NASCIO STATE IT RECOGNITION AWARDS

Colorado's

Strategic Program for Responsible Generative AI: Governance, Innovation and Literacy

CATEGORY
Artificial Intelligence

START DATE
July 2024

END DATE
January 2025

COLORADO
Governor's Office of Information Technology

Brandi Wildfang
Chief Communications Officer & PIO
brandi.wildfang@state.co.us | 720-601-5470

Amy Bhikha
Chief Data Officer
amy.bhikha@state.co.us | 720-392-4414

Executive Summary

Generative artificial intelligence (GenAI) presents both high risks and high rewards in driving productivity, innovation and new capabilities across sectors. Last year, the Data Office within the Governor's Office of Information Technology (OIT) embarked on a strategic, proactive approach to implementing GenAI to ensure responsible integration into government operations. Recognizing the transformative potential of AI, the Strategic Program for Responsible Generative AI, also outlined in OIT's Guide to Artificial Intelligence, is structured around three key components:

1. Governance and Policy
2. Innovation
3. Literacy

The Colorado Data Office's (CDO) Framework for AI Governance and Policy, Innovation and Literacy addresses the need for a circumspect, coordinated approach to AI adoption, ensuring responsible use, mitigating risks and maximizing benefits. With the components above in mind, Colorado launched three initiatives to introduce GenAI into its technology environment thoughtfully and holistically:

- Establishing an AI Community of Practice.
- Piloting and rolling out Gemini Advanced, Google's GenAI productivity tool.
- Implementing a risk evaluation process for GenAI agency business requests.

The program is transforming government services and empowering its workforce for the future by prioritizing governance, fostering collaboration and focusing on measurable outcomes, as evidenced by the Google Gemini Advanced pilot project. The pilot included 150 employees across 20 agencies who reported increased task completion, improved work quality and creativity, reduced stress and enhanced confidence. Participants also reported improved compliance with accessibility. As a result of the successful pilot, this GenAI tool was approved for use by interested state agencies in January 2025.

The CDO's framework emerged from the recognition that GenAI presents both significant opportunities and potential challenges for state government. The program addresses the critical need for a proactive and coordinated approach to the state's AI adoption to maximize its benefits while mitigating risks.

The core driver behind the framework is the goal of the responsible and effective integration of generative AI across state agencies. The framework is structured around three key components:

1. **Community of Practice:** The AI Community of Practice (CoP) was formed in early 2024 with a virtual, open monthly meeting to discuss AI and provide legislative, policy and initiative updates. Any state employee is welcome to join the CoP meeting, which still meets today. The CoP creates a collaborative ecosystem for AI knowledge-sharing, use case demonstrations and best practice development. The CoP breaks down silos between agencies, encourages collaboration and accelerates the responsible adoption of AI.

2. **GenAI productivity (Google Gemini) pilot and rollout:** This component centers on demonstrating the tangible benefits of GenAI through pilot projects and subsequent rollouts. The Google Gemini Advanced pilot serves as a real-world example of how GenAI can enhance productivity, creativity and efficiency within state government. The pilot tested and collected data from over 2,000 use cases, highlighting the benefits of using GenAI in the workplace.

3. **Evaluation process for responsible GenAI agency business requests:** This component establishes a standardized method for evaluating, mitigating risks of, and approving GenAI business requests. This process ensures that AI initiatives align with the state's strategic goals, adhere to ethical principles and are implemented responsibly.

Through these three components, Colorado's GenAI program aims to transform government services, empower its workforce and drive innovation while prioritizing responsibility, ethics and accountability.

IMPLEMENTATION

The CDO Framework for AI was implemented through a multi-faceted approach, with each component involving specific strategies and activities.

1. **Governance and policy, innovation and literacy**
    - An AI working group, including OIT and the Governor's Office, was established to develop a statewide strategy, governance policies and ethical guidelines for AI use.
    - AI literacy initiatives, including training programs like "InnovateUS: Using Generative AI at Work," virtual GenAI learning sessions and internal custom resource development on TechU (the state's IT intranet site providing employees access to an extensive library of guides, video tutorials, fact sheets, etc.), were launched.
    - In August 2024, the Statewide GenAI Policy was promulgated. Among its provisions, the policy requires that state agencies obtain OIT approval before deploying new GenAI systems into the state environment and have a human reviewer of any GenAI-generated workflows. With this policy, agencies were also encouraged to work with OIT to foster a culture of responsible AI use and innovation.
2. **Establishing an AI Community of Practice with 20 participating agencies**
    - OIT created a growing centralized platform with over 200 employees who range from AI-curious to burgeoning experts to share best practices, use cases and lessons learned related to GenAI implementation.
    - Regular forums and workshops were organized to facilitate knowledge-sharing and collaboration among agencies.
    - Working groups convened to address specific areas of interest, such as AI security, data privacy and accessibility.
    - An open chat group with over 200 members was established for cross-agency collaboration and communication.
3. **GenAI productivity (Gemini Advanced) pilot and rollout**
    - The team established a formal request process for agencies to participate in the Google Gemini Advanced pilot.
    - All pilot participants were required to undergo mandatory training and attestation to ensure responsible use and mitigate risks. The attestation language outlined prohibited activities and user responsibilities.

- The pilot involved 150 testers from 20 agencies, representing diverse roles and functions.
- Data from the pilot was collected and analyzed to measure impact and inform future rollout decisions.

4. **Evaluation process for responsible GenAI business requests:**
    - OIT established a standardized evaluation framework to assess GenAI agency business requests based on criteria such as alignment with strategic goals, ethical considerations, a risk assessment and potential benefits.
    - OIT convened a review board, which includes the State CIO and Governor's Office, to evaluate requests and provide recommendations.
    - OIT staff drafted guidelines and templates to support IT Directors and agency Product Directors in developing and submitting GenAI business requests.
    - To date, **over 140 GenAI have been reviewed, and over half are in process, pilot, testing or development.**

IMPACT

This comprehensive, multipronged implementation strategy ensured a coordinated, responsible and impactful approach to integrating GenAI across state government. The state's AI program has yielded significant positive statewide impacts, and the metrics associated with Strategy 3: **GenAI Productivity (Gemini Advanced) pilot and rollout** are remarkable. Twenty agencies have approved the use of Gemini Advanced for their employees, with 1,700 licenses provisioned so far. Employees are required to undergo prerequisite training to obtain a license and are encouraged to attend weekly training sessions to learn more about the tool's capabilities.

1. **Enhanced productivity and efficiency -** The Google Gemini Advanced (Gemini) pilot directly yielded significant gains in pilot testers' productivity:
    - Pilot participants reported a **74% increase in task completion**, indicating that Gemini Advanced enabled them to accomplish more in less time.
    - **73% of participants stated that Gemini helped them focus on higher-priority work**, suggesting that the tool streamlined workflows and allowed employees to concentrate on more strategic activities.
    - Overall, **83% of pilot participants reported improved work quality**, demonstrating the tool's positive impact on their work's accuracy and effectiveness.

> "As English is my second language, crafting emails used to be a time-consuming process. I'd spend extra time checking for grammar, syntax, and ensuring the tone and context were appropriate for the intended audience. Gemini has been a game-changer! It not only helps me write more efficiently and effectively but also boosts my overall communication. I especially appreciate how it helps me navigate the nuances of cross-cultural communication. I absolutely love it."

2. **Increased innovation and creativity -** The pilot program has fostered a culture of innovation by encouraging the exploration of GenAI applications across agencies:
    - **75% of pilot users reported that Gemini helped them be more creative**, indicating the tool's ability to support innovative problem-solving and idea generation.

> "Using Gemini and participating in this Pilot has changed my life in ways I am only beginning to understand, yet I am benefiting from more and more each day. I discovered something that allowed me to use my unique way of thinking and processing in a way I had not experienced before. Further, it elevated the same traits and skills that have traditionally isolated me, caused misunderstandings, and sometimes, reputational/professional harm."

3. **Improved employee well-being -** The Gemini Advanced pilot also had a positive impact on employee mental state.
    - **49% of participants reported reduced work stress**, suggesting that the tool helped alleviate workload pressures.
    - **25% of users reported reduced feelings of isolation and increased feelings of inclusion**, highlighting the tool's potential to foster a more connected and supportive work environment.
    - **70% of users reported feeling more confident in their abilities**, indicating that the tool empowered employees and enhanced their sense of competence.
4. **Increased AI literacy -** The program's focus on AI literacy has significantly increased employee understanding and awareness of AI.
    - Data from the pilot indicates a substantial shift in GenAI literacy levels among participants, with a notable increase in the number of employees reporting higher

levels of understanding after the pilot. Prior to the pilot, only 8.5% of participants stated that they felt they had a “high” or “very high” level of GenAI literacy. At the end of the pilot, that number **increased to 42.6% of participants**.

5. **Strategic and responsible GenAI adoption -** The program has ensured that GenAI is adopted strategically and responsibly across the state government by establishing a comprehensive governance framework and evaluation process.
    - This approach has mitigated potential risks, promoted ethical considerations, and maximized AI's benefits for employees and the public.
    - Concerns with GenAI were minimal. Those identified were mitigated with focused training to increase literacy and ensure responsible use of GenAI by state employees.

What’s Next

Due to the State of Colorado’s rapid and deliberate advancement of the AI program, several major initiatives are already in development. An internal strike team led by the OIT Data Office is dedicated to improving the state's governance, innovation and literacy. The AI Dialogues, a literacy program designed to foster an internal statewide culture of responsible AI use and facilitate community AI learning, was introduced. This program, a collaboration between OIT and a third-party vendor, will assist 13 agencies in their responsible use and implementation of GenAI. It features Executive, Operational Management and End Users tracks along with facilitating a Community of Practice.

The ultimate goal of the state’s AI framework is to transform state government by mindfully integrating AI into state government, maximizing worker productivity and streamlining processes that provide vital state services. By creating a unified and accountable approach to AI, Colorado quickly moved from fragmented efforts to a coordinated strategy. By building centralized governance, shared infrastructure and scalable literacy programs, state agencies will be able to unlock AI’s full potential for faster, more innovative and more equitable public services. These outcomes position Colorado as a leader in leveraging AI to transform government services and empower its workforce.