Generic Negative: More Study Needed

By “Coach Vance” Trefethen

***Resolved: The United States federal government substantially reform the use of Artificial Intelligence technology***

This is a generic negative brief that can be used whenever you don’t have an on-case brief specifically dealing with the topic of the Affirmative plan. If you don’t know what else to do, try running the arguments in this brief. It will fill your speeches with evidentially supported arguments, salvage your speaker points, and give you at least some percentage chance of winning. It’s a lot better than giving up or floundering because you don’t have evidence about the AFF plan, or whining about their funding or timeline.

This brief argues that we can’t do any successful policies on Artificial Intelligence right now because the field is too new. We are sure to make mistakes if we rush in to new policies and reforms without knowing what we are doing.

Generic Negative: More Study Needed 2

SOLVENCY 2

1. Too early 2

AI is too new at this stage to start passing laws for it. We need to develop expertise and study impacts first 2

We need to better understand how AI processes are executed 2

Tradeoffs between promoting innovation and regulating for safety are difficult, and we don’t have the expertise yet to understand the implications 2

Big applications of AI don’t really work yet – it’s mostly hype and “fake it ‘til you make it” 3

2. Too complex 3

AI policy is so complex that it takes years of study and collective input to do it right 3

It’s not just about AI: We have to look at multiple other technologies at the same time 3

3. Lack of expertise / skills 4

AI regulators have trouble staying current with technology 4

Government has trouble ramping up expertise needed to manage the deep technology of AI 4

US Government has massive human talent deficit in AI 4

Government expertise must be specific to the sector using AI, not “AI in general” + must have it before crafting regulations 5

DISADVANTAGES 5

1. Premature regulation stifles AI development 5

Link: Poorly informed regulation stifles AI innovation 5

Impact: Lose money and jobs – because AI could generate wealth and new jobs if it is allowed to grow 5

Generic Negative: More Study Needed

SOLVENCY

1. Too early

AI is too new at this stage to start passing laws for it. We need to develop expertise and study impacts first

Prof. Ryan Calo 2017. (Associate Professor, University of Washington School of Law; hosted the first White House workshop on artificial intelligence policy, organized AI workshops for the National Science Foundation) Artificial Intelligence Policy: A Primer and Roadmap <https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf> (accessed 8 Aug 2021)

Policy admits of the possibility of new laws, but does not require them. It may not be wise or even feasible to pass general laws about artificial intelligence at this early stage, whereas it is very likely wise and timely to plan for AI’s effects on society — including through the development of expertise, the investigation of AI’s current and likely social impacts, and perhaps smaller changes to appropriate doctrines and laws in response to AI’s positive and negative affordances.

We need to better understand how AI processes are executed

Darrell West and John Allen 2018. (West - Vice President and Director - [Governance Studies](https://www.brookings.edu/program/governance-studies/) Senior Fellow - [Center for Technology Innovation](https://www.brookings.edu/center/center-for-technology-innovation/). Allen -President, The Brookings Institution) 24 Apr 2018 How artificial intelligence is transforming the world <https://www.brookings.edu/research/how-artificial-intelligence-is-transforming-the-world/> (accessed 8 Aug 2021)

To summarize, the world is on the cusp of revolutionizing many sectors through artificial intelligence and data analytics. There already are significant deployments in finance, national security, health care, criminal justice, transportation, and smart cities that have altered decision-making, business models, risk mitigation, and system performance. These developments are generating substantial economic and social benefits. Yet the manner in which AI systems unfold has major implications for society as a whole. It matters how policy issues are addressed, ethical conflicts are reconciled, legal realities are resolved, and how much transparency is required in AI and data analytic solutions. Human choices about software development affect the way in which decisions are made and the manner in which they are integrated into organizational routines. Exactly how these processes are executed need to be better understood because they will have substantial impact on the general public soon, and for the foreseeable future. AI may well be a revolution in human affairs, and become the single most influential human innovation in history.

Tradeoffs between promoting innovation and regulating for safety are difficult, and we don’t have the expertise yet to understand the implications

Stanford University 100 Year Study on Artificial Intelligence 2016. (The One Hundred Year Study on Artificial Intelligence, launched in the fall of 2014, is a long-term investigation of the field of Artificial Intelligence and its influences on people, their communities, and society) “ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE” Sept 2016 <https://ai100.stanford.edu/sites/g/files/sbiybj9861/f/ai100report10032016fnl_singles.pdf> (accessed 8 Aug 2021)

Some existing regulatory regimes for software safety (for example, the FDA’s regulation of high consequence medical software) require specific software engineering practices at the developer level. However, modern software systems are often assembled from library components which may be supplied by multiple vendors, and are relatively application-independent. It doesn’t seem feasible or desirable to subject all such developers to the standards required for the most critical, rare applications. Nor does it seem advisable to allow unregulated use of such components in safety critical applications. Tradeoffs between promoting innovation and regulating for safety are difficult ones, both conceptually and in practice. At a minimum, regulatory entities will require greater expertise going forward in order to understand the implications of standards and measures put in place by researchers, government, and industry.

Big applications of AI don’t really work yet – it’s mostly hype and “fake it ‘til you make it”

Prof. Mary Cummings 2020 (*professor in the Duke University Electrical and Computer Engineering Department, and the Director of the Humans and Autonomy Laboratory)* The AI that Wasn’t There: Global Order and the (Mis)Perception of Powerful AI *) 2 June 2020* <https://tnsr.org/roundtable/policy-roundtable-artificial-intelligence-and-international-security/> (accessed 8 Aug 2021)

Despite the fact that AI has not been as successful in military and commercial settings as many people think, it is entirely possible that the perception of having all-powerful AI may be just as important as actually having it. A major factor driving the perception of who has the most advanced AI is who spends the most on it. Alphabet has spent more than $2 billion on DeepMind, which has a reputation as one of the most advanced AI companies in the world. However, DeepMind has produced very little in terms of revenue beyond successes in deterministic games like Alpha Go, calling into question DeepMind’s supposed successes.The uncertain accomplishments of AI are important when it comes to the international arms race because there is serious concern that China is outpacing the United States in AI applications. But given the significant weaknesses of current AI development, it must be asked whether China is really ahead of the United States in AI development or if AI overhype and well-placed demonstrations have simply given the perception that China is ahead. If the latter, what are the ramifications of such a misperception? The practice of claiming to possess all-powerful AI without actually having AI-driven systems is currently an issue in the commercial world of driverless cars. Companies developing driverless cars must rely on humans to significantly augment computer vision systems through data labelling: Humans must tell the car what it is seeing (road, bush, pedestrian, etc.), in the hope that after enough examples the car will “learn” these relationships on its own. As a result of the brittleness in such supervised approaches to learning, companies have not delivered on their promises of fleets of operational self-driving cars. To date, no company has demonstrated the ability for sustained driving operations without a safety driver behind the wheel. This practice of “fake it till you make it” is well known in Silicon Valley and has shown up in other commercial settings, like when humans pretended to be calendar-scheduling chatbots or when call center employees acted as transcription AI for voice-to-text translation.

2. Too complex

AI policy is so complex that it takes years of study and collective input to do it right

Peter Dizikes 2020 (journalist with Massachusetts Institute of Technology News Office) 20 Feb 2020 “A road map for artificial intelligence policy <https://news.mit.edu/2020/starr-videgaray-artificial-intelligence-policy-0220> (accessed 8 Aug 2021)

The rapid development of artificial intelligence technologies around the globe has led to increasing calls for robust AI policy: laws that let innovation flourish while protecting people from privacy violations, exploitive surveillance, biased algorithms, and more. But the drafting and passing of such laws has been anything but easy. “This is a very complex problem,” Luis Videgaray PhD ’98, director of MIT’s AI Policy for the World Project, said in a lecture on Wednesday afternoon. “This is not something that will be solved in a single report. This has got to be a collective conversation, and it will take a while. It will be years in the making.”

It’s not just about AI: We have to look at multiple other technologies at the same time

National Security Commission on Artificial Intelligence 2021 (bipartisan commission of 15 technologists, national security professionals, business executives, and academic leaders) March 2021 “Final Report” <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf> (accessed 17 June 2021)

Leadership in AI is necessary but not sufficient for overall U.S. technological leadership. AI sits at the center of the constellation of emerging technologies, enabling some and enabled by others. The United States must therefore develop a single, authoritative list of the technologies that will underpin national competitiveness in the 21st century and take bold action to catalyze U.S. leadership in AI, microelectronics, biotechnology, quantum computing, 5G, robotics and autonomous systems, additive manufacturing, and energy storage technology. U.S. leadership across these technologies requires investing in specific platforms that will enable transformational breakthroughs and building vibrant domestic manufacturing ecosystems in each. At the same time, the government will need to continuously identify and prioritize emerging technologies farther over the horizon.

3. Lack of expertise / skills

AI regulators have trouble staying current with technology

Peter Dizikes 2020 (journalist with Massachusetts Institute of Technology News Office) 20 Feb 2020 “A road map for artificial intelligence policy <https://news.mit.edu/2020/starr-videgaray-artificial-intelligence-policy-0220> (accessed 8 Aug 2021) (brackets added)

[Luis] Videgaray [PhD director of MIT’s AI Policy for the World Project] observed that it is difficult for AI regulators to stay current with technology. “There’s an information lag,” Videgaray said. “Things that concern computer scientists today might become the concerns of policymakers a few years in the future.”

Government has trouble ramping up expertise needed to manage the deep technology of AI

Prof. Ryan Calo 2017. (Associate Professor, University of Washington School of Law; hosted the first White House workshop on artificial intelligence policy, organized AI workshops for the National Science Foundation) Artificial Intelligence Policy: A Primer and Roadmap <https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf> (accessed 8 Aug 2021)

The better-grounded observation is that government lacks the requisite expertise to manage society in such a deeply technically-mediated world. Government bodies are slow to hire up and face steep competition from industry. When the state does not have its own experts, it must either rely on the self-interested word of private firms (or their proxies) or experience a paralysis of decision and action that ill-serves innovation. Thus, one overarching policy challenge is how best to introduce expertise about AI and robotics into all branches and levels of government so they can make better decisions with greater confidence. [**END QUOTE**] The solution could involve new advisory bodies, such as an official Federal Advisory Committee on Artificial Intelligence with an existing department or even a standalone Federal Robotics Commission.143 Or it could involve resuscitating the Office of Technology Assessment, building out the Congressional Research Service, or growing the Office of Science and Technology Policy. Yet another approach involves each branch hiring its own technical staff at every level. [**HE GOES ON TO CONCLUDE IN THE SAME CONTEXT QUOTE:]** The technical knowledge and affordances of the government — from the ability to test claims in a laboratory to a working understanding of AI in lawmakers and the judiciary — will ultimately affect the government’s capacity to generate wise AI policy.

US Government has massive human talent deficit in AI

National Security Commission on Artificial Intelligence 2021 (bipartisan commission of 15 technologists, national security professionals, business executives, and academic leaders) March 2021 “Final Report” <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf> (accessed 17 June 2021)

The human talent deficit is the government’s most conspicuous AI deficit and the single greatest inhibitor to buying, building, and fielding AI-enabled technologies for national security purposes. This is not a time to add a few new positions in national security departments and agencies for Silicon Valley technologists and call it a day. We need to build entirely new talent pipelines from scratch.

Government expertise must be specific to the sector using AI, not “AI in general” + must have it before crafting regulations

Stanford University 100 Year Study on Artificial Intelligence 2016. (The One Hundred Year Study on Artificial Intelligence, launched in the fall of 2014, is a long-term investigation of the field of Artificial Intelligence and its influences on people, their communities, and society) “ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE” Sept 2016 <https://ai100.stanford.edu/sites/g/files/sbiybj9861/f/ai100report10032016fnl_singles.pdf> (accessed 8 Aug 2021)

One lesson that might be drawn concerns the growing disconnect between the context-specific way in which AI is governed today and a wider consideration of themes shared by AI technologies across industries or sectors of society. It could be tempting to create new institutional configurations capable of amassing expertise and setting AI standards across multiple contexts. The Study Panel’s consensus is that attempts to regulate “AI” in general would be misguided, since there is no clear definition of AI (it isn’t any one thing), and the risks and considerations are very different in different domains. Instead, policymakers should recognize that to varying degrees and over time, various industries will need distinct, appropriate, regulations that touch on software built using AI or incorporating AI in some way. The government will need the expertise to scrutinize standards and technology developed by the private and public sector, and to craft regulations where necessary.

DISADVANTAGES

1. Premature regulation stifles AI development

Link: Poorly informed regulation stifles AI innovation

Stanford University 100 Year Study on Artificial Intelligence 2016. (The One Hundred Year Study on Artificial Intelligence, launched in the fall of 2014, is a long-term investigation of the field of Artificial Intelligence and its influences on people, their communities, and society) “ONE HUNDRED YEAR STUDY ON ARTIFICIAL INTELLIGENCE” Sept 2016 <https://ai100.stanford.edu/sites/g/files/sbiybj9861/f/ai100report10032016fnl_singles.pdf> (accessed 8 Aug 2021)

Faced with the profound changes that AI technologies can produce, pressure for “more” and “tougher” regulation is probably inevitable. Misunderstandings about what AI is and is not could fuel opposition to technologies with the potential to benefit everyone. Inappropriate regulatory activity would be a tragic mistake. Poorly informed regulation that stifles innovation, or relocates it to other jurisdictions, would be counterproductive.

Impact: Lose money and jobs – because AI could generate wealth and new jobs if it is allowed to grow

International Telecommunications Union 2018 (This research was conducted by Jacques Bughin, McKinsey Global Institute Director and Senior Partner of McKinsey & Company, Jeongmin Seong, Senior fellow, MGI, and MGI’s expert members ) Assessing the Economic Impact of Artificial Intelligence, Sept 2018 <https://www.itu.int/dms_pub/itu-s/opb/gen/S-GEN-ISSUEPAPER-2018-1-PDF-E.pdf> (accessed 19 June 2021)

As AI contributes to the higher productivity of economies, the increased output from efficiency gains and innovations can be passed to workers in the form of wages and to entrepreneurs and firms in the form of profits. The generation of wealth induced by AI could create spillover effects that boost economic growth. As workers’ incomes rise and they spend more, and firms reinvest their profit into operations, the incremental output can be channeled back into the economy in the form of higher consumption or more productive investment as well as jobs growth.