DATE: Nov 15, 2023
TO: Office of Science and Technology Policy Director Arati Prabhakar
FROM: Juan Pablo Gutierrez
SUBJECT: Artificial Intelligence Regulation: New Policies about AI Need to be Established

---

Abstract:
Artificial Intelligence in recent years has been growing at an incredible rate. As AI develops, it is also becoming more accessible to the masses. With this accessibility and growth, new problems have presented themselves, including disinformation and misinformation, privacy and copyright concerns, and job displacement. Policymakers have three policy options to counter these problems. One possibility is maintaining the status quo, leaving the States to decide on what they want to do with AI. Another possibility is to implement an AI Bill of Rights that will be a foundation for AI policy in the future. Finally, the last option is to Impose an Immediate Moratorium on the Training of AI Systems, which will stop AI progression for a minimum of 6 months to allow the federal government to develop AI governance systems. I recommend implementing an AI Bill of Rights because it gives the most protection to the American people. It will be simple to implement since we already have created a blueprint of the AI Bill of Rights at the Office of Science and Technology Policy.

Background:
Artificial Intelligence has been developing at incredible speeds in the last five years. Handwriting recognition, speech recognition, image recognition, reading comprehension, and language understanding are all starting to surpass human performance due to these developments[i]. In 2022, we saw the launch of Chat-GPT, and on its first five days of launch, it saw over 1 million users[ii]. In 2023, there will be over 100+ million users, and it will get 1.5 billion monthly visitors[iii]. Relating to AI image creation, more than 15 billion images have been created using text-to-image AI since 2022. Compared to humans, it has taken us 150 years, from 1826 to 1975, to reach the 15 billion mark[iv].

AI is growing at an incredible rate, and industries recognize this. According to Bloomberg, the AI industry will become a $1.3 trillion market by 2032[v]. 97% of business owners believe that Chat-GPT will benefit their business, and currently, 1 in 3 businesses plan to use AI to create website content[vi]. AI will continue to grow in the coming years for the benefit of many, but with newfound growth may come some unforeseen consequences.

Problems:
Disinformation and Misinformation
Today, with social media and information being always present for the masses, it is easy for disinformation and misinformation to spread. Now, with open-source text-to-image algorithms, it is easy for people to make convincing images of events that never happened. The worry is that people will be unable to tell reality from fiction, creating more significant societal divides. It is not just the AI images but the AI deepfake technology and AI voice replication that can be considered very dangerous. All these factors will continue to perpetuate and increase the spread of disinformation and misinformation.

Privacy and Copyright Concerns
Much of AI policy falls into US privacy laws, and policymakers created these policies before Artificial Intelligence began to advance to what it is today[vii]. AI systems rely on vast amounts of data to operate effectively. Many worry that companies or the government use their sensitive and personal data for these systems without their consent. Since AI is a new technology, the current policies must effectively represent what can happen with AI and privacy. AI is a tool that grabs information from different places to create something new, meaning anything an AI makes is not technically theirs. AI generation issues transition into copyright concerns and how AI abuses these laws. It needs to be clarified what is infringement or not in the eyes of the law. There have been multiple cases in late 2022 and throughout 2023 where artists are suing generative AI platforms based on using their original works without licenses to train their AI[viii].

Job Displacement
According to McKinsey Global Institute, in a study conducted in 2018, there will be 400 million workers that AI will displace between 2016-2030[ix]. As AI continues to develop, companies will continue looking for cheaper labor options. Companies will use AI over humans to conduct work. Today, over 75% of people are concerned about losing their jobs due to AI. There is no protection for workers against the use of AI[x].

Goals:
The main goal of this memo is to highlight different options that will allow the federal government to regulate and cement guidelines for AI as it continues to grow. Americans should not worry about AI affecting communication, privacy, or jobs. New policies should reflect today's concerns with AI and fully understand the problem of unrestricted access to these tools.

Three Policy Options:
Maintain Status Quo: Leaving it to the States
In this scenario, the federal government leaves it to the states to regulate and set guidelines as they see fit. States like California, Maryland, Hawaii, Illinois, and many others are trying to pass their policies on AI regulation and research. Many of these are pending, while other policymakers adopted or failed to pass[xi].

The benefit of this scenario is that it gives the states flexibility on how they want to handle AI. Each state may need different levels of regulation in AI. California and New York may need more policies since those states have more tech companies. Meanwhile, a state like Alabama only needs a few since there is less of a worry there. Policymakers are trying to pass AI legislation in New York, and California is trying to pass multiple policies regarding AI, but other states are not as concerned with AI[xii]. Possible problem with this alternative is that there is no set guideline that States should follow regarding AI, so it may take more time to create AI policies.

Implementing the Blueprint for An AI Bill of Rights
An idea already discussed within the Office of Science and Technology Policy (OSTP) is An AI Bill of Rights. There already is a blueprint for how the Bill of Rights will look and cover. The blueprint covers Safe and Effective Systems, Algorithmic Discrimination Protections, Data

Privacy, Notice and Explanations, Human Alternatives Consideration, and Fallback[xiii]. This blueprint highlights many potential problems not included in this memo but also misses some crucial aspects that policymakers can add during the final implementation.

- Regarding copyright law, there should be space in the AI Bill of Rights protecting the rights of artists, content creators, and their creations. If an AI algorithm wants to use data regarding artists and creators of content, it must receive permission to use that data. Once AI uses that data, it must be clear that the generated content is AI and credit where the data is from. The addition of copyright may fall into Notice and Explanations and Data Privacy, but it is good to go into details.
- Regarding Job Displacement, there should be details in the AI Bill of Rights that counters the job displacement. A counter can include AI training for workers, so companies can give workers training on the topic instead of laying them off. Another thing could be that companies always require a certain number of human workers. There could be a percentage that policymakers may negotiate on the number of humans compared to AI.

An AI Bill of Rights will set a foundation that the rest of the country has to follow. Eventually, as time passes and technology develops, you can continue adding to the Bill of Rights to counteract any future problem AI can present to the American people. A possible problem is that you hinder the freedom of the states to create their own set of policies around AI, so politicians from those states would not like the federal government stepping in.

Impose an Immediate Moratorium on the Training of AI Systems
Using California's AJR 6 proposed policies as inspiration, there will be a total stoppage of training AI systems more potent than GPT-4 for a minimum of six months[xiv]. The stoppage will give the US government time to develop AI governance systems. There can be the creation of new policies and new research done at that time while halting AI from progressing too much during that time. This policy is not a direct fix unlike the other two polices, but it allows the federal government to get caught up with AI systems and find solutions to the problems that come with AI technology.

<u>Policy Recommendation:</u> Implement An AI Bill of Rights
I recommend implementing an AI Bill of Rights that sets the groundwork for future AI policy. It forms a standard across the country of how people should handle AI, and it protects the American people from the problems that are present with AI technology. When using AI tools, the government, companies, and the American people must follow the AI Bill of Rights. This policy will be easy to implement since a blueprint has already highlighted essential protections that are needed. The OSTP has already done most of the work by creating the blueprint; it needs to go through a final set of revisions before it gets implemented. Though it may hinder some of the state's decision-making on what they want to do with AI policies, it won't take away all their decision-making power. It gives the states a starting point to work from instead of the states creating their policies with no point of reference. The AI Bill of Rights will be the most effective way to protect the American people from the problems that AI technology presents.

Notes

[i] Giattino et al., "Artificial Intelligence."

[ii] "Number of ChatGPT Users (Nov 2023)."

[iii] "100+ Incredible ChatGPT Statistics & Facts in 2023 | Notta."

[iv] "AI Image Statistics."

[v] "Generative AI to Become a $1.3 Trillion Market by 2032, Research Finds | Press | Bloomberg LP."

[vi] "How Businesses Are Using Artificial Intelligence In 2023 – Forbes Advisor."

[vii] "U.S. Privacy Laws."

[viii] Appel, Neelbauer, and Schweidel, "Generative AI Has an Intellectual Property Problem."

[ix] "AI, Automation, and the Future of Work: Ten Things to Solve for (Tech4Good) | McKinsey."

[x] "Types of Content Where Consumers Are Concerned with Artificial Intelligence Being Used."

[xi] "Artificial Intelligence 2023 Legislation."

[xii] "Artificial Intelligence 2023 Legislation."

[xiii] "Blueprint for an AI Bill of Rights | OSTP."

[xiv] "Artificial Intelligence 2023 Legislation."