The Potential of Artificial Intelligence in Government Citizen Engagement

**RESEARCH BRIEF** 



# Introduction

Today, with the rapid speed of technological innovation, as well as rising citizen expectations, agencies are looking for new ways to increase citizen engagement and satisfaction. Keeping pace with citizen experience expectations has become even more complex because of the fast growth of channels and interactions. Investing in artificial intelligence (AI) and chatbots may be a way to transform the way government organizations interact with citizens.

As citizen engagement grows more intricate, some government agencies are turning to service automation to alleviate pressure and enhance the citizen experience. The adoption of artificial intelligence is taking off as an efficient and cost-effective component of service automation — although it has also inspired uncertainty in parts of government.

Is most of government new to AI and chatbots? Do they think of it as something to ease their citizen experience and call center operations, or are they resistant to it? Are agencies incorporating chatbots as part of their artificial intelligence journey, or are they shying away? Are parts of government blending both artificial intelligence and the traditional human touch in their interactions with citizens?

To find the answers to these questions and more, GovLoop partnered with Genesys, a leader in citizen experience platforms, for this research brief. In the following pages, we analyze the survey results of 217 public-sector employees who were asked about their perceptions of and experiences with artificial intelligence, automation and chatbots. We also share insights from Tommy Minta, Digital Solution Lead at Genesys, as well as best practices about automation for wherever you may be in your artificial intelligence journey.

## Artificial Intelligence's Perception Today in the Public Sector: Survey Results

GovLoop surveyed 217 public-sector employees broadly about their perceptions of and experiences with automation, artificial intelligence and chatbots. The major takeaway of the survey? The use of artificial intelligence in the public sector is still at a relatively low point today.

Many survey respondents had not even heard of artificial intelligence, and of those who had, many were not considering implementing or pursuing solutions for a variety of reasons. Funding and prioritizing of artificial intelligence is, at this moment, low.

Those who were interested in Al's potential, however, did seem to understand its ability and potential for enhancing the citizen experience.

Examined together, there is another major takeaway for artificial intelligence in government: Today is a budding moment for education around this technology, and what it could truly do to help agencies with their citizen experience and needs.

Before moving into analysis of the survey results, it's important to set the stage for what we mean by the technologies discussed in these pages.



### Artificial intelligence

is, according to Techopedia, "an area of computer science that emphasizes the creation of intelligent machines that work and react like humans. Some of the activities computers with artificial intelligence are designed for include speech recognition, learning, planning, and problem solving."



### **Automation**

refers to the creation and application of technology to monitor and control the production and delivery of services, which saves labor and provides consistent experiences.



### Chatbots

are computer programs that run automated tasks and can be designed to simulate conversation with human users.

### **Overall Exposure of AI in Government** Is Still Growing

Diving into the results, we immediately found that penetration in the public sector of this technology and its capabilities was not high. In fact, 34 percent of survey respondents had not even heard of artificial intelligence or chatbots (See Figure 1). Those who were familiar with the terms had primarily come across them in industry publications (40 percent) or casual word of mouth (35 percent).

Tommy Minta, Digital Solution Lead at Genesys, ventured that the newness of this technology and the variety of competing terms were at the root of this result.

"There are a lot of different terms around the technology," he explained. "There's still confusion in this space. I would conclude that many in the public sector do not yet have the comfort to respond positively to say that they were confidently familiar with the technology."

It's not all a mystery, however – 5 percent of survey respondents had actually gone so far as to experiment with building their own chatbots. And there are plenty of existing chatbots in government already, from Citibot, a text-based chatbot in North Charleston, S.C. that helps people to report for city services, to Los Angeles' CHIP (City Hall Internet Personality), a chatbot for Los Angeles Business Assistance Virtual Network (LABAVN) that assists more than 180 people every day.

#### Overshadowed by Competing Priorities

To further understand the existing or near-future use of AI and chatbots in the government space, we asked survey respondents if their agencies were already using or considering implementing AI and chatbots to help guide citizens through their channels.

Only 12 percent were already using chatbots at their agencies; nearly 22 percent were not yet using the technology but were considering implementing it anytime in the next six months to over a year later. A majority, however – 66 percent – were not even considering implementing the technology at any point (See Figure 2).

When asked why their agencies were not yet moving forward with the technology, respondents cited a variety of reasons, the top ones being: too many other pressing priorities (26 percent); limited or no funding (22 percent); and generally limited understanding of the potential of the technology (16 percent) (See Figure 3).

## Figure 1: How have you learned about AI and chatbots? (Select all that apply)



# Figure 2: Is your agency already using or considering implementing AI and chatbots to help guide citizens through your channels?



## Figure 3: What is the primary reason that your agency has not moved forward yet?



Figure 4: Does your agency have funding for AI and chatbots?



Figure 5: How would you rate the priority of AI and chatbots in comparison to other IT initiatives?



Figure 6: What primary goal are you hoping to achieve by implementing AI and chatbots?



Enable efficient self-service containment 34%

Modernize & differentiate service provided to citizens 30%

Effectively route citizens who need human assistance 23%

Reduce costs 9%

Other 5%

Figure 7: What would be the primary metric against which your agency will measure the ROI of an AI and chatbots project?



Looking deeper at the budget and prioritization issues cited, GovLoop learned that 52 percent of agencies did not have funding planned for Al, and only 13 percent cited Al as being a high priority at their agencies, while 35 percent said it was not a priority at all (See Figures 4 and 5).

Minta said he was not surprised by any of these findings. "It's still the early days for these technologies," he noted. "That means the ROI or the benefits from them aren't as easy to put your finger on. So it can be easier for agencies to justify investments in technologies that have been around for longer, or that have a little bit more well-documented ROI."

#### A Growing Understanding of Its Potential for the Citizen Experience

All previous findings considered, there were many survey respondents who did understand the potential of transforming the citizen experience through artificial intelligence and chatbots.

When asked, "What primary goal are you hoping to achieve by implementing AI and chatbots?" the top goal from the GovLoop survey respondents was "Enable efficient selfservice containment," at 34 percent, followed by "Modernize and differentiate service provided to citizens," at 30 percent. Being able to effectively route citizens who need human assistance was also a priority, at 23 percent (See Figure 6).

And the public sector seems to understand that the primary success of artificial intelligence is if the citizen is happy – not necessarily cost reduction, which can normally be the case in government efforts. When asked, "What would be the primary metric against which your agency will measure the ROI of an AI and chatbots project?" the majority, 52 percent, said the rankings of citizen satisfaction would be their main ROI point (See Figure 7).

Minta explained that agencies have truly begun to grasp the importance of citizen satisfaction to their technological efforts, which is reflected in this survey question. Citizen satisfaction builds trust in government, and fortunately, it is on the rise – Americans were 2.5 percent more satisfied with government-provided services in 2017 than they were the previous year, bringing the total satisfaction to 69.7 out of 100. The score constitutes an 11-year high in satisfaction scores for the federal government, according to a report from the American Customer Satisfaction Index.



In fact, one GovLoop survey respondent wrote that their only concern about artificial intelligence and chatbots would be if it were not executed correctly: "We have concerns that the public will feel slighted and it will destroy the public relations we've built up over the last decade."

Minta understood that concern, and said it can be alleviated with blended AI and experimenting with low-lift efforts in terms of AI. "It is truly important to ask yourselves: When is self-service automation, such as a chatbot, the *right* thing to offer to a citizen, and when is it the *wrong* thing to offer? That's critical to ask yourselves, and will help you orchestrate an optimal citizen experience" he said.

"Having AI blended with the human experience in government can be truly transformative," Minta continued. "The important factor there for government is combining the automation along with the human touch. If a citizen tries to self-serve with a bot for steps one through four, and a human helps complete the fifth and final step successfully, that's a great experience for a citizen. It's efficient but gets the job done with a human touch."

Finally, when asked how they are considering leveraging Al and chatbots at their agencies, the survey results revealed that the majority of respondents are looking at Al as important for education for themselves and their citizens. Sixty-one percent said they want to try chatbots and Al to expose those technologies to citizens; 45 percent said they want to use them to improve business efficiencies; and 29 percent want to use the technology to improve the employee backend experience (See Figure 8).

Minta noted that this is a time of education and experimentation in AI for everybody, both citizens and agencies, and was not discouraged by the findings of limited penetration and understanding of artificial intelligence in the public-sector space. In fact, he viewed it as a strong moment of potential and education.

"Genesys has been working for a long time to create ways for agencies to flexibly and easily automate citizen needs while maintaining a positive citizen experience," Minta said. He also noted that right now, Al and automation are simply the next step for people to learn about to continue to increase their citizen experience journey. As with any new technology, it will take a while before it really gets going, but he believes with education and use cases that showcase the benefit, government will eventually really start to take off with Al.

In the next section, to help agencies become more familiar with artificial intelligence and its use in government, we'll go over five critical ways to think about it.

## Figure 8: How are you considering leveraging AI and chatbots? (Select all that apply)

Citizen engagement: exposing AI and chatbots to citizens 61%

Business optimization: making your business processes more efficient through the use of Al and chatbots 45%

Employment engagement: making agency personnel more efficient through the use of Al and chatbots 29%

Other 12%

## 5 Ways to Think About Starting With Artificial Intelligence

Chatbots and AI are about reaching a point where people can dialogue with data. Agencies should start with identifying the most common self-service tasks that citizens need that can easily be automated – like directing users to a particular resource page, payment services or appointment scheduling. And while some organizations are familiar with chatbots, many may be averse to integrating them into agency operations due to a lack of understanding of the technology's potential. A lack of knowledge of the technology, however, is not always the issue. For many, the integration of AI represents a major change in culture and operations that may not match with citizens' current idea of government. For instance, many citizens and agencies alike are concerned with the idea of chatbots replacing human interaction.

But agencies should still begin to at least experiment with deployment of artificial intelligence – and no big steps have to necessarily be undertaken. With a trusted partner, small steps and concepts of artificial intelligence can be explored.

"Often, we will begin our engagement with organizations with an attempt to understand their current process, why efficiency is needed and where efficiency can be improved," Minta said. "It's all about the small steps."

Here are five ways the public sector can start thinking about incorporating artificial intelligence, automation and chatbots:

#### 1. Consider reusability of automation technology.

It's important that agencies think beyond just a chatbot on a website, and consider a bot that can be built once, then made available across multiple channels – including web, mobile, messaging applications, and even voice IVR – for consistent self-service regardless of how a citizen reaches out.

### **2.** Accelerate the creation of bots using pre-built business processes or MicroApps.

MicroApps are mini embeddable apps that provide a pre-defined modular set of capabilities to accomplish a specific task. They make it much easier to deploy Al across all channels, consistently and quickly, and allow for rapid deployment of the most common self-service tasks (such as address changes, bill payments and password resets). Genesys offers 80-plus pre-built and proven MicroApps that can be leveraged today.

### **3.** Ensure that any automation is part of your overall omnichannel strategy.

Today's citizen journeys happen on multiple communication channels, including email, web chat, social media and more. Creating and sustaining customer relationships across assisted and self-service channels is the key to an agency's success. To build exceptional experiences, citizen engagement must be seamless, proactive and personalized across all channels and touchpoints throughout the entire lifecycle. If a chatbot is part of your strategy, remember that citizens may need to escalate to a live agent and expect to not have to repeat themselves, or agents may need to refer back to previous interactions that a citizen had with a bot, so it's important that the chatbot and automation be part of the omnichannel experience.

#### 4. Take a blended approach to Al.

Al alone cannot consistently deliver a great citizen experience. The power of Al reaches its fullest potential when it's seamlessly combined with live agents — assisting your agents with more contextual information while giving your customers the personalized journey they expect. With blended Al, agencies can improve citizen service applications while making operations smarter and more cost-effective. Al solutions are excellent for handling simple requests, automated conversations or proper routing, while human agents are still excellent at understanding customer emotions, building trust and handling more complex requests.

## **5.** Try journey-mapping to learn where you could be implementing AI to enhance the citizen experience.

How do you visualize a scenario to see the full picture of where AI could ease pain points that happen during citizens' interactions with your agency? The short answer is by creating journey maps that visually document a citizen persona's needs, perceptions and the touchpoints encountered for each step toward the citizen's journey goal. Journey maps are a common approach used to design customer-centric processes for multi-channel engagement. They often serve as the foundation for customer experience optimization programs, identifying new ways to help your customers reach their goals while still delivering on the organization's objectives. As you map the journey of a citizen engaging with your agency, ask yourself: Where could chatbots or automation simplify things, both externally and internally?

## How Genesys Helps

"Genesys works to simplify government customer service across every channel," Minta explained.

A leader in government customer experience platforms, Genesys provides services that meet the fast and alwaysavailable standards set by the private sector. Keeping up with an increasing volume of communications across multiple digital and voice channels while staying within budget and meeting government mandates and requirements can be difficult, but leveraging Genesys solutions, agencies are able to improve efficiency and accountability throughout contact centers and back offices, as well as with outsourcers.

Additionally, in the last year, Genesys launched <u>"Kate,"</u> a personified Al. Kate focuses on delivering enhanced customer experiences and brings her own MicroApps and natural language understanding. Kate is able to bring together the capabilities of blended Al to deliver even more power by bridging automation with the human touch.

"At Genesys our focus is really on helping agencies understand these technologies and apply them externally to citizens but internally to employees as well," Minta said. "We partner with agencies to make both your omnichannel strategy as well as your back-office processes more efficient with these technologies."

# Conclusion

The number of channels on which citizens engage is growing, as is the complexity of engagement. The result is increased costs and significant citizen experience challenges. By adopting AI and automation, agencies can control costs and meet those rising expectations.

Before adoption and deployment of Al, the public sector has an opportunity to learn and explore what's best for their agency. In a time of concern about funding, security, IT modernization and more, it is clear from our survey that the potential of Al to truly enhance the citizen experience and create more efficiency is not yet realized in government.

As with any new technology, however, there is always a period of uncertainty and where to begin before adoption takes place. That's why it's so critical for workers in the public sector to now begin learning as much as they can about artificial intelligence and automation, even if it will not be deployed at their agency in the near future.

This is a learning moment, and a real chance for agency IT leaders to begin thinking about and testing use cases for AI. Taking the time now to understand how they can weave in automation and AI to the citizen experience will help agencies be leaders in this arena down the road.

### **About Genesys**

Genesys® powers 25 billion of the world's best customer experiences each year. Our success comes from connecting employee and customer conversations on any channel, every day. Over 10,000 companies in 100+ countries trust our #1 customer experience platform to drive great business outcomes and create lasting relationships. Combining the best of technology and human ingenuity, we build solutions that mirror natural communication and work the way you think. Our industry-leading solutions foster true omnichannel engagement, performing equally well across all channels, on-premise and in the cloud. Experience communication as it should be: fluid, instinctive and profoundly empowering.

To learn more, visit genesys.com/government.



### About GovLoop

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 270,000 members, fostering crossgovernment collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

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