

The Future of Government Technology Leadership

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 CENTER FOR
**PUBLIC
SECTOR AI**

 CENTER FOR
**DIGITAL
GOVERNMENT**

Top 10 CIO Priorities

State CIO Priorities	County CIO Priorities	City CIO Priorities
1. Cybersecurity	1. Cybersecurity	1. Cybersecurity
2. Customer Experience	2. Workforce	2. Customer Experience
3. Workforce	3. Customer Experience	3. Workforce
4. Legacy Modernization	4. Broadband/Connectivity	4. Business Intelligence
5. Broadband/Connectivity	5. Infrastructure Modernization	5. Data Governance
6. Departmental Collaboration	6. Budget/Cost Control	6. Process Automation
7. Cloud Computing	7. Disaster Recovery	7. Broadband/Connectivity
8. Digital Services/Processes	8. Business Intelligence	8. Disaster Recovery
9. Infrastructure Modernization	9. Departmental Collaboration	9. Digital Services/Processes
10. Data Governance	10. Digital Services/Processes	10. Legacy Modernization

2024 City Government Intent Signals

Rank	Finance Leadership	IT Leadership	IT Staff	Elected Official	Mission Owner
1	Cybersecurity	Cybersecurity	Cybersecurity	Immediate Challenges	Community
2	Finance	Workforce	Workforce	Community	Immediate Challenges
3	Leadership	Artificial Intelligence	Market Voices	Future	Future
4	Education	Govtech Biz	Govtech Biz	Politics	Workforce
5	Urban	Education	Artificial Intelligence	Market Voices	Cybersecurity

Government Technology Leadership Is Dramatically Changing

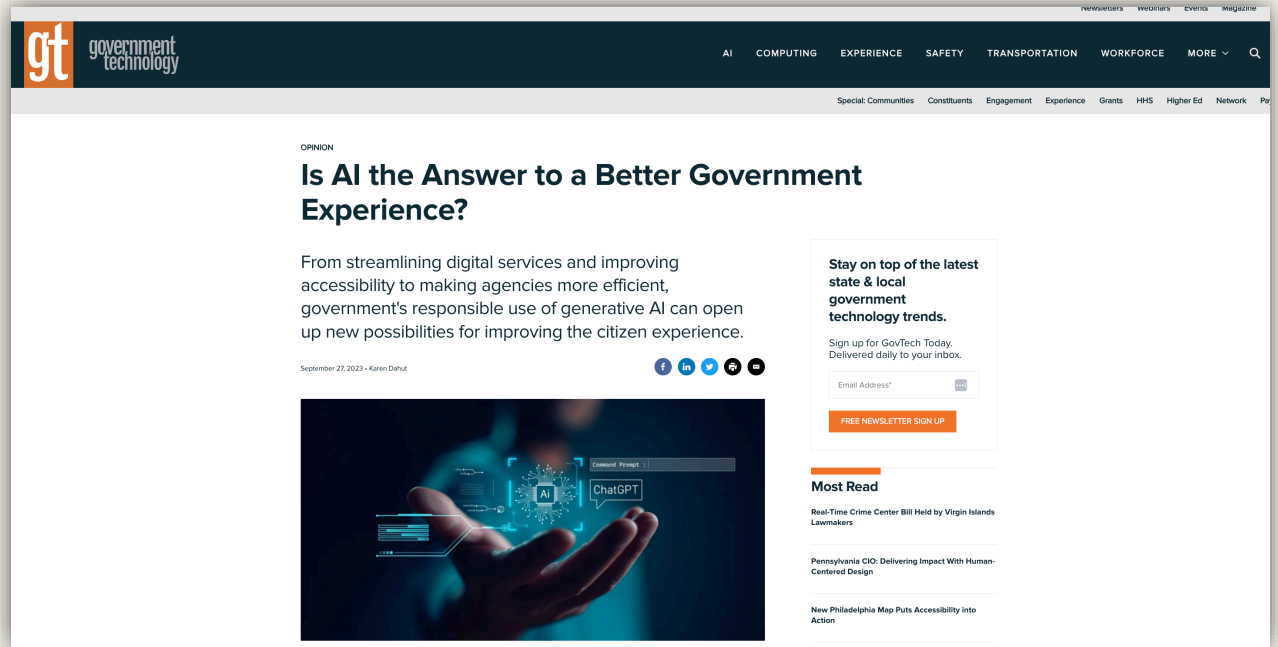
- Technologies are being introduced with amazing speed.
- Technologies are now BYO – bring your own.
- Technology will transform government at all levels.
- Everyone in city government must be aware of the potential to change the way services are delivered.



Up Next: GenAI Impact



GenAI is an Evolving Government Service Delivery.



<https://www.govtech.com/opinion/is-ai-the-answer-to-a-better-government-experience>



Whether we like
it or not, GenAI
is here to stay.

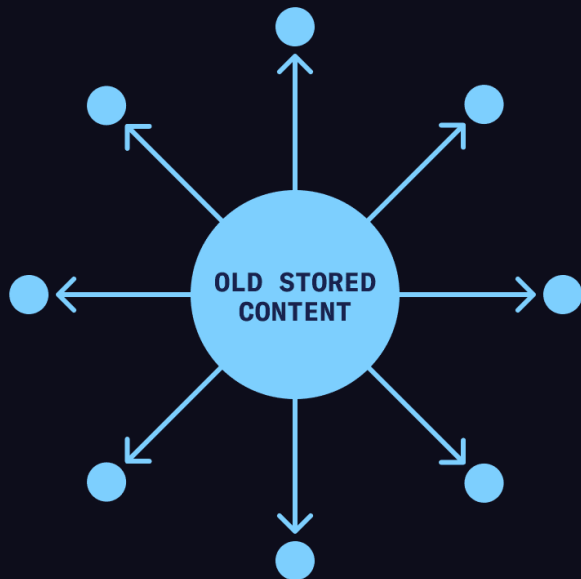
**More than half (75%)
of U.S. workers** said
they use generative AI
at work*.



How does GenAI impact the way government delivers services?

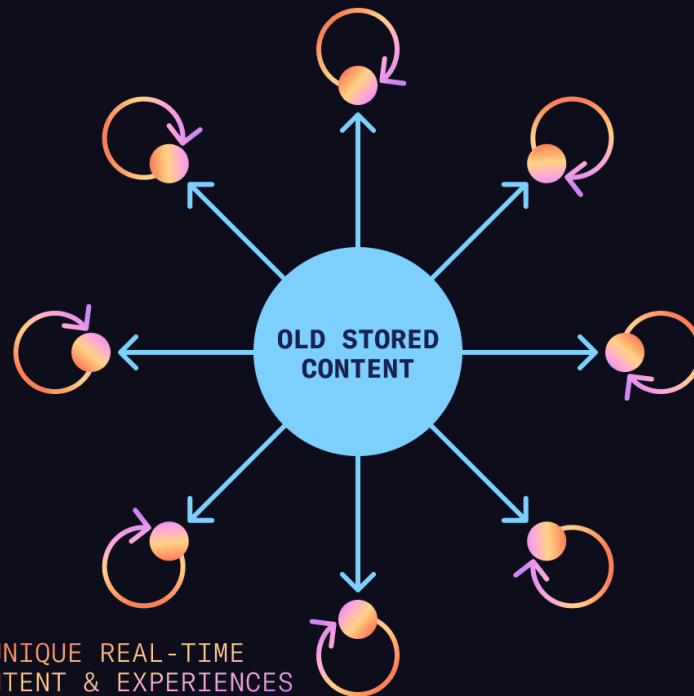
Web2

2002-2019



Generative Web

2021-PRESENT





AI = Beginning of the Post-Search Era And A New UX For Your Data



AI Will Not Be A Separate Product
It Will Be The New Product Experience

Generative AI Evolution



Standalone AI

Generative AI existing as a standalone application.

Examples:
OpenAI's ChatGPT,
Google Gemini, Bing
Copilot



Embedded AI

Generative AI integrated within the application layer.

Examples: Google Gemini (within Google Workspace), Co-pilot (within Microsoft's O365), watsonx, etc.



Abstracted AI

Generative AI on the edge of the consumer experience, where users interact with edge AI bots that abstract other AI experiences.

Examples: SiriGPT, Google Assistant GPT



Autonomous AI

AI operates autonomously based on a goal or pre-defined set of needs to complete tasks, functions, etc.

Examples: Agent AI, AutoGPT

The Generative AI Application Landscape



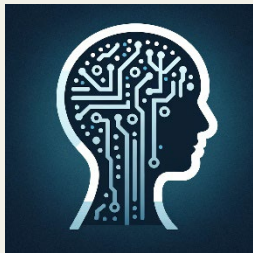
APPLICATION LAYER		MODALITY						
		TEXT	CODE	IMAGE	SPEECH	VIDEO	3D	OTHER
APPLICATION LAYER	Marketing (content)							
	Sales (email)		Code generation	Image generation				Gaming
	Support (chat / email)		Code documentation	Consumer / Social				RPA
	General writing		Text to SQL	Media / Advertising				Music
	Note taking		Web app builders	Design	Voice Synthesis	Video editing / generation	3D models / scenes	Audio
	Other							Biology & chemistry
MODEL LAYER		OpenAI GPT-3	OpenAI GPT-3	OpenAI Dall-E 2	OpenAI	Microsoft X-CLIP	DreamFusion	TBD
		DeepMind Gopher	Tabnine	Stable Diffusion		Meta Make-A-Video	NVIDIA GET3D	
		Facebook OPT	Stability.ai	Craiyon			MDM	
		Hugging Face Bloom						
		Cohere						
		Anthropic						
		AI2						
		Alibaba, Yandex, etc.						

Source: Sequoia Capital

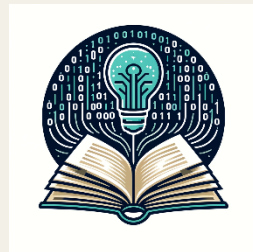


GenAI + Government = ?

Generative AI Applications for State & Local Government



People Augmentation

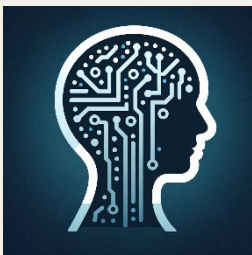


Knowledge Augmentation



Experience Augmentation

Generative AI Applications for State & Local Government



People Augmentation

Employees will have access to their own personal chatbots that aid in their daily administrative tasks, enabling:

1. Data-driven decision-making
2. Administrative augmentation
3. Enhanced customer service
4. Personalize Reskilling/Upskilling

What does this mean for you?

- Agencies and departments will be ‘designing’ their own administrative processes using these technologies.
- The organization and protection of data will increase in importance.
- Training programs that help your employees learn the ‘right’ way to use the tools.
- Engaging outside resources will bring in expertise.

Generative AI Applications for State & Local Government



Knowledge Augmentation

Government knowledge (i.e., ordinances, legislative actions, etc.) will be accessible through generative AI systems, enabling:

1. Richer data analysis
2. Intelligent policy analysis and creation
3. Enhanced simulation and prediction
4. Automation of knowledge capture

What does this mean for you?

- The tools to find and access data that was ‘hidden’ or not easily accessible are now available.
- There is the potential to provide greater transparency and enhance analytics in driving decision making without significant investment.
- ‘Old’ and ‘obsolete’ data will surface – think about how to ensure that electronic data are managed like ‘paper’ data.



Generative AI Applications for State & Local Government



Experience Augmentation

Government experiences will be augmented by generative AI enabling.

1. New forms of civic engagement
2. Personalization of communications
3. Greater transparency & accessibility
4. The rise of third-party service delivery

What does this mean for you?

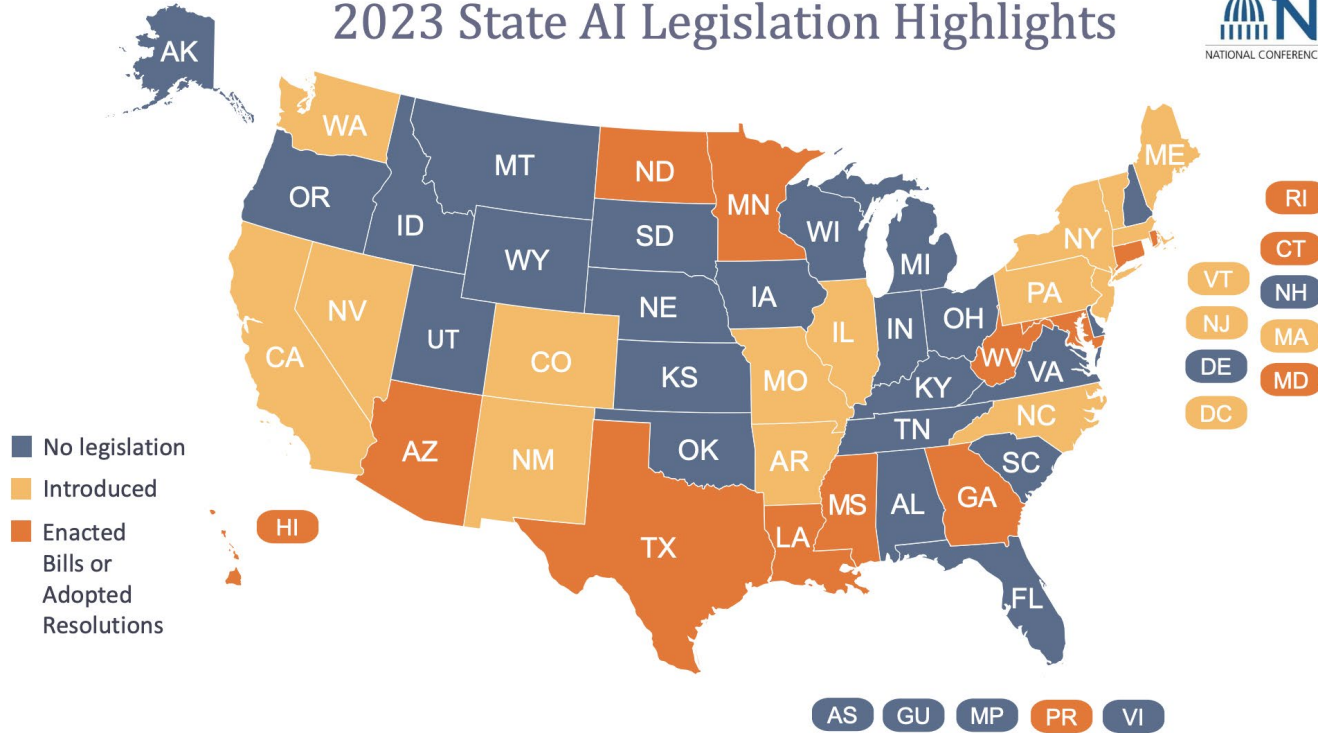
- New technologies and tools are available to update your websites, mobile applications.
- Outside companies have developed software that can ‘link’ to your websites and apps.
- New ways will emerge to customize your websites to fit individual constituent needs.

Latest Generative AI Updates

REGULATORY



2023 State AI Legislation Highlights



Source: National Conference of State Legislatures



City of Boston Interim Guidelines for Using Generative AI

Version 1.1

Prepared by Santiago Garces, Chief Information Officer, City of Boston

Published: 5/18/2023

Applies to: *all City agencies and departments with the exception of Boston Public Schools*

Purpose

Generative AI is a set of relatively new technologies that leverages large (very large) volumes of data along with some machine learning (ML) techniques to produce content based on inputs from the users known as prompts. The new content can be written (e.g. ChatGPT or Bard), or visual (e.g. Dall-E). These tools are evolving rapidly, and are still the subject of active research: improving our understanding of how they actually work, and the impacts of their use in society. These tools are not actual intelligence in the human sense, rather, they are very sophisticated models that predict what the language, text, or video that satisfies the prompt should be. **Because of their impact and potential usefulness, as well as the risks and dangers, these guidelines serve as an interim resource for employees of the City of Boston.**

Generative AI is a tool. We are responsible for the outcomes of our tools. For example, if autocorrect unintentionally changes a word - changing the meaning of something we wrote, we are still responsible for the text. Technology enables our work, it does not excuse our judgment nor our accountability.

These guidelines should be replaced in the future with policies and standards. But we want to encourage responsible experimentation and we encourage you to try these tools for

Emerging Guidance and Policy – City of Boston



https://drive.google.com/file/d/1o25MruYz8NYgJNLgUhr8m7BJAkE/view?usp=drive_link

What does this mean for you?

- Be aware of what your legislators and elected officials are thinking and planning.
- Ensure that you have a voice in emerging policy, legislation, direction that will impact the use of AI in your business area.

ARTIFICIAL INTELLIGENCE

San Jose Welcomes Participation in AI Coalition

San Jose, Calif., has announced several steps to shape AI governance, including an open letter to stakeholders, a resource toolkit and an invitation to participate in its growing GovAI Coalition. A meeting is set for next Wednesday.

March 18, 2024 • Julia Edinger



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The city of San Jose, Calif., is calling for participation in its growing coalition of public

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Latest Generative AI Updates

USE CASES

ARTIFICIAL INTELLIGENCE

How AI Tools Can Help Governments Understand and Manage Data

Artificial intelligence software can be a powerful force in helping government agencies that are responsible for managing and analyzing massive amounts of data, both quantitative and qualitative.

February 26, 2024 • Julia Edinger



Government agencies are increasingly turning to AI tools to help support data-informed

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ARTIFICIAL INTELLIGENCE

The Tedious Parts of City Planning Could Be Turned Over to AI

A New Hampshire city joins a growing list of local governments that are turning over some of the more time-intensive tasks of planning operations to artificial intelligence technologies.

February 14, 2024 • Skip Descant



Lebanon, N.H., City Hall. Shutterstock



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What does this mean for you?

- Use cases will drive adoption.
- Get started on developing potential use cases – both big and small.
- Be willing to experiment and learn together.



Latest Generative AI Updates

EMERGING CHALLENGES



Most Pressing Challenges

Changing Government Procurement Rules

- AI/model usage must be disclosed in procurements.
- Governments must address the issues around liabilities with copyright, IP, etc. associated with AI usage.

What does this mean for you?

- Start thinking about how you buy technology today.
- Talk with procurement and legal counsel to look at today's contracts for technology.
- AI will impact what is embedded in the technology you already have.

Most Pressing Challenges

Preparing for BYOAI – Bring Your Own AI

- Employees may leverage their own personal AI as a function of augmenting their jobs, creating major implications for public records.

What does this mean for you?

- How is your team using AI today?
- How can they use AI to drive productivity, constituent engagement, and effectiveness?
- What training does your team need?

Most Pressing Challenges

Updating Privacy Policies

- Agencies must update their data and privacy rules and regulations to account for their policy on AI usage, training, etc.

What does this mean for you?

- Understand your current privacy policies and guidelines.
- Recognize the impact of AI on privacy
- Participate in committees and groups focused on your requirements.

Most Pressing Challenges

Focusing on AI Literacy/Equity + Reskilling/Upskilling

- Agencies will need to develop professional development and training programs for reskilling or upskilling AI continuously.

What does this mean for you?

- Prepare your team and yourself with AI skills.
- Learn where AI will create new job descriptions and skill requirements, and career opportunities.
- Help your organization embrace AI – not fear it.



Up Next: Where to Start With Adoption

AI-Ready Recommendations

1

Set the guardrails

Have the right policy foundation (internal employee acceptable use and general AI use tied to your agency privacy policies) to provide the initial guardrails and transparency on initial utilization.

What does this mean for you?

- Don't start from scratch. Look at what other jurisdictions are doing.
- Train staff on acceptable use.
- Audit and review to ensure that guidelines are met and maintained.

AI-Ready Recommendations

2

Build internal governance

Create a Task Force composed of representatives from different departments to share use cases and provide feedback. **Tip:** Align your areas of experimentation to key organizational objectives instead of trying to later connect an emerging technology to an underlying business problem.

What does this mean for you?

- Don't wait – bring your teams together to discuss what is possible.
- Start with the business objectives.

AI-Ready Recommendations

3

Experiment and empower

Create a culture of experimentation through training, empowerment, licensing, etc. You cannot create all the game-changing generative AI use cases from the top, so you will need to have a strategy to empower, equip, and learn from ALL your employees, not just the CXO level.

What does this mean for you?

- Get started – there are no right or wrong approaches.
- Be prepared to learn along the way.
- Find the individuals who want to experiment and empower them.

AI-Ready Recommendations

4

Connect the dots

At this point, you will inevitably find gaps in the data you want to glean insights from what's available, so you will want to find ways to connect the dots with disparate data silos in your organization. All AI, including generative AI, requires the right data foundation to provide actionable intelligence. Also, recognize that this step may require significant work and semantic linkage over time.

What does this mean for you?

- Data will be more important than ever
- Don't wait for 'clean data' – get going and manage data required as needed
- Use the opportunity to focus on enterprise data

AI-Ready Recommendations

5

Operate in a State of Continuous Improvement or Beta

Successful public sector AI utilization requires being adaptive and agile with your existing AI approaches.

Tip: Meet Frequently To Ensure You're Up-to-Date

What does this mean for you?

- Technology will change and improve at a fast pace.
- Fail fast and keep experimenting!

AI-Ready Recommendations

6

Partner Strategically (and Carefully!)

There will be hundreds of potential AI applications and services available to the public sector; you will want to ensure you approach each AI capability with the same level of scrutiny over details (training, bias, records retention, etc.), even for pilots.

What does this mean for you?

- Stay in touch with your technology partners for latest developments.
- Continue to work with your procurement organization.
- Keep watching the Center for Public Sector AI website for what is happening across state and local government and K-20.

The Future of Government is in Your Hands

- The new technologies require leadership at all levels. You don't have to be a 'techie' to understand where tech will make a difference.
- Don't delegate this to your CIO or technology leader. Talk about how technology can help the delivery of services to your constituents.
- The moment is NOW!

Available Resources

- **State of Michigan Department of Technology, Management and Budget** is meeting regularly to discuss AI and potential policy development.
- **The National Association of Counties has developed guidance**
AI County Compass: A Comprehensive Toolkit for Local Governance and Implementation of Artificial Intelligence:
<https://www.naco.org/resource/ai-county-compass-comprehensive-toolkit-local-governance-and-implementation-artificial>
- **State of Michigan resource**
Ms. Ulrika Zay, Geospatial Outreach Specialist
Office of Technology Partnerships
ZayU@michigan.gov



CENTER FOR PUBLIC SECTOR AI

A national research and advisory institute focused on technology policy and best practices in state and local government.

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What is the Center for Public Sector AI?

The Center for Public Sector AI is a critical resource for public agencies eager to explore the potential of AI technology. It offers strategic guidance on AI policy, procurement, and practical application, ensuring that the public sector is fully prepared to adopt and implement AI in a responsible and effective manner.

In The News



AI a Part of Major Upgrades to Honolulu Permitting Process

Hawaii's capital city is piloting artificial intelligence-based software for building plan reviews, and will fully implement a new platform that went live in February. Updates to a third system are planned



Will AI Be Scoring Standardized Tests in the Near Future?

Starting in 2025, the Program for International Student Assessment (PISA) will include problem-solving tasks that will be at least partially scored by AI, potentially demonstrating a new use



Clinical Psychologist: Tech Overuse Exacts Toll on Students

Clinical psychologist Lisa Strohmman connects technology overuse with rampant mental health problems in young people, and she says they will need help from parents, teachers and



Missouri May Ban Fake Videos Aimed at Elections

Fake videos designed to persuade Missouri voters would be banned within 90 days of an election under legislation that won broad support in the state's Legislature Wednesday.



SCAN ME



Thank you.

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