

ARTIFICIAL INTELLIGENCE TASK FORCE

Minutes of the 1st Meeting of the 2024 Interim

July 9, 2024

Call to Order and Roll Call

The 1st meeting of the Artificial Intelligence Task Force was held on July 9, 2024, at 11:00 AM in Room 171 of the Capitol Annex. Senator Amanda Mays Bledsoe, Chair, called the meeting to order, and the secretary called the roll.

Present were:

Members: Representative Josh Bray Co-Chair; Senator Amanda Mays Bledsoe Co-Chair; Senators Stephen Meredith, Brandon J. Storm, Reginald Thomas, and Gex Williams; Representatives John Blanton, Derek Lewis, and Pamela Stevenson.

Guests: Ryan Harkins, Senior Director, Public Policy U.S. Government Affairs, Microsoft; and Doug Robinson, Executive Director, National Association of State Chief Information Officers.

LRC Staff: Daniel Carter, Christina Gordley, Alaina Spence, Shannon Tubbs, Hannah Gray, and Angela Rhodes.

Charge of the Task Force

Co-Chair Mays Bledsoe and Co-Chair Bray shared their objectives of the task force whereas, the task force shall identify strategies by other states to study and monitor artificial intelligence systems developed, employed, and procured by other states' agencies; study other states' agencies currently using artificial intelligence systems in government operations; identify existing Kentucky agencies using artificial intelligence systems and study those systems; gather information on artificial intelligence systems used by other groups, including Kentucky businesses and the federal government; and provide recommendations on how Kentucky government agencies' use of artificial intelligence systems would benefit their operation and procurement policies and the legislative initiatives needed to provide consumer protection in the private and public sectors.

Overview of Artificial Intelligence in the Private Sector

Ryan Harkins, Senior Director, Public Policy U.S. Government Affairs, Microsoft, began his presentation stating that artificial intelligence (AI) is not just another piece of

technology but could be one of the most fundamental pieces of technology the human race has ever created. AI can produce a range of benefits across industries, such as, ATM machines, spellcheck, auto complete feature on a search engine, and a more sophisticated range of autonomous vehicles.

There are three key developments that have enabled the creation of powerful computer programs or large language models: machine learning, which has developed more sophisticated computer programs; the dramatic decrease in the cost of data collection and storage; and massive processing power.

The computer programs causing all the stir today is the large language models. Programs have been trained to look for patterns and correlations with internet size data sets to predict the likelihood of language. ChatGPT is an example of large language model. GPT-4 can pass the bar exam with a score of 297, which is in the 90th percentile of actual test takers and is enough to be admitted to practice law in most states.

Generative AI (GenAI) offers advancements over traditional AI models. Examples are content generation, summarization, semantic searches, and code generation.

Mr. Harkins discussed the partnership between Microsoft and OpenAI. OpenAI ensures that artificial general intelligence benefits humanity and Microsoft empowers every person and organization to achieve more. Microsoft products offered on the market are Copilot and Azure OpenAI Service.

AI can be used as both a tool and a weapon. Mr. Harkins discussed the risks and concerns along with the principles and guidelines that are needed for development of AI to insure there are no potential risks of harm. Mr. Harkins provided an outline of ethical principles and regulations to govern development of AI that are built into products.

Lastly, Mr. Harkins produced ideas for state policymakers going forward in the development of AI.

In response to a question from Senator Thomas, Mr. Harkins stated that the way AI programs operate today are different from a traditional rules-based software where humans would manually program in the rules to dictate how the software would function. Now, in large language models, math is used in order to identify patterns and correlations from data sets.

In response to a question from Representative Blanton regarding the availability of technology to detect if an image and/or video is AI generated, Mr. Harkins stated there are efforts to create decoders or detectors and work is continuing to imbed stamping, water marking, and/or digital finger printing to show if AI is used.

In response to a question from Representative Lewis, Mr. Harkins stated he would like to see the regulatory landscape consistent between states as AI evolves and policy makers should share ideas to ensure laws are interoperable with one another. In response to another question, Mr. Harkins stated that Microsoft's view on applications is that an application is like a tool, such as, a paint brush and/or camera. The person utilizing the application/tool owns the content created. In response to another question regarding the power grids in eastern Kentucky, Mr. Harkins stated that energy is an important component to building the infrastructure required to run large language models and that Microsoft would have to follow-up with an answer at a later time.

In response to a question from Senator Williams, Mr. Harkins stated that bias is something Microsoft is concerned about. Before release of programs to the public, they put safeguards in place and monitoring is continued. In response to a follow-up, Mr. Harkins stated that safeguards are transparent.

In response to a question from Representative Stevenson, Mr. Harkins stated that as technology develops, Microsoft is very concerned about ensuring safeguards are in place to both prevent and help identify when and where a deep fake was generated.

Overview of Artificial Intelligence in the Public Sector

Doug Robinson, Executive Director, National Association of State Chief Information Officers (NASCIO), began his presentation with what NASCIO is. It is a national association representing state chief information officers and information technology executives from the states, territories, and D.C. It provides members with products and services designed to support the challenging role of the state CIO, stimulate the exchange of information, and promote the adoption of IT best practices and innovations.

Mr. Robinson discussed the top 10 priorities of NASCIO with number three being AI, machine learning, and robotic process automation. Mr. Robinson also went over GenAI, in where, a subset of AI that enables users to quickly create new content (text, images, audio, video, code) based on a variety of inputs.

NASCIO has developed publications since 2018 and data from a publication in 2019 shows that states do not have the training and knowledge to maintain AI. Mr. Robinson provided charts showing the percentages of where states are in development.

A NASCIO 2023 state CIO emerging technology survey showed that within the next three to five years, GenAI will be the most impactful at 53 percent, with AI machine learning being the second most impactful at 20 percent. Across the country, GenAI will be an \$80 billion per year market in state governments.

Mr. Robinson stated that NASCIO convened a task force in December 2023 that provided to the states a 12-step process and other actions and/or concerns to consider for developing AI roadmaps.

Mr. Robinson provided charts for state government investment changes for GenAI over the next few years, whether the increase of AI and GenAI will impact data management importance, data quality importance, efficiency improvements in the technology workforce, concerns regarding the impact of GenAI on state government technology workforce, and state's current technology workforce expertise in GenAI.

There are five dimensions for consideration in improving GenAI effectiveness in state government, which are, governance, funding, workforce/skills, infrastructure, and data.

In response to a question from Representative Bray, Mr. Robinson stated that CIOs are concerned about the ability to commit fraud against agency programs and have started hardening cyber security protocols in preparation.

In response to a question from Senator Williams, Mr. Robinson stated he is not aware of any state that is in the process or that has replaced their legacy cobalt mainframe systems with GenAI at this time. What NASCIO is seeing, is a shift to having mainframe as a service managed by a third party.

In response to a question from Senator Meredith regarding the chart provided on the confidence level of state governments current workforce expertise and skillsets, Mr. Robinson stated the chart was compiled with the aggregated data of the 49 states that responded. In response to a follow-up question, Mr. Robinson stated it is challenging for the public sector to hire persons skilled in emerging technologies due to the changing work preferences of the younger workforce. In response to another question by Senator Meredith regarding the disability factor and AI, Mr. Robinson stated that states need to use the right frameworks and guiderails with staying within the ethical and responsible uses. Mr. Robinson stated that several states have adopted governance model sets.

In response to a question from Senator Thomas, Mr. Robinson stated the shift to third party management of mainframes is the current reality of today. States are no longer investing in large computing infrastructure and models.

Next Scheduled Meeting - Tuesday, August 13, 2024

Adjournment