative AI can provide quick value to government workers and the people they serve as well. Take corrections institutions, for example. Turnover in this field is often high, yet safety and lives depend on having corrections officers know how to address myriad high-stakes situations. Generative AI could provide access to insights from other officers across the system (or across several systems), giving someone near real-time guidance on how to handle a scenario properly.

Look before you leap

There is clearly a sweet spot between being too cautious about new technology and getting left behind and jumping in too quickly and getting burned. Here are some things to consider as you contemplate a move into this space:

Keep a human in the loop

Generative AI is not here to do our jobs; it's here to help us do our jobs better. Oversight is essential, especially as the system itself is learning as it goes. Consider enhancing existing capabilities like a chatbot with generative AI.

Be transparent

Let people know when you are using ChatGPT. That context will help them make sense of the information they receive and attune them to more oversight as well. And if you are worried about someone realizing you're using ChatGPT for a particular function—writing a personalized letter, for example—it may be a sign that you or your constituents aren't quite ready for that yet. Trust your instincts.

Work with a trusted advisor

Because generative AI has low barriers to entry, there will be plenty of potential partners looking to help apply this innovation in various scenarios. The fact that the tool is easy to use doesn't mean it comes with less risk. It's essential to work with a partner that understands a) the technology and its potential to support an organization's strategic agenda; b) how to use the technology to come up with relevant and reliable insights; and c) how to ensure the technology isn't weakening existing security, governance or data privacy practices. For public service agencies, the last of these considerations is the most vital.

Embrace innovation at two (or more) speeds

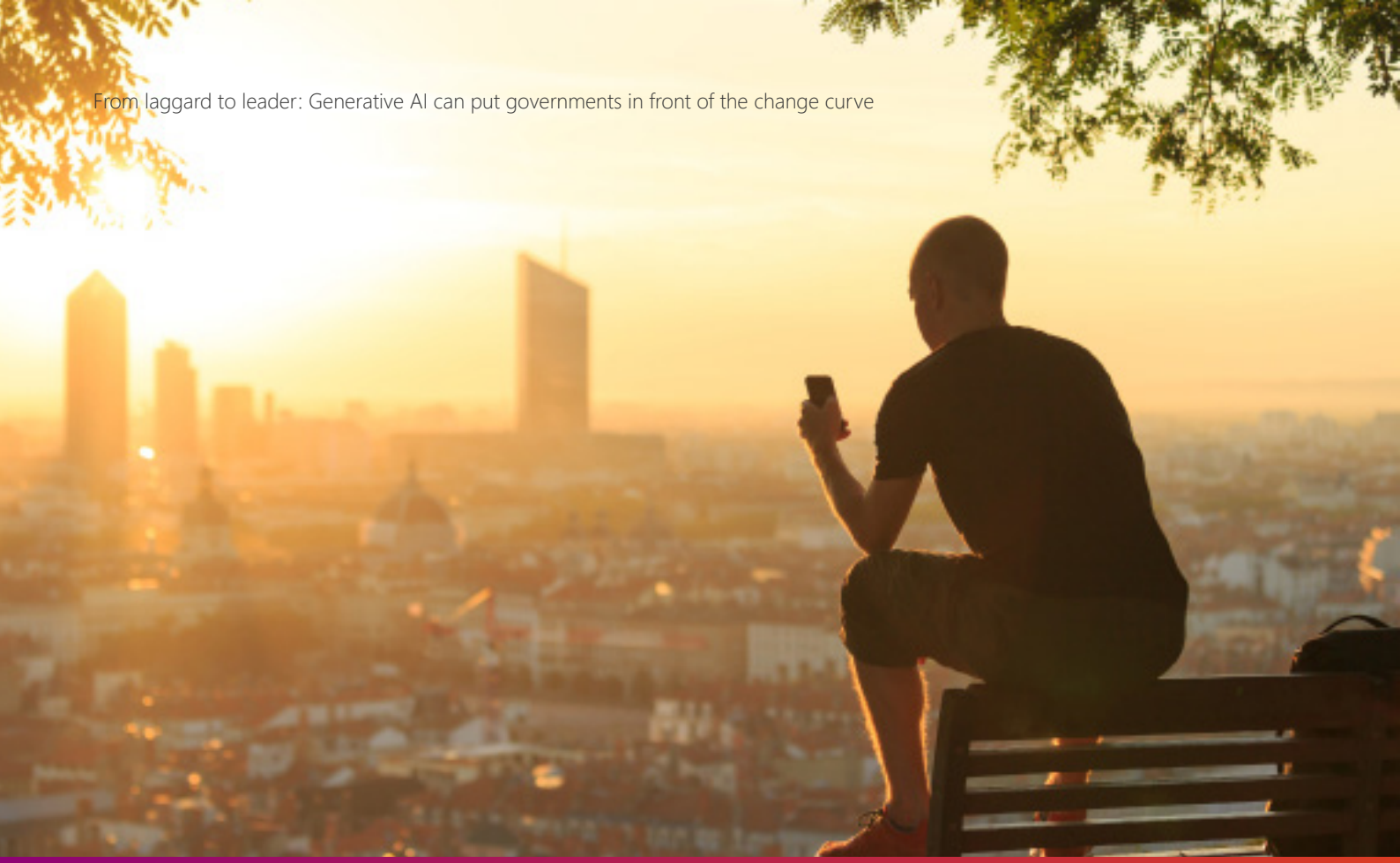
Big gains from generative AI does not change the imperative around continuing your innovation journey. Moving into the cloud and embracing more digital innovations will benefit your entire organization and power future generative AI efforts.

Keep humans in the loop with a people first approach

Our first consideration was maintaining human oversight of generative AI uses. We're returning to humans here because it's essential to acknowledge and plan for the enormous culture change that will come with using generative AI. It has the capacity to shift people's focus by quickly accomplishing tasks, so how does that change someone's job and how they view their contributions to the team? Identify AI ambassadors to help others navigate into this uncharted territory.

Govern the technology with ethics

There are a lot of things you can do with generative AI, but what should you be doing? Some of these questions can be answered through an exercise that aligns generative AI aligns to an organization's mission and values.



AI Defined

Generative AI is a type of machine learning that can 'cognitively' generate synthetic data (like blog posts, reports, program code, artwork and videos) rather than simply analyzing or acting on existing data. **OpenAI** is the "capped" for-profit (formerly nonprofit) research org which is succeeding in making breakthrough progress at training generative AI models for versatile and dynamic 'conversations' (**ChatGPT**), images and art (**DALL-E 2**), coding (**CoPilot**) which turns natural language prompts into fully-fledged code across dozens of programing languages. Avanade has been involved with Microsoft on OpenAI since 2021 when the services were in early preview. Building on OpenAI's success, several startups are pushing the generative AI boundaries even further (**Stable Diffusion, MidJourney**, etc.).

Source: Avanade Hub

"Send a message"

The same words that ChatGPT uses as a prompt are perhaps the best call to action for government and public service agencies.

Early adoption of generative AI could send a clear message about a forward-thinking approach to innovation that is not something most government entities are known for. It can convey to citizens a commitment to being responsive to their needs. It can also signal a working knowledge of the technology, which some agencies will be asked to regulate.

It will take some time to find your footing in this new world. Experimentation and innovation are part of the process as no one wants to move too quickly with a tool that is this powerful. Before you send a message by using generative AI, the smartest thing you could do is to send a message to a trusted advisor in the digital space. Avanade is working with clients to take an approach to generative AI that encompasses strategy, innovation and safe and effective execution.

Stepping into lead a technology transformation rather than following one is a bold move. Yet with the right partner and the right approach, the reward can be well worth the risk.

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Do what matters