



REIMAGINING GOVERNMENT SERVICES *IN THE DIGITAL AGE*

In the era of digital transformation, commercial and consumer sectors have embraced digital tools and services, providing their users with convenience and accessibility. However, government and public sector organizations have lagged in offering similar experiences to their constituents. This paper explores how these organizations can leverage new digital tools, services, and capabilities, such as artificial intelligence (AI), Generative AI, and machine learning (ML), to re-evaluate and reimagine their connection with stakeholders, customers, and the people they serve.

The goal is to utilize technology to reinforce several key principles:

Government should be perceived as a diverse ecosystem of departments and programs catering to various needs, rather than a singular entity serving everyone.

Constituents should be able to find the information they seek through interactive methods that align with their individual intents, eliminating the need for generic and one-sided search experiences.

Government should operate as a system of engagement that seamlessly integrates across multiple technologies and back-end systems.

Through a collaborative effort, Deloitte and Google Cloud have introduced a constituent-focused solution known as Elevating Digital Government Experiences (EDGE™). This offering leverages the capabilities of enterprise-grade Google AI models alongside human-centered design principles. The aim is to create highly personalized and impactful online experiences that empower government organizations to improve internal productivity across government employees and deliver modern government experiences to their constituents.

Meeting the rising expectations of the digital constituent

Constituents today expect the same seamless and personalized digital experiences from government that they receive from the private sector. They want online services that are intuitive, efficient, and accessible, allowing them to easily find information, complete transactions, and engage with government agencies.

According to recent studies, 92% of US citizens report that improved digital services would positively impact their view of the government, which demonstrates the public's growing demand for digital-first services and just how deeply today's constituents desire more accessible, efficient, and user-friendly online interfaces.¹

This demand for digital-first services is driven by several factors:

- **Increased reliance on technology:** People are accustomed to using technology to manage nearly every aspect of their lives, from banking to health care to shopping.
- **Rising expectations for convenience:** Constituents expect quick and easy access to information and services, with minimal friction.
- **Desire for personalized experiences:** People want government services tailored to their individual needs and preferences.

Failing to meet these expectations can lead to frustration, decreased trust in government, and a widening digital divide. For example, lengthy online forms and confusing instructions can discourage constituents from accessing essential services or outdated websites and fragmented information sources can make it challenging to find the right information – all of which can result in higher call volumes and wait times within an organization's contact center.

Public sector organizations face the challenge of meeting these rising expectations, often with limited resources and often outdated technology. This is where AI-powered solutions that can run in parallel with existing investments can make a real difference to automate routine tasks, deliver more personalized experiences, and facilitate easier access to information through intelligent search to surface or recommend services that constituents are seeking.

EDGE: A digital concierge for government services

To provide constituents and employees with a single “front door” that acts more like a digital concierge presenting a wide array of online public sector information and services, Deloitte and Google Public Sector developed an offering called Elevating Digital Government Experiences, or EDGE™.

EDGE uses various innovative technologies and tools to safely and efficiently leverage AI and ML in the public sector, giving agencies the ability to:



Use intent-based search to make information more readily available: EDGE’s AI-powered search engine understands user intent and delivers relevant results, even if users don’t know the exact government agency name or terminology. For example, someone searching for “help with paying taxes” would be directed to a relevant page, regardless of whether they used precise Internal Revenue Service (IRS) terminology.



Share personalized recommendations: EDGE can personalize the user experience by tailoring content and recommendations to each user’s needs and interests. A user can browse anonymously or, if logged in, EDGE can personalize search suggestions based on the user’s preferences and popular search prompts. For instance, a senior citizen visiting the website might see information about Social Security benefits and Medicare, while a small business owner might see information about tax breaks and permits. Additionally, EDGE can suggest other relevant government services based on the conversation flow. For example, if a user is asking about unemployment information EDGE can also suggest related jobs and food resources.



Break down language barriers: EDGE natively supports over 135 languages and can help make information accessible to all site visitors, regardless of their native language. This ability to write once, but deliver in multiple languages, is critical for serving diverse communities and improving access to government services without the large time commitment or overhead associated with manual translation.



Find resources faster: EDGE can empower users to find information and understand relevant data easily across an agency through natural language search and interactions—all grounded and trained in the agency’s knowledge base—to help reduce information silos and improve information discovery for constituents and government employees.



Simplify content: EDGE can simplify and summarize content at various reading levels to help constituents better understand complex programs, instructions, or forms. For example, a user can summarize and ask questions of 200+ health care programs to narrow down selection based on their priorities or criteria for a plan.



Streamline complex tasks: EDGE uses APIs to bridge system gaps, so users can fill out forms and populate data or complete actions—such as scheduling an appointment—across systems directly within the same conversational interface. This can reduce the number of document requests within a workflow or reduce manual data entry for a more streamlined interaction.

With Deloitte’s deep knowledge and user experience with Google tools, such as the cutting-edge capabilities powered by Google’s Gemini AI model, EDGE is akin to a trustworthy, round-the-clock digital concierge service that can provide immediate answers to common questions, reduce time spent on tedious forms, and literally speak in the native language of the constituent or employee.

Transforming government: EDGE in action

EDGE empowers both government employees and constituents with AI-driven capabilities that streamline processes, improve access to information, and enhance service delivery.

Here are a few examples of how EDGE can be applied:

INTERNAL SCENARIOS:

Enhanced onboarding and day-one readiness:

New hires in public sector agencies often face a steep learning curve, navigating complex policies, procedures, and internal systems. EDGE can significantly accelerate this process. Imagine a new employee needing to understand the process for handling a constituent inquiry about a program their agency runs. They can simply ask EDGE and receive clear and accurate guidance in real-time. This not only boosts their confidence and day-one readiness but also frees up supervisors and trainers to focus on more complex issues. EDGE can even be customized with agency-specific knowledge, ensuring new employees are equipped with the precise information they need to succeed.

Boosting productivity within case management:

Government agencies often handle cases that span years, involve multiple departments, and generate a vast amount of documentation. This complexity can hinder efficiency and make it challenging for employees to get a complete picture of a case quickly. EDGE addresses this by providing concise summaries of complex cases, highlighting key events, decisions, and relevant information. This allows caseworkers to quickly grasp the history of a case, identify critical details, and make informed decisions faster, ultimately improving service delivery and constituent satisfaction.

Unlocking insights from large datasets:

Government agencies collect vast amounts of data, but extracting meaningful insights from these datasets can be time-consuming and require specialized skills. EDGE can help unlock these insights quickly and efficiently. Imagine an agency conducting audits of hospitals to help ensure compliance with regulations. An auditor can use EDGE to analyze audit reports, identify recurring themes, pinpoint areas of concern, and extract actionable insights. EDGE can even identify patterns and trends across multiple audits, helping the agency proactively address systemic issues and improve overall healthcare quality. This allows agencies to leverage their data more effectively, make data-driven decisions, and improve public services.



EXTERNAL SCENARIOS:

Navigating health care programs:

Constituents interacting with government websites often encounter complex terminology, confusing navigation, and a lack of personalized guidance. EDGE can transform this experience. Imagine a constituent seeking information about government health_care programs. They can engage in a natural language conversation with EDGE, asking questions and receiving clear, personalized answers tailored to their specific needs and circumstances. EDGE can even proactively suggest relevant resources and programs, ensuring constituents have the information they need to make informed decisions about their health_care.

Providing language translation for license applications in real-time:

Language barriers and complex processes can create significant obstacles for constituents accessing government services. EDGE breaks down these barriers by offering real-time language translation and simplifying complex procedures. Imagine a non-English speaking resident needing to renew their driver's license. EDGE can guide them through the process in their native language, provide step-by-step instructions, and even help them schedule an appointment online. This helps ensure equitable access to services and promotes inclusivity.

Understanding tax audits in simple terms:

Constituents often struggle to understand complex government notices, regulations, and programs. EDGE can help bridge this gap by simplifying complex language and providing clear explanations. For example, a constituent receiving a notice about a tax audit can use EDGE to understand the implications, learn about their rights, and find resources to help them navigate the process. This empowers constituents to engage with the government more effectively and confidently.

Applying for small business loans faster:

Government forms can be lengthy, confusing, and prone to errors. EDGE streamlines this process by providing step-by-step guidance, identifying missing information, and ensuring accurate completion. Imagine a constituent applying for a small business loan. EDGE can guide them through the application, answer questions about a field definition or what to do when the user doesn't have the information to support the completion of a more accurate application package. This saves time, reduces frustration, and improves the chances of a successful application.

EDGE offers a transformative approach to government service delivery, empowering both employees and constituents with AI-driven capabilities.

By streamlining processes, improving access to information, and personalizing interactions, EDGE helps build trust, enhance efficiency, and create a more constituent-centric government. As AI technology continues to evolve, solutions like EDGE will play an increasingly vital role in shaping the future of public service.





AI-powered transformation: *The technology behind EDGE*

EDGE delivers its advanced capabilities through a powerful combination of cutting-edge AI technologies and robust cloud infrastructure. This foundation is built on Google Cloud's end-to-end platform, leveraging tools like BigQuery for data warehousing, Vertex AI for machine learning, Gemini for advanced language processing, and Document AI for intelligent document processing.

Deloitte's deep experience in data analytics, cybersecurity, case management, and stakeholder management can further enhance this platform ensuring a secure, scalable, and tailored solution for public sector clients.

This synergy of technology and experience allows EDGE to:



Handle numerous inquiries simultaneously:

EDGE can effortlessly scale to meet fluctuating demands without requiring additional staff or resources, ensuring consistent and responsive service delivery even during peak periods.



Adapt and expand seamlessly:

As agency needs evolve, EDGE can be readily extended to support new programs, departments, and services. This flexibility ensures that EDGE remains a valuable asset as organizations grow and change.



Harness the power of large language models (LLMs):

EDGE leverages the latest advancements in LLMs, enabling it to understand and respond to complex inquiries in a natural and intuitive way. This unlocks a new level of human-computer interaction, making government services more accessible and user-friendly.

By combining Google Cloud's cutting-edge AI technologies with Deloitte's deep public sector experience, EDGE provides a powerful and adaptable solution for modernizing government services. Its scalable architecture and advanced capabilities empower agencies to enhance efficiency, improve constituent experiences, and unlock the full potential of their data. EDGE is not just a technology solution; it's a catalyst for transforming government operations and building a more responsive and citizen-centric public sector.

Putting people first:

A human-centered approach to AI

EDGE isn't just about technology; it's about empowering people. AI should be designed to serve human needs, not the other way around. That's why we put human-centered design (HCD) at the heart of everything we do.

HCD means we start by deeply understanding the needs, challenges, and aspirations of the people who will use EDGE. We involve end-users in every stage of the process, from initial design to ongoing development. This can help ensure that EDGE is intuitive, easy to use, and truly helps people do their jobs better.

Our HCD approach fosters a collaborative environment where designers, technologists, subject-matter experts, and end-users work together to create a solution that meets real-world needs. This continuous feedback loop helps ensure that EDGE remains relevant and effective over time, adapting to evolving user needs and new technology advancements.

By putting people first, we're not just building AI; we're building a better future for government employees and the constituents they serve. EDGE empowers employees to be more efficient, make better decisions, and ultimately, provide more effective and responsive public services.

Establishing ethical and responsible use of AI in government

The use of AI in government presents incredible opportunities to improve internal operations and constituent services to streamline processes. However, it's essential to help ensure that these technologies are deployed ethically and responsibly. This means prioritizing fairness, transparency, accountability, and privacy in every stage of AI development and implementation.

EDGE is built on a foundation of trustworthy AI principles. It is designed and trained using robust protocols that ensure AI-generated feedback and recommendations are based on trusted, vetted data. This helps promote fairness, minimize bias, and earn the trust of both government employees and the constituents they serve.

Of course, security is paramount when dealing with sensitive government data. EDGE incorporates cybersecurity measures to protect and safeguard information, including real-time monitoring and threat detection response. This helps ensure that sensitive data remains secure while enabling the ethical benefits of AI.

Both Deloitte and Google Cloud have established trustworthy AI principles and frameworks that guide the development and deployment of AI solutions. These frameworks prioritize ethical considerations and are continually evolving to keep pace with the rapid advancements in AI technologies. This commitment to responsible AI can help ensure that EDGE can be trusted to serve the public good.



STARTING YOUR AI TRANSFORMATION WITH EDGE

Interested in experimenting with AI? Implementing a transformative technology like EDGE requires a strategic and phased approach, starting with identifying a specific area where it can address a critical need. This might involve enhancing information access through intelligent search, streamlining complex processes such as form completion, or even personalizing constituent interactions. With this high-impact use case in mind, a pilot program can be launched to evaluate EDGE's capabilities in a real-world setting. This not only allows you to gather valuable data on performance and impact, but also provides an opportunity to identify areas for optimization and secure buy-in from key stakeholders.

Collaboration is crucial during this pilot phase. By actively involving stakeholders from IT, operations, and end-user groups, you can facilitate comprehensive feedback and smooth integration. Deloitte's experience can be leveraged to configure and customize Google Cloud components like Vertex AI and Document AI, helping to ensure they align with your specific needs. Continuous monitoring of the pilot, coupled with ongoing feedback and iterative improvements, will further enhance performance. Once the pilot demonstrates success against your predefined criteria, you can confidently scale the solution across your organization as needed, providing ongoing support and training to maximize adoption and effectiveness.

This structured approach, with its emphasis on targeted implementation, continuous collaboration, and iterative improvement, empowers your agency to harness the full potential of EDGE. Ultimately, this can lead to increased efficiency, improved service delivery, and the transformation of government operations to better serve constituents.

CONCLUSION

Deloitte's EDGE offering – powered by Google AI – can help governments and public sector leaders at all levels improve services across programs, elevate constituent experiences, and support employee efficiency. This helps evolve and improve the overall government and public sector experience to meet growing demands and urgency from constituents.

By combining Deloitte's deep experience and insights for business transformation and technology implementation with Google Cloud's advanced AI and cloud computing technologies, EDGE puts constituent and public sector employee satisfaction front and center.

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Endnotes

- 2022 digital trends: The rise of the citizen consumer
- <https://www.isc2.org/research>

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