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US' AI Ethics Debate:
Overcoming Barriers in Government and Tech Sector

By Megan Lamberth

SYNOPSIS

The debate over ethics and norms building in artificial intelligence (AI) is gaining momentum in the US government and tech industry. Yet, while these institutions understand the need for ethics in AI, a myriad of barriers impede their ability to construct and execute on their ethical frameworks.

COMMENTARY

IN A period of rapid advancement in artificial intelligence and machine learning, policymakers and private sector leaders are recognising the need for ethics and norms building in artificial intelligence (AI). And while the US government and tech sector have independently made strides incorporating ethical principles into the development of AI systems, the absence of a shared language and culture between government and industry has impeded meaningful, ongoing debate.

Tech companies have struggled to transition from drafting AI ethical frameworks to actually implementing them, an issue exacerbated by a lack of accountability in the companies internally, as well as a lack of oversight from the US Congress. Ensuring the right ethical principles are built into AI systems is no easy feat. And if the US government and tech sector want to advance the conversation on AI ethics from written charters to tangible actions, they must work through these complex ethical questions together.

The Evolving Conversation on AI Ethics in the United States

Earlier this year, the White House announced its "American AI Initiative," a strategy that calls upon individual agencies to prioritise research and development into AI. And while the Initiative does not directly mention the need for ethics in AI, it does recognise the public's mounting concern around data privacy and acknowledges the need for international cooperation to ensure confidence and trust in AI systems.

Soon after the White House announced its AI Initiative, the Pentagon released its own strategy framed around the concept of a "human-centered approach to AI". In an effort to dispel public fears of killer robots and showcase the beneficial uses of AI, the strategy focused not on AI and lethality, but on developing AI systems that are robust, reliable, and secure.

In addition to the Pentagon's strategy, the Defence Innovation Board (DiB), an advisory council made up of primarily private industry leaders, is in the latter stages of developing a series of "AI Principles for Defence." The DiB hopes these principles will guide the Pentagon's development and use of AI systems moving forward.

On the other side of the country, giants in the tech community — Microsoft, Google, Facebook, IBM, among others — have announced their own initiatives in AI ethics. These initiatives have often come in the form of a series of ethical principles, an independent ethics board, or the sponsorship of a research lab studying AI ethics and norms.

Barriers to Building Ethics into AI Systems

The US government and the tech industry have made progress on developing ethical approaches in AI, yet both communities are struggling to move from written declarations of intent toward meaningful, transparent action. This transition from word to deed is obstructed by a number of barriers originating from both the government and tech sector.

Barrier #1: The relationship between the US government and the tech industry is tainted by mistrust and a lack of a shared language and culture.

A chasm between the tech sector and the US government, particularly the Defence Department, has thwarted an ongoing dialogue on what a fair and ethical AI-enabled system might look like and how it should be deployed. Mistrust permeates the relationship between the two communities and is accentuated by a lack of a shared language and culture.

The strained relationship between the Defence Department and tech sector was on heightened display in the aftermath of Google's withdrawal from the Pentagon's Project Maven. Google employees penned a letter to the company's leadership declaring that "Google should not be in the business of war".

While employees from Google and the Defence Department may have differing views for how AI should be used, both entities want to ensure that the AI systems they develop and deploy are trustworthy, responsible, and secure.

The US government and tech sector need each other to help navigate these complex but critically important questions around ethics and norms in AI. Mending this rift is essential to ensuring that AI algorithms being developed are fair and abide by ethical standards.

Barrier #2: Tech companies lack oversight and accountability mechanisms to execute on and abide by their own ethical principles.

The ethical frameworks developed by many companies in the tech community reflect common themes: the desire to promote AI for social good, to reduce bias in AI algorithms, and to be accountable and transparent to the company's massive user base. While these principles seem to reflect a prioritisation and embracement of ethics in AI, the actual levers of implementation for these principles are opaque. And without transparency, oversight, and accountability mechanisms in place, there is little to incentivise or compel private sector companies to abide by and implement the ethical standards they propagate.

Barrier #3: US congressional engagement is needed to hold the tech sector accountable, but tech literacy amongst congressional members poses a substantial challenge.

Over the past year, numerous congressional hearings, most notably a hearing with Facebook CEO Mark Zuckerberg, have made it abundantly clear that there is a significant dearth of tech literacy amongst congressional members. And in the absence of familiarity with these technologies that are rapidly being integrated into American society, it will become increasingly difficult for Congress to perform its critical regulatory and oversight functions.

Overcoming Barriers to Building Ethics into AI Systems

To ensure the AI systems built today and deployed tomorrow are responsible and trustworthy, the US government and tech sector must establish mechanisms and safeguards for accountability and oversight. And these mechanisms for oversight must be transparent to the population primarily affected by these advancements — the American public.

In the private sector, accountability should come from both internal and external sources. Internally, companies should establish an independent review board, similar to those that exist at universities and hospitals, to ensure a company abides by its adopted ethical standards.

Externally, the US Congress must begin to flex its oversight and regulatory powers and hold tech companies accountable. The proposed [Algorithmic Accountability Act](#), which would require companies to correct algorithms that are biased, inaccurate, and discriminatory, would be an ideal first step.

But to ensure that Congress remains effective in this oversight role, increased tech literacy for congressional members is key. To legislate on these issues, lawmakers should hire additional staffers focused on emerging technologies, as well as restore

the Office of Technology Assessment, the expert body that advised politicians on technological issues until it was defunded two decades ago.

Most importantly, to ensure the US is a leader in building AI systems that are fair and trustworthy, the government and tech sector must work in tandem on these issues. Because the barriers to ensuring ethics are built into AI systems are steep, but certainly not insurmountable.

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