

Harvard Model Congress Boston 2024

REGULATING GENERATIVE AI By Andrew Zonneveld

INTRODUCTION



ChatGPT, owned by OpenAI, is a large language model designed to chat with users and provide feedback. OpenAI Imagine for a second that all the briefings at Harvard Model Congress were written by **generative artificial intelligence** (AI), like ChatGPT. Would you be able to tell the difference between human creativity and machine learning? What about an artistic rendition of the US Capitol Building? A legal contract between two parties? These examples all reflect the growing capabilities of generative artificial intelligence. The latest concepts can generate digital art, manipulate pictures, produce literature and music, and perhaps an infinite number of other skills previously thought to only be possible through human conception.

As generative AI becomes commonplace, several important questions have been raised, such as how AI could be used in professional and academic settings, whether certain protections like copyright and patent laws will apply to AI- generated work, and how AI should be allowed to interact with humans. Many of these issues have yet to be fully addressed due to the rapidly developing world of technology. Generative AI truly is a novel subject, one that many would say is currently in serious need of regulation and proactive legislation.

EXPLANATION OF THE ISSUE

Historical Development

Generative AI as a concept is not new; however, the AI models that are present today are vastly more complex and sophisticated than the ones first introduced in the 1960s. Back then, a program called ELIZA used a "rules-based lookup table" to answer input questions from users and simulate a therapist (Buhler, 2023).



Pictured are the hosts and other scientists at DSRPAI. Margaret Minsky

Goldman Sachs believes AI could have a \$7 trillion impact on the global economy (2023). Basically, the program was just capable of returning predetermined answers based on associated questions. When looking at AI now, ELIZA seems totally obsolete in comparison .

The most serious advancements to generative AI started occurring more recently, but true research and development did not begin until after the Dartmouth Summer Research Project on Artificial Intelligence (DSRPAI) was held in 1956 (Anyoha, 2017). Since then, several programs have far outperformed ELIZA. In 1997, the world chess champion Gary Kasparov lost to a computer built by the International Business Machines Corporation (IBM) called Deep Blue (Anyoha, 2017). Around the same time, models that could recognize speech or even emotions, like Kismet, emerged (Anyoha, 2017). Since the Dartmouth conference in 1956, there has been an incredible amount of development in this space, but unfortunately legislation on the subject has not kept up with the rate of innovation.

Scope of the Problem

Regulating generative AI is not an easy task. The concept itself is so broad that it would take Congress years to adequately address all the possible complications that might arise through the more common utilization of AI. In the meantime, federal agencies and executive action have been and will most likely bear most of the burden of protecting Americans while the judicial and legislative branches take a less time-sensitive approach.

Some key issues resulting from the proliferation of generative AI include consumer protection , copyright and patent laws, the privacy and security of data, economic impact , law enforcement implications, and so much more. Generative AI has the potential to impact every aspect of traditional life, making it incredibly difficult to regulate quickly. Most regulations will likely focus on how generative AI is allowed to interact with and impact human life, with laws focused on protecting human autonomy and creativity, without stifling innovation within the realm of generative AI.

Consumer Protections

Consumer protections are important because AI has the power to deeply transform the commercial world. Generative AI like ChatGPT can create literature and songs; models like DALL-E create generate images and digital art. Other models are emerging that can help manage businesses and even organize real financial assets. With these kinds of interactions, it is important to put consumer protections in place to ensure consumers are not being harmed by generative AI. People should be aware of how generative AI develops outputs, where it gets its information, and even when they are interacting with AI, especially as some companies do not outright disclose this information.

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Disclosing as much information about AI models as possible will mitigate several of these issues. First, AI can potentially be manipulated with bad data and unintentionally develop racial or other implicit biases, along with a host of other complications (Lee, 2023). By requiring specific disclosures, individuals who use generative AI can check code and sources to avoid potential **misinformation** or information that is biased. When it comes to deciding who is at fault when incorrect information has harmful consequences, Congress will need to decide whether humans have a moral or legal responsibility to ensure that information gathered from generative AI is correct, regardless of their involvement with its creation, and who warrants liability when certain parties are harmed.

The Chair of the Federal Trade Commission, Lina Khan, said rtificial i ntelligence is not exempt from consumer that a protections and other regulations that promote competition and owever, the agency and other executive protect Americans. Η offices are having trouble prosecuting companies due to a lack of resources and training (Khan, 2023). It is vital that Americans are aware of how they are using rtificial i ntelligence to limit а fraud. As generative AI becomes capable of creating images and audio, scammers will only grow more realistic and successful in defrauding people.

Overall, consumer protections are desperately needed to ensure Americans are safe when using generative AI. Consumer protections will need to both protect users from malicious AI and protect others from those using malicious AI. Issues like liability and transparency will be key in solving these issues.

Copyright and Patent Laws

There are two aspects to regulating copyright and patent laws regarding generative AI. First, generative AI models traditionally use sources that are already available on the internet to develop and train models and to produce new content. While some of this work could be considered **fair use** under the **US Copyright Act**, there are some instances in which generative AI does not give credit to the rightful creators. Because of this, issues regarding infringement need to be addressed. Secondly, generative AI can create new works, but the question remains: who has the right to own said work product, or can it even be copyrighted in the first place?

OpenAI admitted that their models are largely trained on publicly available information, including images which it makes a copy of so it can be translated into language the AI can understand (CRS, 2023). Using this information, authors of these publicly available sources can argue AI companies are infringing on their copyrights because only authorized people are able to reproduce the work product under copyright law. Nonetheless, t he US Circuit Court of Appeals for the Second Circuit found in *The Authors Guild, Inc. v.*

misinformation -

false information deliberately intended to deceive.

Federal Trade Commission – an independent federal agency charged with enforcing civil antitrust law and protecting consumers.

Fair use – a doctrine that permits the use of copyrighted material without prior approval based on four factors: purpose of use, nature of copyrighted work, amount of work used, and value of the work.

US Copyright

Act – prevents the unauthorized copying of a work without permission; copyright is granted based on originality. *Google, Inc.*, that Google copying entire books to form a searchable database did not rise to the level of a copyright violation. This creates precedent that supports the training of AI models. This is why the fair use doctrine is important because there are certain factors that need to be met to ensure AI companies are not infringing on copyrights.

Another area for concern is when an AI-generated work product is too similar to copyrighted materials and competes with the work of an author who produced a similar product. To prove **infringement**, copyright owners must prove the AI program had access to their work and created substantially similar outputs (CRS, 2023).

What Congress must decide when it comes to infringement is whether using copyrighted material to train AI models constitutes a violation if that information is never released to the public. Similarly, Congress must decide who is at fault when an AI-generated work product is considered to be infringing on copyright owners. Is it the creator of the AI or the user who asked for the output?

Congress must also decide if they will extend copyright protections to AI-generated work and the user who directed its creation. Previous court rulings have held that non-human generated work is not protected, and the Copyright Office has refused to issue copyrights for materials not created by humans (CRS, 2023). Some creators argue that AI is a tool, just like photography – which is allowed to be copyrighted – and should be granted the same copyright protections. It seems unlikely, however, that regulations will grant the same considerations to AI-generated art versus pictures taken by a camera. This is because AI is autonomouslycreated art, while a camera is controlled and operated by a human. Nonetheless, Congress can make its own decision regarding the extension of copyright protections to AI work products.

Privacy and Data Security

A rtificial i ntelligence has access to a vast sea of information, and the storage and protection of this data is paramount to ensuring the safety of all users. Generative AI models can manipulate financial assets, recognize facial expressions, and be given access to the most personal information possible to ensure unique experiences that are different for each user. The issue with this is that with more data comes more risk, and storing large amounts of data can be both dangerous and expensive.

AI companies are increasingly asking for more information from users to better connect the dots of what interests individuals. With more information, there is always a risk of data leaks affecting thousands, if not millions of consumers (Idziniak, 2023). AI companies will need to take the necessary precautions to ensure that data cannot be compromised, especially sensitive information like

infringement – when a copyrighted work is reproduced, distributed, performed, or displayed without the permission of the copyright owner; penalties include imprisonment and large fines.



This is an example of AI-generated art, however, it is created using the same style as Van Gogh – most people can't tell the difference. MegaPencil

Personally identifiable information –

sensitive personal information that can be used to reasonably infer one's identity such as a Social Security Number or even biometric data. financial information or **personally identifiable information (PII).** Congress has the authority to create standards for how data should be stored, how it can be shared, and even how generative AI models are able to collect and use information. Users deserve to know what information is being collected, how it is being used, and if that information is ever shared outside of the authorized company.

Autonomous Human Interaction

Many believe **A utonomous Human Interactions (AHI)** need to be regulated since this is when the public is most at risk of physical harm from a rtificial i ntelligence. Most people assume AI can only interact with humans on a technological level, not physical. As AI becomes more advanced, however, their interactions with humans are becoming increasingly physical. Self-driving cars are the most common form of AHI, with varying levels of autonomy. The most basic systems keep a vehicle in its own lane, but today AI can control every aspect from starting the engine to putting the car in park.

When it comes to self-driving cars, there is a gray area in terms of liability. For instance, if an autonomous vehicle was to be involved in an accident, deciding who is at fault can be difficult. Depending on the level of autonomy, a human driver might not even be behind the wheel. Some argue that the owner of the vehicle, regardless of if they were driving or not, should be held responsible. Others might suggest the software company was technically in control of the vehicle, and therefore the company assumes liability. To make the situation more complex, there are times when human drivers must make swift decisions that might involve a moral dilemma. For example, if a driver witnesses another vehicle was involved in a collision and did not have enough time to come to a complete stop, they must either hit the car, potentially injuring or killing the other driver, or swerve to avoid the collision, potentially harming themselves. If autonomous vehicles are in control of the vehicle during a similar incident, there is not enough time to transfer control back to the human. Instead, the AI would need to make this moral decision itself, and determining how companies train models to do so could be a part of future regulations.

Autonomous human interactions go beyond just self-driving cars. Developing technology has introduced robots powered by AI that can provide medical treatment, care for the elderly, wait on tables at restaurants, or in rare cases, act as law enforcement. Each of these examples involves an AI model interacting with humans – this is not based on input from another individual, but from previous training and exposure. Deciding how these models are trained, what standards they should uphold, and how they are allowed to interact with humans is all up for debate. Legal issues like determining liability for accidents, or in the case of law enforcement, excessive

Autonomous human interaction

(AHI) – occurs when artificial intelligence interacts with humans without input or supervision from another individual, such as self-driving cars. force, all need to be regulated. In the real world, people can be prosecuted or imprisoned for harming others, but what would happen to an AI powered robot? If a robot dropped an elderly patient, is it just an accident? Should a robot that uses excessive force be de-commissioned or should the software be reprogrammed? When accidents or incidents like this occur, does liability fall on the software engineer, mechanical engineer, or the entity that bought the robot and deployed them?

It appears regulating the physical interactions between natural intelligence and artificial intelligence will be the most important, and complex, issue legislators face. A balance between promoting innovation while protecting lives and property will be paramount to the future success of AI within the United States. There is incredible potential for increased productivity and economic prosperity, but equal potential for accidents to cause great harm.

Congressional Action

Congress has already taken some action towards regulating AI. First, in 2020, Congress passed the National Artificial Intelligence Initiative Act of 2020 as part of the annual omnibus National Defense Authorization bill, specifically H R 6395. The National Artificial Intelligence Initiative (NAII) is designed to ensure the United States supports the responsible development of AI, both in the public and private sphere. As part of this legislation, the President and federal agencies are required to support research and education, focusing on the following key areas: Innovation, Advancing Trustworthy AI, Education and Training, Infrastructure, Applications, and International Cooperation (AI.gov, 2023). Furthermore, the NAII Office was established to oversee these developments, along with the Select Committee on AI, created in 2018 as a collection of leaders across multiple federal agencies: the Machine Learning and AI Subcommittee; the National AI Advisory Committee, which includes a specific subcommittee on law enforcement; and several other regulatory groups to further promote AI research and education (AI.gov, 2023).

While there are no other substantive pieces of legislation that have passed either chamber of Congress, some bills regarding AI have been introduced and referred to the appropriate committees. S 4201, introduced by Senator Bennet of Colorado, would have created another federal agency dedicated to regulating AI called the Federal Digital Platform Commission. H R 6553, introduced by Representative Soto of Florida, would direct the Department of Labor to study the impact of AI on the workforce.

These two bills are small efforts compared to the NAII Act of 2020. Neither made it beyond committee, but it shows that Congress has AI on its radar and recognizes the need for regulation. Importantly, both the Senate and House Judiciary Committees have

held hearings on AI. Their focus has been on creating rules and navigating copyright issues.

Drafting legislation for AI is not particularly a priority for the current Congress as they are dealing with a host of other issues like the national debt and spending limits. Because of this, Congress has been slow to act on AI beyond the NAII Act. For now, most of the action being taken is through the federal agencies in the executive branch.

Other Policy Action

Few other actions regarding a rtificial i ntelligence have been taken either domestically or internationally. Congress has only authorized research and funding for the development of AI, but it hasn't created significant regulation . Other governments, like those within the European Union, have taken similar actions. The Artificial Intelligence Act, which is a piece of legislation pending a final vote by the European Parliament, would be the world's first set of rules governing a rtificial i ntelligence (European Parliament, 2023). This legislation would categorize AI technology across four levels with various levels of regulation (European Parliament, 2023). Additionally, it would prohibit "biometric surveillance, emotion recognition, and predictive policing" (European Parliament, 2023). These rules ensure AI research and use is done with human rights in mind , increasing transparency and efficacy without limiting innovation.

Besides the rules proposed by the European Union, the United Nations has taken up the issue of a rtificial i ntelligence too. In 2021, all 193 members of the UN Educational, Scientific, and Cultural Organization (UNESCO) adopted a joint *Recommendation on the Ethics of Artificial Intelligence* (UN, 2021). This agreement outlines common values and principles to support the healthy development of a rtificial i ntelligence (UN, 2021).

Legal action against a rtificial i ntelligence has also been taken. In April 2023, the US Supreme Court denied hearing a case against the US Patent Office. In Thaler v. Vital, the plaintiff argued the AI system he created autonomously invented two unique creations, but the US Patent Office refused to issue patents on the grounds that the AI system was not a human (Brittain, 2023). This case is one of the first that truly limits the rights of AI and will have large impacts across the industry, as there is less incentive for developers to encourage AI to invent novel products since they cannot benefit from a patent.



CEO of ChatGPT testifies before Congress as they tackle the risks of AI CNN

IDEOLOGICAL VIEWPOINTS

Conservative View

According to the Heritage Foundation, a conservative public onservatives have three fundamental policy think-tank, C methods of thought when it comes to a rtificial i ntelligence. First, conservatives believe AI will be a fundamental aspect in national security (Kitchen, 2019). They support research in partnership with the Department of Defense and other defense contractors to safely evaluate the potential for AI use in law enforcement. Second, c onservatives want to mitigate the impact on the labor markets that AI will have, with protecting jobs remaining a top priority (Kitchen, 2019). Third and finally, c onservatives believe AI should be used to expand opportunities without room for discrimination (Kitchen, 2019). They believe no minority, nor political ideology, should be excluded from the benefits of AI.

Liberal View

The l iberal approach to a rtificial i ntelligence is not so different from that of C onservatives. Liberals believe less in AI's application in law enforcement, shying away from supporting AI research within the Department of Defense or within other law enforcement capacities. Liberals do not believe AI should be capable of using any amount of force against a human, weighing the risks are far too great. Instances which require force often authorize the use of force when the officer perceives a credible threat to their safety or the safety of those around them. In the case of AI, the technology must be programmed to make this decision and liberals are not convinced this is a good idea.

Furthermore, liberals view AI as a way of increasing economic output while simultaneously reducing work expectations. By using AI and automation in the workforce, some liberals see potential to decrease the work week and ameliorate working conditions. Allowing AI to generate revenue instead of humans presents the perfect opportunity to introduce a universal basic income, which some more left-leaning liberals have been suggesting for years.

AREAS OF DEBATE

This section will address potential policy areas up for debate in response to the issues previously presented. It is important to be aware that these are only suggestions, and legislators should work within their party and across the aisle to draft their own unique legislation using compromise and strategy.

Ban AI in Law Enforcement

Banning the use of artificial intelligence falls under the scope of Autonomous Human Interactions. Many experts argue that AI has the potential for bias when learning how to be an effective member of law enforcement, and therefore would disproportionately affect minorities. Because of this, the potential risks for allowing AI to operate in the field of law enforcement may not be worth the benefits for some. This issue largely focuses on the training of AI models. and while one could argue that if trained correctly there would be no issues, there are already systemic inequalities across the United States that impact the data and methods that would be used to train such AI models. Any well-intentioned attempt to properly train AI as a law enforcement officer would be using already biased information, which would then affect the AI model. Additionally, procedures for the use of force require the officer to feel as if there is a credible amount of danger, and AI simply cannot feel emotions in the same way humans can. Any AI capable of the use of force would need to be to execute certain actions based on the necessary inputs, trained but each situation is extremely different, and most would agree that no AI model should be capable of purposefully taking the life of a human, regardless of the level of training.

Some would argue that using AI in law enforcement would save the lives of law enforcement officers and could have potential military applications. By using robots powered by AI, humans could avoid potentially lethal situations while still maintaining some remote authority. If an AI were put into a difficult situation, its perception of time is flexible, allowing the machine to process all the available information much faster than any human. With the addition of cameras and sensors, AI would also have access to more information than humans traditionally have. Finally, with AI there is no life-loss risk, except some potential financial losses. AI could still be a part of law enforcement without the capability of lethal force, which would also protect the safety of alleged criminals.

Political Perspectives on this Solution

As mentioned before, c onservatives are supportive of research towards the goal of implementation of AI in law enforcement and the military. They believe it is a great opportunity to increase law enforcement presence without harming additional officers.

Liberals, however, generally stand opposed to the use of a rtificial i ntelligence in law enforcement because of the implications that biases in AI models could have on the health and safety of the human population, especially the minority populations that existing data collection and research is disproportionately biased against.

Other interested parties would mainly be p olice o fficer u nions, because of both the positive and negative impact AI would have on officers . There is the potential for saving the lives of countless officers; nonetheless, others might lose their jobs to automation. Additionally, defense contractors would favor the opportunity to receive research grants and investments to pursue this technology. On the other hand, c ivil rights groups might be concerned with this legislation and will want to investigate the impact it will have on minorities.

Extend Copyright and Patent Protections to AI

Artificial intelligence has the capability to autonomously create artwork, music, literature, unique inventions, and countless other creative works. Because of this, expanding c opyright and patent protections to work generated by a rtificial i ntelligence might help promote the private sector to continue research and development of AI. Currently, all work products created by AI cannot receive a patent or copyright because those protections apply exclusively to human generated work. By expanding the protections in the US Copyright Act, individuals can ensure the work created by their models cannot be copied without their consent and benefit. Optimistically, no one would mind allowing their creations into the public domain and not receiving compensation . However, i nnovation is often rewarded with profit, and allowing AI to patent and copyright materials is how innovation is fostered.

Supporters believe this is a necessary step in ensuring the private sector of AI is motivated to continue research and development in a way that could potentially benefit society. Conversely, some are opposed to this idea because it discourages humans from exercising their creative capacities without turning to AI. Expanding protections would mean human artists now have more competition in the creative field.

Political Perspectives on this Solution

This issue is not easily divided among party lines and requires independent values to guide decision-making. The primary issues are whether copyright and patent protections should continue to only be granted to humans, or if AI is considered autonomous enough to protect any output. Liberals and conservatives both want to promote the innovation and research of AI, but they also need to consider the impacts it will have on artists, musicians, and culture altogether.

Many AI software companies would be interested in this legislation because it opens the door for significant financial gains to be made. Potential groups opposed to this legislation would be creators and artists who feel like this expansion would undermine their work and human creativity.

Create a Federal Agency to Regulate AI

Creating a federal agency to regulate and enforce rules on artificial intelligence would tackle several issues simultaneously. It would enable greater transparency, consumer protection, privacy, and help facilitate changes to patent or copyright and security, laws and autonomous human interactions. By delegating the authority of regulating artificial intelligence to a federal agency, the day-to-day operations would be under the purview of the President and their administration. Congress could still have oversight over this newly established agency and could outline key priorities that the administration would be required to take. To do this, Congress would need to appropriate the necessary funding, but beyond that there is some flexibility. Congress could have greater control over the agency, creating the name, titles of staff, authority, and regulatory priorities. However, Congress could also take a hands-off approach and give the President the necessary funding to accomplish these tasks according to their priorities.

Some argue that creating another agency will further bloat the executive bureaucracy and exacerbate existing inefficiencies with communication and interagency cooperation. These problems would delay the research and innovation of a rtificial i ntelligence in a way that smothers advancement, preventing American AI companies from being globally competitive in the AI space.

Supporters argue that a new federal agency is necessary because it ensures one agency can regulate and enforce the rules related to a rtificial i ntelligence. For this solution to work, Congress should clearly express that all possible issues related to AI should be deferred to the new agency, who can then delegate tasks as necessary to other federal agencies.

Political Perspectives on this Solution

Liberals are more likely to support this solution. Well-written legislation that clearly defines goals and priorities, in addition to ample authority, will ensure success within the agency. Congress is too slow to efficiently update regulations as new, innovative advancements are made. By creating a federal agency to do this, quick changes can be made when the industry inevitably evolves beyond current legislation.

However, a s with most increases in the size of the federal government, c onservatives will not be happy. Many will assume a larger government means more rules and less room for independent advancement. Additionally, a new agency comes with more spending, which is a common sticking point for c onservative legislators.

Existing federal agencies will be unlikely to agree with relinquishing all authority regarding AI to a single agency. To ensure

efficiency, the responsibilities of each agency will need to be clearly defined.

Create a Privacy Taskforce

Privacy is among the top concerns when it comes to a rtificial i ntelligence. Consumers should have certain rights when it comes to the use of AI, both publicly and privately. Whether they download an app or walk down the street, knowing if an AI model has access to your information or biometric features is important. Establishing a taskforce designed to ensure privacy and security standards around AI is an important step towards protecting consumers. This taskforce can be used to set standards, investigate complaints, and ensure the data collected by AI models meets rigorous tests to prevent unauthorized access. Congress has the authority to designate either a Congressional Task Force , composed of m embers, or a third-party task force industry professionals made up of nominated by the President or co ngressional l eaders.

Supporters believe additional oversight regarding AI is necessary, more than what Congress can provide. There are several niche instances in which rules need to be debated on protecting privacy versus promoting innovation. Whether AI can be used in public without a person's consent or how AI data can be stored needs to be addressed.

Political Perspectives on this Solution

Conservatives are less likely to support a task force without specific limitations on the purview of the group. They might also believe that this solution is redundant and just another governmental overreach that bloats bureaucracy. If there are already federal agencies for consumer protection and online data storage, a separate agency might be perceived as unnecessary.

Most taskforces such as this can only provide recommendations, and it is up to Congress to make final legislative or regulatory decisions. Overall, both ideologies support increased transparency, security, and privacy.

Restrict Research and Development of AI

The final solution for solving the issues associated with AI, and perhaps the least popular, is to restrict the development and research of AI. This would mean halting current projects, prohibiting advancements to the industry, and most likely phasing out current uses of AI depending on their level of risk. Some scientists have called for a freeze on AI research until legislators have enough time to address the issues associated with AI, but this comes with some heavy costs. Supporters of this legislation argue that it would enable the federal government to formulate a plan for integrating AI into daily life. This solution need not be permanent, but rather like hitting the pause button so the government can catch up on their notes.

Opponents to this solution are concerned about the impact it would have on the industry on a global scale. Other competitors will not stop research and innovation just because we do; therefore, American companies will end up behind the global market and unlikely to catch up. This will prevent the US from being a leading contributor to the industry and potentially set standards that other countries would have adopted otherwise.

Political Perspectives on this Solution

Regardless of political affiliation, this solution is not the most popular. Most supporters are traditional c onservatives who fear what the unregulated potential for AI means. Liberals are less likely to support pausing research unless they are older and changeadverse .

There would be significant backlash against this legislation that would most likely result in litigation up to the Supreme Court on the constitutionality of this legislation. The government would have to have more interest in prohibiting research than injured parties in conducting the research for this to be considered constitutional.

BUDGETARY CONSIDERATIONS

The federal government is one of the largest financial contributors to scientific research. Over the past five years, over \$1 billion has been granted to various projects based on artificial i ntelligence (Brookings Institute, 2022). Additionally, previously introduced legislation to create new agencies for the purpose of tackling artificial intelligence was given a proposed budget over more than \$3.5 billion over ten years (S 4201 - Digital Platform Commission Act of 2022, 117th Congress).

When considering budgets for proposed solutions, be sure to be specific with funding requirements. Identify specific areas or programs for funding and use research to support a fiscally responsible approach. Budgets should be reasonable, using existing authorizations as guidelines. Additionally, each budget will be different depending on the specific policy approach. Finally, identify the source of funding for your legislation as well.

CONCLUSION

Regulating generative artificial intelligence is likely to be one of the most influential and controversial matters that will come before Congress for the foreseeable future. While there are significant benefits stemming from the use generative AI, they must be balanced with the potential risks. AI uses incredible amounts of data, much of it sensitive – this need to be protected and regulated. AI also can be used by bad actors to harm citizens – this needs to be regulated. AI is capable of autonomous human interactions and can physically interact with people – this needs to be regulated. Finally, at least for the time being, AI can create unique work products – this needs to be regulated and protections for authorship decided.

Regulations for AI will need to balance protecting humans with Some congresspeople maintain that the US protecting innovation. must hold a position of global dominance in the industry to ensure the safe, ethical development of AI across the world; others would disagree. Either way, any significant advancements that come from American scientists should uphold ethical guidelines to ensure AI respects the rights and dignity of all people, not just the majority. There is also serious economic potential regarding AI, and Congress will need to balance how that will transform the domestic workforce.

Generative AI is a revolutionary tool, but only if used responsibly and with care. It has the power to change the entire world, ushering in a new age of enhanced manufacturing, research, and so much more. As has happened in the past, technological revolutions change society as we know it. From hunter-gathers, to farmers, to the modern day American, technology has changed the shape of history and the next innovation to do could very well be generative AI. It is now up to Congress to decide if, and how, that will take place.

GUIDE TO FURTHER RESEARCH

Generative AI as we now understand it is a novel topic, and it is important to maintain an active approach to research. The field of AI will continue to rapidly grow and develop as new technological advancements are made. Just a few decades ago, AI was something many people barely understood and now it is on track to be one of the most transformative innovations in human history. By keeping up on developments and new products, researchers can ensure they are not caught off guard by innovation.

Further research should seek to understand how generative AI will impact human life in the future. It should center around the impact generative AI will have on the economy, the labor market, and perhaps specific occupations that will gain the most from integrating generative AI, and those that stand to lose the most to automation.

Regarding specific sources, the bibliography of this briefing will be a good place to start. Gathering research from timely news

There have been four industrial revolutions since 1765. Will AI be the fifth? articles, research journals, and even other editorials on generative AI could prove fruitful.

It might also be helpful to keep up with relevant bills and legislation floating their way through Congress. For that, make sure to check out Congress.gov and simply search for bills on the topic. You can even see if your representative has sponsored any on the subject!

GLOSSARY

Autonomous Human Interaction (AHI) – occurs when artificial intelligence interacts with humans without input or supervision from another individual, such as self-driving cars.

Fair use – a doctrine that permits the use of copyrighted material without prior approval based on four factors: purpose of use, nature of copyrighted work, amount of work used, and value of the work.

Federal Trade Commission (FTC) – an independent federal agency charged with enforcing civil antitrust law and protecting consumers.

Generative Artificial Intelligence – algorithms that can be used to generate new content such as text, images, audio, etc.

Infringement – when a copyrighted work is reproduced, distributed, performed, or displayed without the permission of the copyright owner; penalties include imprisonment and large fines.

Misinformation – false information deliberately intended to deceive.

Personally Identifiable Information (PII) – sensitive personal information that can be used to reasonably infer one's identity such as a Social Security Number or even biometric data.

US Copyright Act – prevents the unauthorized copying of a work without permission; copyright is granted based on originality, creativity, and fixation.

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