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FILLING THE VOID: ARTIFICIAL INTELLIGENCE AND PRIVATE INITIATIVES

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Artificial intelligence ("AI") has the potential to revolutionize entire industry sectors and provide substantial economic and social benefits to American workers and consumers. Although the AI legal and regulatory landscape is still in its early stages and the regulatory void seems to be widening, many private initiatives have embraced self-regulation to foster responsible AI development and deployment. These private initiatives are designed to effectively and responsibly harness the benefits of AI. In recent years, it has become a standard practice for major companies to institute and publish their own AI principles or guidelines. A growing number of companies have similarly originated responsible AI resources such as templates, checklists, and policies. To ensure a larger impact, many companies have also formed diverse partnerships to promote responsible AI development and deployment. Similarly, some premier universities and civil rights groups have established their own ethical guidelines around AI design and deployment.

This Article contends that the private sector should remain at the vanguard of national discussions on AI to ensure that it is developed, deployed, and used responsibly and in ways that are consistent with key values. In doing so, this Article examines the specific roles that companies, civil rights groups, academic institutions, industry groups, and other nongovernmental

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organizations play in advancing responsible AI. This Article then outlines the significant and widespread benefits that these private initiatives have had in the AI arena. Finally, this Article concludes that it is imperative that private initiatives collaborate with the government to facilitate shared goals.

TABLE OF CONTENTS

I. INTRODUCTION

Artificial intelligence ("AI") is increasingly pervasive and essential to everyday life. Programs such as ChatGPT and DALL-E are making headlines by turning ordinary people into world-class painters and poets.[1] Meanwhile, Tesla's AI is helping drivers

[1] *See* Erin Griffith & Cade Metz, *A New Area of A.I. Booms, Even Amid the Tech Gloom*, N.Y. TIMES (Jan. 7, 2023), https://www.nytimes.com/2023/01/07/technology/generative-ai-chatgpt-investments.html [https://perma.cc/5MJW-HN5N] (explaining that ChatGPT is a chatbot that answers questions in

navigate the most difficult traffic situations without using their hands or feet.[2] To date, the most widely assimilated use of AI technology is in business, covering every sector, such as healthcare, financial services, manufacturing, online shopping, communication, and so much more. Likewise, large corporations have widely adopted AI technology to inform high-stakes decisions about their most critical asset: their workforce. For example, human resources ("HR") departments use AI technology to screen resumes, conduct video interviews, and assess job seekers' qualifications.[3]

Although ripe with the potential transformative benefit of eliminating human bias, AI poses novel legal challenges when poorly designed or misused, specifically in employment discrimination.[4] Especially as is the case with the type of AI discussed in this Article, which covers human-designed algorithms applied to (typically) large data sets to reach a desired outcome more efficiently or more accurately (or both) than if a human did the process by hand.[5] Because AI is human-designed, the potential for AI to result in discriminatory outcomes has led to varied, often inconsistent responses across the globe seeking to implement greater oversight thereby preventing the misuse of AI in employment.[6]

Overall, the United States has adopted a light-handed approach to regulating AI in employment decisions, but recent developments in state and local laws suggest further regulation of AI in the future.[7] In addition, the use of AI has drawn the attention of federal regulators that are responsible for preventing discrimination in

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clear and concise prose and has been used by millions of users to create everything from poetry to term papers to rewrites of classic songs; also explaining that DALL-E is a system that allows users to generate photo-realistic images simply by describing what they wanted to see).

[2] *See* Jake Feiler, *The Artificially Intelligent Trolley Problem: Understanding Our Criminal Law Gaps in a Robot Driven World*, 14 HASTINGS SCI. & TECH. L.J. 1, 16 (2023).

[3] *See* Keith E. Sonderling et al., *The Promise and the Peril: Artificial Intelligence and Employment Discrimination*, 77 U. MIA. L. REV. 1, 13 (2022).

[4] *See id.*

[5] *See id.*

[6] *See* Scott J. Shackelford & Rachel Dockery, *Governing AI*, 30 CORNELL J. L. & PUB. POL'Y 279, 308–09 (2020).

[7] *See* Sonderling et al., *supra* note 3, at 3.

various contexts, such as the U.S. Equal Employment Opportunity Commission ("EEOC"), the Federal Trade Commission ("FTC"), and the Civil Rights Division of the U.S. Department of Justice ("DOJ").[8]

Notwithstanding the current regulatory uncertainty, the private sector is rightly not sitting idly by as it waits for government agencies to establish a regulatory scheme or, perhaps worse, legislate through enforcement. Because of the transformative benefits to their customers, shareholders, and workforces, companies are looking to each other to chart a lawful and ethical path to using AI. Many private initiatives are embracing self-regulation to foster responsible AI development, deployment, and use to take full advantage of AI's potential.[9] These private initiatives involve large corporations, academic institutions, civil rights groups, and partnerships between these various stakeholders.

In recent years, it is now commonplace for technology companies to develop and publish AI principles, guidelines, and other related resources.[10] In a similar vein, an increasing number of major corporate entities, many who are even business competitors, are partnering together to study and identify best practices on AI technologies.[11] Critically, these companies have established their own principles governing the development and use of AI that purport to commit members of these partnerships to actively engage with stakeholders to protect the privacy, security, and other human

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[8] *See* Paige Smith, *Artificial Intelligence Bias Needs EEOC Oversight, Official Says*, BLOOMBERG L., (Sept. 1, 2021), https://news.bloomberglaw.com/daily-labor-report/artificial-intelligence-bias-needs-eeoc-oversight-official-says [https://perma.cc/LD9N-TBFB].

[9] *Id.* (explaining that these private initiatives involve the private sector, academia, civil society, and partnerships between these various components); *see also* Kristen E. Egger, *Artificial Intelligence in the Workplace: Exploring Liability Under the Americans with Disabilities Act and Regulatory Solutions*, 60 WASHBURN L.J. 527, 556–57 (2021).

[10] Egger, *supra* note 9, at 556–57.

[11] *See* Steve Lohr, *Group Backed by Top Companies Moves to Combat A.I. Bias in Hiring*, N.Y. TIMES (Dec. 8, 2021), https://www.nytimes.com/2021/12/08/technology/data-trust-alliance-ai-hiring-bias.html#:~:text=They%20decided%20to%20focus%20on,their%20companies%20were%20adopting%20A.I. [https://perma.cc/E2PC-XVJE].

rights of individuals.[12] Indeed, most of the private AI governance initiatives are written in terms of social—as opposed to merely economic or legal—priorities, emphasizing the need for the thoughtful implementation of AI in private industry.[13]

In nearly every highly regulated industry, there are many well-established benefits of private initiatives filling the regulatory void. Related to emerging technologies such as AI, scholars regularly explain that self-regulation by the private sector is imperative to tackling challenges posed by AI. Perhaps most significantly, the private sector has first-hand expertise in AI development that is simply incomparable to any federal agency or legislative body. Because the private sector remains at the cutting edge of funding, developing, deploying, and implementing AI, private enterprises are better situated to tackle these unique challenges than governmental regulatory bodies whose mandates are much broader than just regulating AI. Private initiatives can undoubtedly help build a culture of trust, transparency, and accountability in AI technologies.

As demonstrated throughout this Article, private sector groups that develop AI best practices are essential in ensuring that AI results in fair, efficient, and reliable outcomes.[14] Although critics may argue that allowing private entities that are driven by profits to self-police may result in more harm, allowing this responsibility to remain in the hands of private initiatives would not be misplaced. The backstop of local, state, and federal laws is omnipresent. The desire for private companies to avoid public scandal, especially when dealing with such fundamental civil rights, further incentivizes private initiatives to develop socially-focused policies. As such, the private sector will play a vital role in transitioning the workforce into an economy impacted by automation and AI. Ultimately, the private industry itself is the institution best situated to implement AI

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[12] *Id.*

[13] Shackelford & Dockery, *supra* note 6, at 307.

[14] William Magnuson, *Artificial Financial Intelligence*, 10 HARV. BUS. L. REV. 337, 374 (2020).

initiatives, especially in light of its expertise coupled with its consistent emphasis on accountability and transparency.[15]

This Article proceeds as follows: Part II explores the background of AI and its use in the employment context. Next, Part III examines the increasingly critical role of self-regulation in the private sector by analyzing examples of private enterprises that have successfully implemented and regulated AI. Part IV considers the benefits and drawbacks of private AI regulation and addresses criticisms to this approach. Finally, this Article concludes that private initiatives have the best potential for implementing the effective and expedient solutions needed to address the unique regulatory challenges of AI and should thus be encouraged.

II. BACKGROUND INFORMATION ON AI

To understand the vital role of private initiatives, it is important to contextualize AI. AI is becoming more popular in the employment decision-making process. With AI's increased use among employers, many benefits and externalities have come to light. This Section investigates these pros and cons, and briefly explores government responses and efforts to regulate AI in the workplace.

A. The Pros and Cons of AI

With thousands of HR technology vendors in the marketplace, countless potential uses of AI in the workplace exist, encompassing the entire employee lifecycle. As such, industry analysts are not surprised that the HR technology market (largely comprised of software using AI) is expected to nearly double from $23 billion dollars now to $40 billion dollars by 2029.[16]

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[15] Sonia K. Katyal, *Private Accountability in the Age of Artificial Intelligence*, 66 UCLA L. REV. 54, 61 (2019).

[16] Fortune Business Insights, *With 7.5% CAGR, Human Resource Technology Market Size Worth USD 39.90 Billion In 2029*, GLOBE NEWSWIRE (Oct. 21, 2022, 1:17 AM), https://www.globenewswire.com/en/news-release/2022/10/21/2538959/0/en/With-7-5-CAGR-Human-Resource-Technology-Market-Size-Worth-USD-39-90-Billion-In-2029.html [https://perma.cc/E4PX-QY58].

AI has been shown to eliminate human bias and subjectivity, as well as streamline the hiring process.[17] Additionally, AI can eliminate unlawful discrimination in the workplace and promote diversity, equality of opportunity, accessibility, and inclusion. The reason is simple: AI has algorithms that enable it to correlate data and make predictions. Accordingly, AI's reliance on hard data creates the potential to eliminate invidious discrimination by removing human bias from decision-making. Aside from the efficiency benefits, AI's objective nature is one of the key drivers that makes AI attractive to employers. Further, when AI is designed in a clear and explainable way, it has the potential to eliminate one of the most prominent and unsolved challenges to effective HR management: the capriciousness of human tastes.[18]

Among its many specific and well-documented uses—if appropriately designed and applied—AI promises to help workers find their most rewarding jobs, match companies with their most valuable and productive employees, and improve employee happiness and retention. Additionally, workplace technologies and tools can provide remarkable opportunities for individuals with disabilities by broadening the universe of positions for which they are qualified and by providing better reasonable accommodations.[19]

Despite the various potential benefits of implementing AI, AI poses a number of serious risks. Most notably, in the workforce, an improperly designed or deployed AI tool can replicate and even *amplify* existing biases or introduce new biases, directly or indirectly, throughout the employment lifecycle.[20] This could lead to both intentional and unintentional discrimination against various protected classes. For example, an algorithm could filter out job

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[17] *See* Alexia Elejalde-Ruiz, *The End of the Resume? Hiring is in the Midst of a Technological Revolution with Algorithms, Chatbots*, CHI. TRIB. (July 19, 2018, 6:00 AM), https://www.chicagotribune.com/business/ct-biz-artificial-intelligence-hiring-20180719-story.html [https://perma.cc/L2QP-UXQL] (explaining that AI can reduce or eliminate bias by masking names and other information).

[18] Ai4, *The Promise and Perils of Using Artificial Intelligence in Human Resources with EEOC*, YOUTUBE (Aug. 16, 2022), https://www.youtube.com/watch?v=AKjShZrXspw [https://perma.cc/3KNT-Y5SU].

[19] *See generally* Sonderling et al., *supra* note 3.

[20] *See id.* at 21–36.

candidates with significant resume gaps, which might unintentionally discriminate against and disparately impact women, especially those who took time off work because of caretaking responsibilities.[21] Similarly, AI could intentionally advertise employment opportunities exclusively to younger workers—a form of intentional discrimination.[22] From a legal perspective, whether such discrimination is intentional or not generally does not matter: the company using the tool will suffer liability regardless.

B. Government Responses

Laws aimed at regulating AI are a recent and rapidly evolving initiative.[23] Specific AI-use legislation is particularly challenging because AI develops rapidly and can be instantly scaled across industries.[24] Businesses hoping to implement AI face regulations at the federal, state, and international level. At the federal level, numerous congressional acts to broadly regulate AI have been proposed—the cornerstone being the Algorithmic Accountability Act ("AAA"). Originally introduced in 2019 and re-introduced in 2022, the AAA purports to be the landmark legislation to bring

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[21] *Id.*

[22] *Id.*

[23] *See* Danielle Moss et al., *Medley of State AI Laws Pose Employer Compliance Hurdles*, GIBSON DUNN (Mar. 30, 2022), https://www.gibsondunn.com/wp-content/uploads/2022/03/Moss-Mufson-Lamm-Medley-Of-State-AI-Laws-Pose-Employer-Compliance-Hurdles-Law360-Employment-Authority-03-30-2022.pdf [https://perma.cc/WMC3-G4LM].

[24] *See* Brandon W. Jackson, *Artificial Intelligence and the Fog of Innovation: A Deep-Dive on Governance and the Liability of Autonomous Systems*, 35 SANTA CLARA HIGH TECH. L.J. 35, 42–43 (2019) (explaining that much of the reluctance among legislative bodies to enact broadly tailored AI use legislation stems from the question of how AI systems will likely interact with the other complex systems; further explaining the economic impact this may have on the development of AI and machine learning systems and how this complicates the question of how to regulate AI). *Wyden, Booker and Clarke Introduce Algorithmic Accountability Act of 2022 to Require New Transparency and Accountability for Automated Decision Systems*, RON WYDEN U.S. SENATOR FOR OR. (Feb. 3, 2022), https://www.wyden.senate.gov/news/press-releases/wyden-booker-and-clarke-introduce-algorithmic-accountability-act-of-2022-to-require-new-transparency-and-accountability-for-automated-decision-systems [https://perma.cc/UHF9-4UVB].

transparency and oversight to algorithms.[25] However, both times the bill was introduced, it died in committee hearings. [26] Thus, although no legislation has been finalized yet at the federal level, these attempts to implement AI laws reveal Congress's desire to regulate this technology in the future.

In recent years, federal agencies have become increasingly involved with regulating AI within their jurisdictional mandates. For example, in recognition of the growing trend of regulating employers' use of AI, in 2021, the EEOC announced an initiative to ensure that AI and other emerging tools used in hiring and other employment decisions comply with the federal civil rights laws that the agency enforces.[27] However, the EEOC has only issued limited guidance and conducted one non-technical public hearing.[28] Other agencies are also in the early stages of developing an AI framework. In 2022, the FTC and the National Labor Relations Board ("NLRB") signed a memorandum regarding information sharing between the agencies, cross-agency training, and outreach in areas of common regulatory interest, which included a focus on "the impact of

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[25] *Id.*

[26] *See* Algorithmic Accountability Act of 2019, S. 1108, 116th Cong. (2019); Algorithmic Accountability Act of 2022, S. 3572, 117th Cong. (2022).

[27] *EEOC Launches Initiative on Artificial Intelligence and Algorithmic Fairness*, EQUAL OPPORTUNITY EMP. COMM'N (Oct. 28, 2021), https://www.eeoc.gov/newsroom/eeoc-launches-initiative-artificial-intelligence-and-algorithmic-fairness [https://perma.cc/FA4D-N6BX].

[28] *See* Sonderling et al., *supra* note 3, at 42 (explaining that the EEOC's guidance was "limited to only disability discrimination, was not voted on by the full Commission, and did not go through the administrative law process involving notice and comment"); J. Edward Moreno, *Employers Seek Clarity on AI Bias Ahead of EEOC Enforcement Push*, BLOOMBERG L. (Feb. 13, 2023), https://news.bloomberglaw.com/daily-labor-report/employers-seek-clarity-on-ai-bias-ahead-of-eeoc-enforcement-push [https://perma.cc/GBR7-8RLT]. One significant criticism of the EEOC's single non-technical hearing is that it failed to include any vendors who are actually involved with the development of AI solutions, leading "employers, who often buy AI tools from a third-party vendor, [to] have little insight into how the technology works despite facing the most potential liability in the event of a lawsuit." *Id.* For an in-depth discussion on the importance of including comments from all stakeholders in guidance and rulemaking processes, *see* Keith E. Sonderling & Bradford J. Kelley, *The Sword and the Shield: The Benefits of Opinion Letters by Employment and Labor Agencies*, 86 MO. L. REV. 1171, 1200–01 (2022).

algorithmic decision-making on workers."[29] Thereafter, the NLRB's General Counsel released a memorandum warning employers that using electronic surveillance and automated management technologies presumptively violates employee rights under the National Labor Relations Act.[30]

Moreover, several states and local jurisdictions are also attempting a broader, all-encompassing approach to regulating AI at the workplace. For instance, the New York legislature is considering legislation that would regulate the use of automated employment decision-making tools and require that the tools be subject to an annual disparate impact analysis.[31] One of the most far-reaching proposals is California's Workplace Technology Accountability Act, which would require employers using automated decision-making systems to prepare and publish summaries of their algorithmic and data protection impact assessments that describe the methodology, findings, results, and conclusions of each assessment.[32] The law would also require employers to establish "meaningful human oversight" by designating a specific internal reviewer.[33]

To date, however, some states and local jurisdictions have successfully passed laws regulating AI, focusing on the use of AI in the hiring process. For example, in 2019 and 2020, Illinois and Maryland became the first states to pass laws that directly regulate employers' use of AI when interviewing candidates.[34] Similarly, in 2021, New York City passed a broad AI employment law that will

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[29] *See* Memorandum from Fed. Trade Comm'n to Nat'l Lab. Rels. Bd. (July 19, 2022), https://www.nlrb.gov/sites/default/files/attachments/pages/node-7857/ftcnlrb-mou-71922.pdf [https://perma.cc/F2QM-X7SP].

[30] Off. of Pub. Affs., *NLRB General Counsel Issues Memo on Unlawful Electronic Surveillance and Automated Management Practices*, NAT'L LAB. RELS. BD. (Oct. 31, 2022), https://www.nlrb.gov/news-outreach/news-story/nlrb-general-counsel-issues-memo-on-unlawful-electronic-surveillance-and [https://perma.cc/E8XL-8TLV].

[31] Assemb. B. A00567, 2023 Leg., Reg. Sess. (N.Y. 2023).

[32] Workplace Technology Accountability Act, Assemb. B. 1651, 2022 Assemb. (Cal. 2022).

[33] *Id.*

[34] Artificial Intelligence Video Interview Act, 820 ILL. COMP. STAT. § 42 (2019); MD. CODE LAB. & EMP. § 3-717 (2020).

regulate employers' use of all AI tools used for hiring and promotion decisions.[35]

On the international front, governments and international organizations have taken a more heavy-handed approach to regulating AI. Most notably, the European Union ("EU") is considering the Artificial Intelligence Act, which creates a "risk-based" approach that organizes and regulates AI systems by their level of purported risk.[36] The EU's proposal currently classifies AI systems used for employment purposes as high risk and, therefore, would require employers to establish strict safeguards, including disclosure, validation, and accuracy requirements.[37]

As companies using AI are facing a myriad of legislation and various proposals at federal, state, and international levels, many of them with differing requirements, companies need alternative compliance approaches. Self-regulatory efforts can help ensure businesses are well positioned to proactively respond to any future regulations while also minimizing any negative outcomes associated with their AI systems.

III. THE RISE OF SELF-REGULATION

AI's increasing ubiquity and expanding commercial potential are dominating business headlines. As 92 percent of executives surveyed claim their organizations are increasing investments in AI systems, the need for consistent legal, ethical, and governance standards is unquestionably a key concern for corporate executives and boards.[38] Rightfully, companies and industries are not waiting for government mandates to implement such governance. Instead, they are turning inward and opting to self-regulate.

In a nutshell, self-regulation is an alternative form of governance where an industry moderates its conduct to ultimately improve the

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[35] 2021 N.Y.C. Local Law No. 144, N.Y.C. Admin. Code § 20-870.

[36] *See* Sonderling et al., *supra* note 3, at 61 (describing the risk-based approach).

[37] *Id.* at 61–62.

[38] Robert Eccles & Miriam Vogel, *Board Responsibility for Artificial Intelligence Oversight*, HARV. L. SCH. F. CORP. GOV. (Jan. 5, 2022), https://corpgov.law.harvard.edu/2022/01/05/board-responsibility-for-artificial-intelligence-oversight/ [https://perma.cc/EUN9-HYV7].

marketplace, often in areas where government rules are lacking or do not contain the comprehensiveness that can only be provided by industry experts.[39] This approach benefits not only bottom-line profitability and shareholder interests but also provides a variety of protections to the corporate workforce and customer base. Additionally, consumers are now demanding such measures, as one study found that 90 percent of consumers believe that companies have a corporate social responsibility to improve the state of the world.[40]

A. Individual Company Efforts

Companies that are at the forefront of AI technology investment, development, and deployment have taken the lead in establishing a self-governance framework. Due to their tremendous amount of technical knowledge and seemingly infinite means, these internal and external practices can also serve as a guide for small- and medium-sized businesses lacking such expertise and resources.

In recent years, it has become quite common for technology companies, either directly or through trade associations, to develop and publish their own AI principles and guidelines, including companies such as Google, Microsoft, Intel, and IBM.[41] These resources on the responsible, lawful, and ethical use of AI have largely been published freely for use and adoption by both small- and medium-sized businesses. Additionally, many of these privately-made guidelines contain guiding principles directed at governments to serve as the foundation for future legislation.[42]

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[39] Ryan Hagemann et. al., *Soft Law for Hard Problems: The Governance of Emerging Technologies in an Uncertain Future*, 17 COLO. TECH. L.J. 37, 129 n.65 (2018) (defining self-regulation).

[40] *Salesforce Debuts AI Ethics Model: How Ethical Practices Further Responsible Artificial Intelligence*, SALESFORCE (Sept. 2, 2021), https://www.salesforce.com/news/stories/salesforce-debuts-ai-ethics-model-how-ethical-practices-further-responsible-artificial-intelligence/ [https://perma.cc/EZJ5-MXZL].

[41] Shackelford & Dockery, *supra* note 6, at 305–06 (discussing the AI principles and guidelines companies have adopted).

[42] *See, e.g.*, *Recommendations for Regulating AI*, GOOGLE (Jan. 2020), https://ai.google/static/documents/recommendations-for-regulating-ai.pdf [https://perma.cc/H63Q-N794] ("[W]hile self-regulation is vital, it is not enough.

Scholars identify the noteworthy consistency among the corporate statements published by various companies in terms of the best practices and ethical guidelines that they endorse.[43] Google, for example, has established seven AI principles which emphasize the social impact and fair use of AI.[44] Similarly, in 2021, Meta created a dedicated, cross-disciplinary group, the Responsible AI team, to release Facebook's "Five Pillars of Responsible AI."[45] Meta's Responsible AI team notably encourages and collaborates with both U.S. and EU lawmakers to advocate for "proactive" AI regulation by codifying these pillars.[46]

Like Google and Meta, Microsoft, too, has promulgated its own AI principles as well as developed a Responsible AI Impact Assessment Template that aims to define a process for assessing the impact an AI system may have on people, organizations, and society.[47] Microsoft has also developed an accompanying Responsible AI Impact Assessment Guide that provides activities and guidance for teams to help frame and support conversations

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Balanced, fact-based guidance from governments, academia and civil society is also needed to establish boundaries, including in the form of regulation.").

[43] *See* Adam Thierer, *AI Governance "on the Ground" vs "on the Books*,*"* MEDIUM (Aug. 19, 2022), https://medium.com/@AdamThierer/ai-governance-on-the-ground-vs-on-the-books-daa12a12d996 [https://perma.cc/82WE-YYM4].

[44] Jillian D'Onfro, *Google Promises Not to Use A.I. for Weapons or Surveillance, for the Most Part*, CNBC (June 7, 2018), https://www.cnbc.com/2018/06/07/google-ai-ethical-principles.html [https://perma.cc/D5A9-749A]. *See* Sundar Pinchai, *AI at Google: Our Principles*, GOOGLE (June 7, 2018), https://www.blog.google/topics/ai/ai-principles/ [https://perma.cc/TCV2-ZUU8]. The seven AI principles include the following: (1) to "be socially beneficial;" (2) to "avoid creating or reinforcing unfair bias;" (3) to "be built and tested for safety;" (4) to "be accountable to people;" (5) to "incorporate privacy design principles;" (6) to "uphold high standards of scientific excellence;" (7) and to "be made available for uses that accord with these enumerated principles." *Id.*

[45] *Facebook's Five Pillars of Responsible AI*, META (June 22, 2021), https://ai.facebook.com/blog/facebooks-five-pillars-of-responsible-ai/ [https://perma.cc/9JHQ-T92Y]. The five pillars of responsible AI include: (1) privacy and security; (2) fairness and inclusion; (3) robustness and safety; (4) transparency and control; and (5) accountability and governance. *Id.*

[46] *See id.*

[47] *See Microsoft Responsible AI Impact Assessment Template*, MICROSOFT (June 2022), https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE5cmFk [https://perma.cc/6HMF-R2ZY].

about responsible AI.[48] Additionally, Microsoft has established an "Office of Responsible AI," which is "tasked with 'setting the company-wide rules for enacting responsible AI,' 'defining roles and responsibilities for teams involved in this effort,' and engaging with external efforts to shape soft law approaches to AI."[49] Microsoft's Vice Chair and President has explained that the company's established foundation for responsible AI "sets out how [it] will build AI systems using practical approaches for identifying, measuring and mitigating harms ahead of time, and ensuring that controls are engineered into our systems from the outset."[50]

IBM is another example of a company that has been at the forefront of ensuring the ethical use of AI and AI governance, using a "multidisciplinary" and "multidimensional" approach to "advance responsible AI."[51] IBM's foundation for AI ethics is based on a five-part approach, which is in line with Meta's and Google's values.[52] Its key principles are that AI should augment human intelligence, "data and insight belong to their creator," and the "technology must be transparent and explainable."[53] Similarly, the pillars relate to "expansibility, fairness, robustness, transparency,

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[48] *See Microsoft Responsible AI Impact Assessment Guide*, MICROSOFT (June 2022), https://blogs.microsoft.com/wp-content/uploads/prod/sites/5/2022/06/Microsoft-RAI-Impact-Assessment-Guide.pdf [https://perma.cc/6T28-VKUU].

[49] Carlos Ignacio Gutierrez & Gary Marchant, *A Global Perspective of Soft Law Programs for the Governance of Artificial Intelligence*, SANDRA DAY O'CONNOR COLL. OF L. ARIZ. STATE UNIV. (2021), https://deliverypdf.ssrn.com/delivery.php?ID=711119082125006125091092082088072030054021093008061013104024068125117020103069091064058001029022012102023081089098099127088115103029074046010095003083114114005121074050044015120081117121100117094120002116083072124028073095093126087114114094064090083122&EXT=pdf&INDEX=TRUE [https://perma.cc/H57P-THL4].

[50] Brad Smith, *Meeting the AI Moment: Advancing the Future Through Responsible AI*, MICROSOFT (Feb. 2, 2023), https://blogs.microsoft.com/on-the-issues/2023/02/02/responsible-ai-chatgpt-artificial-intelligence/ [https://perma.cc/9NFV-XJS3].

[51] *AI Ethics*, IBM, https://www.ibm.com/artificial-intelligence/ethics [https://perma.cc/JK7J-CFMP] (last visited Mar. 29, 2023).

[52] IBM's five-part approach includes the following values: (1) principles, (2) pillars, (3) AI ethics board, (4) positions, and (5) collaborations. *See id.*

[53] *Id.*

and privacy."[54] An internal AI Ethics Board at IBM then acts as the mechanism to hold employees accountable for developing and deploying AI in accordance with these values.[55] In 2022, recognizing that there is a lack of consistency in AI auditing standards, IBM released its own standards for protecting at-risk groups in AI bias auditing.[56]

Like the other aforementioned technology companies, IBM is making proactive efforts to work with global legislatures on AI regulations through its "Policy Lab."[57] In addition to providing numerous underlying ideas for more specific AI use regulatory approaches, IBM's Policy Lab suggests that governments should encourage companies to self-regulate.[58] Specifically, the IBM Policy Lab advocates that governments should "[i]ncentivize providers and owners to voluntarily embrace globally recognized standards, certification, and validation regimes."[59] For companies willing to self-regulate based on globally recognized best practices and standards, the Policy Lab argues that safe-harbor protections should be made available.[60]

Salesforce, an American cloud-based software company and technology giant headquartered in California that provides customer relationship management applications, has also proposed an innovative approach to AI self-regulation.[61] Specifically, Salesforce

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[54] *Id.*

[55] *See id.*

[56] *Standards for Protecting At-Risk Groups in AI Bias Auditing*, IBM (Nov. 2022), https://www.ibm.com/downloads/cas/DV4YNKZL [https://perma.cc/5XTF-X6V9].

[57] *Precision Regulation for Artificial Intelligence*, IBM (Jan. 21, 2020), https://www.ibm.com/policy/ai-precision-regulation/ [https://perma.cc/76DS-RMNW].

[58] *See id.*

[59] *See id.*

[60] *See id.* A legal regulation that incorporates a safe-harbor provision allows for a company to avoid liability so long as it meets certain industry-based best practices. *Id.*

[61] *Salesforce Debuts AI Ethics Model: How Ethical Practices Further Responsible Artificial Intelligence*, SALESFORCE (Sept. 2, 2021), https://www.salesforce.com/news/stories/salesforce-debuts-ai-ethics-model-how-ethical-practices-further-responsible-artificial-intelligence/ [https://perma.cc/FD9D-VJG6].

created an "AI Ethics Maturity Model," containing formal strategies for addressing ethical questions in AI development and implementing them before wide-scale use.[62] Salesforce's suggested model requires the examination of four progressive stages of AI implementation. Stage one, the "ad hoc*"* stage, is where individual advocacy for AI use generates small-scale strategies and works to earn buy-in from executives.[63] Stage two, the "organized and repeatable" stage, creates formal teams to coalesce efforts into an executable strategic vision.[64] Stage three, the "managed and sustainable" stage*,* develops measures and an overall mentality to make the ethical practice viable in the long term.[65] Finally, stage four, the "optimized and innovative" stage*,* involves a holistic vision and dedicated support to bake ethical AI use into the organization at all levels.[66] This maturity model not only helps companies design AI for wide use within an ethical framework but also provides clear internal steps to take before implementing a third-party system.

Workday, an American human capital management system and software vendor, has also chartered a noteworthy course in developing internal AI regulations. Workday acknowledges that its use of AI depends upon "trust and that trust will exist only if companies adhere to responsible, ethical practices."[67] In 2019, Workday created "Six Key Principles" that guide how it develops and uses AI responsibly to help the broader society.[68] Those principles are as follows: (1) people first; (2) care about society; (3) act fairly and respect the law; (4) transparent and accountable; (5) protect data; and (6) ethics and privacy-by-design.[69] As AI continues to develop, so has Workday's continued diligence to

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[62] Kathy Baxter, *AI Ethics Maturity Model*, SALESFORCE, https://www.salesforceairesearch.com/static/ethics/EthicalAIMaturityModel.pdf [https://perma.cc/E9PY-U79V] (last visited Mar. 29, 2023).

[63] *See id.*

[64] *See id.*

[65] *See id.*

[66] *See id.*

[67] Barbara Cosgrove, *Workday's Commitment to Ethical AI*, WORKDAY (May 8, 2019), https://blog.workday.com/en-us/2019/workdays-commitments-to-ethical-ai.html [https://perma.cc/HQK2-ZAH9].

[68] *Id.*

[69] *Id.*

ethical AI. For example, in late 2022, Workday adapted its principles based upon its own use of AI to include additional goals such as using AI to improve human potential and privacy protections.[70] Like other industry leaders, Workday has engaged governments "to advocate for workable, risk-based regulatory approaches that build trust in AI technology and enable innovation" based upon its enumerated principles.[71]

Encouragement of self-governance and best practices has not been limited to just technology companies. In 2022, the global bank HSBC released its guide on "Investors' Expectations of Ethical Artificial Intelligence on Human Capital Management."[72] The guide is directed at those who invest in AI companies, a different audience than technical developers of AI, which most of the aforementioned best practices are geared towards.[73] This guide warns of the various issues of potential bias with AI, specifically in employment, and recommends investors push four corporate governance principles: (1) clarify intentionality of AI use; (2) establish processes; (3) ensure accountability; and (4) mandate transparency.[74]

Recognizing that its customers invent, build, and use AI to solve real-world problems, Amazon Web Services ("AWS") released a guide titled "The Responsible Use of Machine Learning" to shape private AI regulation.[75] This guide provides considerations and recommendations for responsibly developing and using AI across

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[70] Kelly Trindel, *Workday's Continued Diligence to Ethical AI and ML Trust*, WORKDAY (Dec. 7, 2022), https://blog.workday.com/en-us/2022/workdays-continued-diligence-ethical-ai-and-ml-trust.html [https://perma.cc/NXF2-3URC]. The additional goals for using AI include: (1) amplify human potential; (2) positively impact society; (3) champion transparency and fairness; and (4) data privacy and protection. *Id.*

[71] *Id.*

[72] *Investors' Expectations of Ethical AI in Human Capital Management*, HSBC (Apr. 7, 2022), https://www.lse.ac.uk/tii/assets/documents/AMFR-PU-368-Investors-Expectations-on-Ethical-AI-in-Human-Capital-Management-20220321-EN.pdf [https://perma.cc/SVY4-3K2C].

[73] *Id.*

[74] *Id.*

[75] *Responsible Use of Artificial Intelligence and Machine Learning*, AMAZON WEB SERVS., https://aws.amazon.com/machine-learning/responsible-machine-learning/ [https://perma.cc/YZ9Z-4DHS] (last visited Mar. 29, 2023).

the three major product lifecycles: design and development, deployment, and ongoing use.[76] Additionally, AWS also utilizes experts in responsible AI to create an operational approach encompassing processes and the involvement of people to minimize the risk of AI bias.[77] Furthermore, AWS provides continuing education to the public through its Machine Learning University, providing Bias and Fairness Courses to prevent AI bias.[78] Similarly, AWS's parent company, Amazon, announced that it would warn customers of its AI limitations through disclosures akin to nutritional labels known as AI Service Cards.[79]

The extent to which private industry has developed these self-regulatory frameworks, committed to them, and educated the public on their importance should generate great optimism on the viability and even desirability of self-regulation in this space. Indeed, self-regulation is at its zenith where the goals of all interested parties, public and private, are aligned. Each self-regulatory framework described above signals such an alignment is not just achievable, but likely. The next Section will describe the tools becoming available that will further bolster private accountability and transparency in their AI use.

B. Open-Sourced Software Solutions

In addition to publicly releasing AI ethical principles and investing in AI compliance divisions, technology companies are also turning to software to implement self-governance. Technology giants are developing software to test, monitor, and correct ethical and legal issues internally. For instance, IBM's AI Fairness 360 toolkit software checks for and mitigates unwanted biases in

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[76] *Id.*

[77] *See id.*

[78] *See id.*

[79] *See* Jeffrey Dastin & Paresh Dave, *Amazon to Warn Customers on Limitations of Its AI*, REUTERS (Nov. 30, 2022, 4:44PM), https://www.reuters.com/technology/amazon-warn-customers-limitations-its-ai-2022-11-30/ [https://perma.cc/3UBF-3K3W]. These cards will allow customers to see limitations on AI use prone to bias, such as facial recognition and audio transcription. These AI disclosures are designed to prevent the mistaken use of its technology, explain how its system works, and manage customer privacy.

datasets, machine learning models, and state-of-the-art algorithms.[80] Once again, to benefit members of the general public who do not have the resources or expertise that large companies do, IBM's toolkit is an open-source project that allows outside contributors to share their metrics and algorithms.[81] IBM has also created software to assist other private companies in implementing an AI governance framework.[82] This program is designed to operationalize AI governance by monitoring AI models for fairness, bias, and drift.[83] If bias is found, then it automatically identifies the need for correction through human intervention.[84]

Similarly, Google's What-If tool helps software developers detect, visualize, and assess biases in their code.[85] This open-source software allows users to manually edit codes where bias is detected by What-If and see how code edits can minimize this bias in real time.[86] Like Google, Meta created "Fairness Flow," which automatically warns coders when an algorithm is making an unfair judgment about someone based upon their race, gender, or age.[87] Facebook developed Fairness Flow in consultation with experts from Stanford University, the Center for Social Media

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[80] *See* Kush R. Varshney, *Introducing AI Fairness 360*, IBM (Sept. 19, 2018), https://www.ibm.com/blogs/research/2018/09/ai-fairness-360/ [https://perma.cc/V8DL-ZUVN]; Egger, *supra* note 9, at 556–57.

[81] Varshney, *supra* note 80.

[82] *AI Governance*, IBM, https://www.ibm.com/products/cloud-pak-for-data/ai-governance [https://perma.cc/D2GG-PMBV] (last visited Mar. 29, 2023).

[83] *See id.* AI drift is the degradation of AI entities' machine learning model performance over time, which often results in AI entities' behavior diverging or "drifting" from the intentions of their human programmers.

[84] *See id.*

[85] Kyle Wiggers, *Google's What-If Tool for TensorBoard Helps Users Visualize AI Bias*, VENTUREBEAT (Sept. 11, 2018, 6:56 PM), https://venturebeat.com/ai/googles-what-if-tool-for-tensorboard-lets-users-visualize-ai-bias/ [https://perma.cc/M7MA-W3BE].

[86] *Id.*

[87] *See* Isabel Klaumann & Jonathan Tannen, *How We're Using Fairness Flow to Help Build AI That Works Better for Everyone*, META AI (Mar. 31, 2021), https://ai.facebook.com/blog/how-were-using-fairness-flow-to-help-build-ai-that-works-better-for-everyone/ [https://perma.cc/Y9HY-TR8T].

Responsibility, the Brookings Institute, and the Better Business Bureau's Institute for Marketplace Trust.[88]

Microsoft has also developed a software dashboard that can detect bias in AI, which has a stated goal of "helping businesses use AI without running the risk of discriminating against certain people" considered to be more vulnerable.[89] Finally, Amazon's SageMaker Clarify is an open-source program that detects and measures biases being introduced into an AI system through the AI's machine learning capabilities.[90] Notably, the program offers to detect potential bias being introduced through an AI's machine learning at all stages of AI deployment, including during preparation, after model training, and through the deployed model.[91] Similarly, NVIDIA, an American multinational technology company, has created an ethical AI team that developed software that enhances AI transparency and ethical considerations by producing a digital document detailing how AI is working in real time and whether it has an adverse impact on certain groups.[92] The growing availability of software solutions that ensure AI is being responsibly used strongly indicates that even when unregulated, companies will take considerable steps towards adhering to AI for good principles.

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[88] Kyle Wiggers, *AI Experts Warn Facebook's Anti-Bias Tool Is "Completely Insufficient,"* VENTUREBEAT (Mar. 31, 2021, 6:00 AM), https://venturebeat.com/business/ai-experts-warn-facebooks-anti-bias-tool-is-completely-insufficient/ [https://perma.cc/KZT5-KPXH].

[89] Kyle Wiggers, *Microsoft is Developing a Tool to Help Engineers Catch Bias in Algorithms*, VENTUREBEAT (May 25, 2018, 9:48 AM), https://venturebeat.com/ai/microsoft-is-developing-a-tool-to-help-engineers-catch-bias-in-algorithms/ [https://perma.cc/T3NA-ZDA8].

[90] *Amazon SageMaker Clarify*, AMAZON WEB SERVS., https://aws.amazon.com/sagemaker/clarify/?sagemaker-data-wrangler-whats-new.sort-by=item.additionalFields.postDateTime&sagemaker-data-wrangler-whats-new.sort-order=desc [https://perma.cc/B536-RB3X] (last visited Mar. 29, 2023).

[91] *See id.*

[92] Michael Boone et al., *Enhancing AI Transparency and Ethical Considerations with Model Card++*, NVIDIA (Sept. 19, 2022), https://developer.nvidia.com/blog/enhancing-ai-transparency-and-ethical-considerations-with-model-card/ [https://perma.cc/B5RS-ZVEU].

C. Sponsored Partnerships

Another form of self-regulation involves companies collectively pooling their resources and forming partnerships to foster responsible AI development and deployment. In 2016, Amazon, DeepMind, Facebook, Google, IBM, and Microsoft announced the Partnership on AI ("PAI").[93] From its inception, the founding members have worked jointly with an increasing number of nonprofit organizations like the Association for the Advancement of Artificial Intelligence, the American Civil Liberties Union, and OpenAI, to define clear goals, thematic principles, and tenets for the safe and responsible development of AI.[94]

Specifically, PAI researches best practices for AI systems and educates the public about AI.[95] It strives to achieve these goals by working on specific thematic pillars.[96] So far, PAI has six sets of pillars: (1) safety-critical AI; (2) fair, transparent, and accountable AI; (3) AI, labor, and the economy; (4) collaborations between people and AI systems; (5) social and societal influences of AI; and (6) AI and social good.[97] Each pillar is co-chaired by two representatives from its corporate and non-corporate members and aims to involve many relevant stakeholders and participants from within its membership ranks.[98] In addition to the six pillars, the PAI website claims its members "believe in and endeavor to uphold" certain tenets, including education and research.[99] The normative effect of these eight tenets can be seen in its members' subsequent adoption of similar AI principles, like Google's AI Principles, for example.[100]

Other prominent self-regulatory partnerships have emerged in recent years. In late 2021, employers across various private

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[93] *About Us: Advancing Positive Outcomes for People and Society*, P'SHIP ON AI TO BENEFIT PEOPLE & SOC'Y, https://www.partnershiponai.org/about/#our-work [https://perma.cc/W8YM-SNBK] (last visited Mar. 29, 2023).

[94] *Id.*

[95] *Id.*

[96] *Id.*

[97] *Id.*

[98] *See id.*

[99] P'SHIP ON AI TO BENEFIT PEOPLE & SOC'Y, *supra* note 93.

[100] *See* Pinchai, *supra* note 44.

industries, including CVS Health, Deloitte, General Motors, Humana, Mastercard, Nike, and Walmart, formed the Data & Trust Alliance ("DTA").[101] The DTA seeks to adopt criteria to mitigate data and algorithmic bias in HR and workforce decisions, including recruiting, compensation, and employee development.[102] Thus far, the DTA has developed a comprehensive evaluation and scoring system for AI software.[103]

Similarly, in 2022, the Business Roundtable, an association of chief executive officers of major American companies, released a Roadmap for Responsible AI (the "Roadmap") that lists ten core principles that businesses should consider to help ensure the responsible use of AI.[104] The Roadmap provides a set of principles to guide businesses as they implement responsible AI and reflects the perspectives and real-world experiences of companies from every sector of the economy, including AI developers, deployers, and end users.[105] Alongside the Roadmap, Business Roundtable released a set of policy recommendations to encourage AI governance, oversight, and regulation, and concurrently build public trust in AI while enabling innovation and promoting continued U.S. leadership on the AI front. In 2023, the Business Roundtable released a report showcasing how its member companies, including Accenture, Dell Technologies, Honeywell, Johnson Controls, and Visa, are integrating responsible AI principles into their day-to-day operations.[106]

The Conference Board, a nonprofit global business think tank, issued numerous research reports on AI, providing self-governance

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[101] Lohr, *supra* note 11.

[102] *Id.*

[103] *See id.* More specifically, the DTA has created a 55-question evaluation, which covers thirteen topics, and a scoring system to evaluate AI use.

[104] *See Business Roundtable Roadmap for Responsible Artificial Intelligence*, BUS. ROUNDTABLE (Jan. 2022), https://s3.amazonaws.com/brt.org/Business_Roundtable_Artificial_Intelligence_Roadmap_Jan2022_1.pdf [perma.cc/UF5W-QYEF].

[105] *Id.*

[106] *See AI Innovation at Work: Putting Principles into Practice*, BUS. ROUNDTABLE, https://s3.amazonaws.com/brt.org/BRT-Al-CaseStudy-FINAL.pdf [https://perma.cc/CF7F-62HK] (last visited Mar. 28, 2023).

recommendations for various business uses.[107] Specifically addressing the use of AI in the workplace, these guidelines recommend detailed consideration for addressing the inherent issues with AI surrounding explainability bias, ethics and fairness, and the need to implement human "common sense."[108]

The Better Business Bureau ("BBB"), a nonprofit overseeing the trustworthiness of over 6.3 million businesses, argues that industry-wide efforts to self-regulate go beyond politics and reflect a commitment to actual and sustainable change.[109] Further in support of self-governance, the BBB suggests that building a consensus around best practices through a trusted institutional process can lead to more collaborative and widespread adoption by industry members, in contrast to unilateral action by lone players, and is timelier than ever.[110] Specifically related to AI in HR, the BBB recommends that companies apply existing laws to AI decision-making, develop and modify an AI data system, strengthen accountability structures, and institute transparency and fairness to those who are subject to AI.[111]

The Institute for Workplace Equality, a nonprofit employer association, issued a Technical Advisory Committee ("TAC") report to inform employers on responsible practices about the use of AI in

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[107] *Artificial Intelligence*, CONF. BD., https://www.conference-board.org/topics/AI## [https://perma.cc/XH46-WCVJ] (last visited Mar. 28, 2023).

[108] Mary B. Young et al., *Artificial Intelligence for HR: Separating the Potential from the Hype*, CONF. BD. (Dec. 4, 2019), https://www.conference-board.org/topics/AI-HR/AI-for-HR-main-report [https://perma.cc/N3CK-F5G2].

[109] Eric Reicin, *Why Independent Industry Self-Regulation Is Timelier Than Ever*, FORBES (Aug. 18, 2021, 7:00 AM), https://www.forbes.com/sites/forbesnonprofitcouncil/2021/08/18/why-independent-industry-self-regulation-is-timelier-than-ever/?sh=7608cf3f6312 [https://perma.cc/A9WX-XBH9]; *see also About Us*, BETTER BUS. BUREAU, https://www.bbb.org/all/about-bbb [https://perma.cc/SUF7-VPWX] (last visited Mar. 28, 2023).

[110] *See* Reicin, *supra* note 109.

[111] Eric Reicin, *AI Can Be a Force for Good in Recruiting and Hiring New Employees*, FORBES (Nov. 16, 2021, 7:00 AM), https://www.forbes.com/sites/forbesnonprofitcouncil/2021/11/16/ai-can-be-a-force-for-good-in-recruiting-and-hiring-new-employees/?sh=739318311e16 [https://perma.cc/ZNZ8-SEWX].

employment decision-making.[112] Led by a former EEOC Acting Chair, TAC was comprised of forty experts from technology companies, AI vendors, academic institutions, trade associations, and both employee- and management-side law firms.[113] In late 2022, TAC released a comprehensive report recommending that employers and vendors: (1) develop a policy for version control and implement associated guardrails around substantive changes to machine learning tools; (2) ensure that data and algorithms are documented and rationales are provided; and (3) make efforts to ensure documentation is sufficient to assess data reliability and validity and allow for computational reproductivity.

Another advocate for self-governance is the U.S. Chamber of Commerce, the world's largest business organization representing companies of all sizes across every sector of the economy. The Chamber of Commerce formed the Chamber Technology Engagement Center ("C_TEC") in 2014 in order "to advance technology's role in strengthening business by leveraging tech innovations that drive economic growth in the United States."[114] One of C_TEC's groups focuses on AI and seeks to educate the public and policymakers on the different types, uses, and policy challenges associated with AI.[115] C_TEC also coordinates industry efforts to advocate for a favorable and effective policy environment.[116] In March of 2023, C_TEC released the "Artificial Intelligence Commission Report," concluding that "[a]ppropriate enforcement of existing laws and regulations provides regulatory certainty and

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[112] *AI TAC Report*, INST. FOR WORKPLACE EQUAL., https://www.theinstitute4workplaceequality.org/ai-tac-report-release [https://perma.cc/F3KQ-SJU2] (last visited Mar. 28, 2023).

[113] *Leading Employer Organization Issues Report to Guide Responsible Data and Artificial Intelligence Practices in Employment*, INST. FOR WORKPLACE EQUAL. (Dec. 21, 2022), https://irp.cdn-website.com/b44ff977/files/uploaded/AI%20TAC%20Press%20Release.pdf [https://perma.cc/KR5F-QWTL].

[114] *About C_TEC*, U.S. CHAMBER OF COM. TECH. ENGAGEMENT CTR., https://americaninnovators.com/about/ [https://perma.cc/JJU4-R7TT] (last visited Apr. 4, 2023).

[115] *Id.*

[116] *Id.*

guidance to stakeholders" and calling for a risk-based regulatory framework under these existing laws.[117]

D. Intergovernmental and Nongovernmental Organizations

As the development and use of AI impacts citizens on every continent, intergovernmental and nongovernmental organizations—with their global reach and support—are also finding forward-thinking ways of promoting the responsible use of AI. Importantly, as intergovernmental organizations develop best practices and model legislation, they must account for the many different forms of governments within their member countries. Accordingly, their emerging best practices provide comprehensive multinational strategies for self-governance, ready for international implementation by regulators as well as private companies.

One apt example is the United Nations Educational, Scientific and Cultural Organization ("UNESCO"), a specialized organization within the United Nations that promotes world peace and security through international cooperation in education, arts, science, and culture.[118] UNESCO created the Recommendation on the Ethics of Artificial Intelligence (the "Recommendation"), considered to be one of the very first global standards on AI.[119] In November 2021, all 193 member states of UNESCO adopted the guidelines contained in the Recommendation.[120] The intended purpose of the Recommendation is to define values, principles, and policies to guide countries in building legal frameworks to ensure AI is deployed for the common good.[121] Notably, many of UNESCO's proposals contained in the Recommendation relate to the use of AI systems in the hiring and employment space. Specifically related to

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[117] *Artificial Intelligence Commission Report*, U.S. CHAMBER OF COM. (Mar. 9, 2023), https://www.uschamber.com/technology/artificial-intelligence-commission-report [https://perma.cc/HL8Y-L52B].

[118] *Our Expertise*, UNESCO, https://www.unesco.org/en/our-expertise [https://perma.cc/G9Q3-ABWB] (last visited Mar. 28, 2023).

[119] *UNESCO Adopts First Global Standard on the Ethics of Artificial Intelligence*, UNESCO, https://www.unesco.org/en/articles/unesco-adopts-first-global-standard-ethics-artificial-intelligence [https://perma.cc/8MES-V84Y] (last updated Apr. 21, 2022).

[120] *Id.*

[121] *Id.*

AI use in employment, the Recommendation states that AI use must uphold certain key principles such as fairness, preventing bias, and antidiscrimination throughout all phases of the employment lifecycle.[122] The Recommendation also identifies risks that reproduce and reinforce existing biases and exacerbate existing forms of discrimination, prejudice, and stereotyping. The Recommendation further recognizes that AI systems must produce fair outcomes, "regardless of race, colour, economic descent, gender, age, language, religion, political opinion, national origin, ethnic origin, social origin, economic or social condition of birth, or disability and any other grounds."[123] The Recommendation contains over 140 proposals for ethical, lawful, and human-focused AI, including sixteen relating to "Ethical Governance and Stewardship."[124]

The Organization for Economic Cooperation and Development ("OECD")—an intergovernmental organization founded to shape polices that foster prosperity, equality, opportunity, and well-being—is also assisting governments and companies with emerging best practices. The OECD Principles on Artificial Intelligence, adopted by all thirty-eight of its member countries, provide value-based recommendations for public policy and strategy for application to AI developments around the world.[125] The AI principles include the following: (1) human-centered values and fairness; (2) transparency and explainability; (3) robustness, security, and safety; and (4) accountability.[126] Additionally, as part of the OECD's AI initiative, OECD has also published dozens of policy notes for specific AI applications.[127] In 2022, the OECD

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[122] *Recommendation on the Ethics of Artificial Intelligence*, UNESCO (Nov. 23, 2021), https://unesdoc.unesco.org/ark:/48223/pf0000381137 [https://perma.cc/7BG2-PN62].

[123] *Id.*

[124] *Id.*

[125] *Artificial Intelligence*, OECD, https://www.oecd.org/digital/artificial-intelligence/ [https://perma.cc/BZC5-HP88] (last visited Mar. 28, 2023).

[126] *OECD AI Principles*, OECD, https://oecd.ai/en/ai-principles [https://perma.cc/YPM3-Q4QZ] (last visited Mar. 28, 2023).

[127] *See, e.g.*, *Trustworthy Artificial Intelligence in Health*, OECD (Apr. 1, 2020), https://www.oecd.org/health/trustworthy-artificial-intelligence-in-health.pdf [https://perma.cc/2KD9-KCDH].

published a guide entitled "Using Artificial Intelligence in the Workplace," detailing the ethical and legal risks associated with using AI for various employment purposes.[128] This guide provides a risk-management perspective for governments and companies to identify and prevent potential harm in accordance with existing legislation, data protection, and due process rights in the workplace.[129]

Another notable illustration of a major entity tackling AI regulations is the World Economic Forum ("WEF"), an international nongovernmental organization that "engages the foremost political, business, cultural and other leaders of society to shape global, regional[,] and industry agendas."[130] Through its vast global network, WEF is bringing together the public and private sectors to co-design, test, and implement policies that increase the benefits of AI.[131] WEF focuses on international public-private partnerships and is building a neutral and objective platform to help countries, as well as businesses, struggling with policy implementation and AI governance.[132] It has a number of projects on AI governance and other projects on governance of drones, blockchain, autonomous vehicles, the environment and technology, IoT, precision medicine, cross-border data flows, and e-commerce.[133] All projects are required to include ethics and values, social inclusion, and human-centered design.[134]

Related to AI, WEF has created multiple industry-specific toolkits for the responsible use of AI, both generalized and

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[128] Angelica Salvi del Pero et al., *Using Artificial Intelligence in the Workplace*, OECD (July 8, 2022), https://www.oecd-ilibrary.org/social-issues-migration-health/using-artificial-intelligence-in-the-workplace_840a2d9f-en [https://perma.cc/6RBQ-NS5H].

[129] *See id.*

[130] *Our Mission*, WORLD ECON. F., https://www.weforum.org/about/world-economic-forum/ [https://perma.cc/65KC-FT63] (last visited Mar. 28, 2023).

[131] *Artificial Intelligence*, WORLD ECON. F., https://www.weforum.org/topics/artificial-intelligence-and-robotics [https://perma.cc/5QJU-UN67] (last visited Mar. 28, 2023).

[132] *Id.*

[133] *Id.* IoT, or Internet of Things, refers to the vast network of interrelated internet-connected devices and machines.

[134] *Id.*

specific.[135] For instance, the "AI C-Suite Toolkit" provides a one-stop place for corporate executives to identify and understand the multiple and complex issues that AI raises for their business and society. It provides a practical set of tools to help them comprehend AI's impact on their roles, ask the right questions, identify the key trade-offs, and make informed decisions on AI strategy, projects, and implementations.[136] Specific to AI in employment, in 2021, WEF collaborated with over fifty experts in HR, data science, employment law, and ethics to create a practical toolkit for the responsible use of AI.[137] In addition to laying out key considerations for the lawful and ethical use of AI in HR—such as transparency, understandability, and preventing bias—the toolkit takes it one step further than other private initiatives by providing two checklists to promote responsible AI.[138] The first checklist is titled the "Tool Assessment Checklist," which provides a list of questions for organizations to assess the AI tool and an organization's own goals for adoption.[139] The second is called the "Planning Checklist," which focuses on broader questions of strategic planning and the development of policies and procedures.[140] Both of these checklists aim to assist companies' use of AI in HR ethically, lawfully, and responsibly.

Lastly, religious entities are also seeing the need to implement AI in accordance with the tenets of their beliefs. For example, the Pontifical Academy for Life, an institute within the Vatican, signed a declaration along with Microsoft and IBM calling for the ethical

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[135] Khari Johnson, *World Economic Forum Launches Toolkit to Help Corporate Boards Build AI-First Companies*, VENTUREBEAT (Jan. 17, 2020, 9:00 AM), https://venturebeat.com/business/world-economic-forum-launches-toolkit-to-help-corporate-boards-build-ai-first-companies/ [https://perma.cc/94F7-6RAX].

[136] *Empowering AI Leadership: AI C-Suite Toolkit*, WORLD ECON. F. (Jan. 12, 2022), https://www.weforum.org/reports/empowering-ai-leadership-ai-c-suite-toolkit/ [https://perma.cc/R4PP-94NP].

[137] *See Human-Centred Artificial Intelligence for Human Resources*, WORLD ECON. F. (Dec. 7, 2021), https://www.weforum.org/reports/human-centred-ai-for-hr-state-of-play-and-the-path-ahead/ [https://perma.cc/TP84-HNSG].

[138] *Id.*

[139] *Id.*

[140] *Id.*

and responsible use of AI.[141] Catholic, Jewish, and Muslim leaders have also joined together to weigh in on the ethical and responsible use of AI related to their religious teachings.[142] Such initiatives can help companies further develop and deploy AI in a responsible and trustworthy manner, taking into account the diverse religious backgrounds of those who will ultimately be impacted by its decisions.

E. Academic Institution Initiatives

Several leading academic institutions have also developed their own best practices and ethical guidelines.[143] For example, the Stanford Center for AI Safety was created to develop rigorous techniques for building safe and trustworthy AI systems and establishing confidence in their behavior and robustness, thereby facilitating their successful adoption in society.[144] Stanford's Institute for Human-Centered AI was created to help industry, government, and civil society understand the influence and impact AI has on society.[145] To do so, the Institute for Human-Centered AI produces the "AI Index Report," which is widely considered the most comprehensive report that provides unbiased, rigorous, and

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[141] *See* Jeremy Kahn, *In A.I., What Would Jesus Do?*, FORTUNE (Feb. 28, 2020, 8:30 AM), https://fortune.com/2020/02/28/ai-ethics-vatican-microsoft-ibm/ [https://perma.cc/4M2L-2DRE].

[142] *See* Carol Glatz, *North Star: Technology Needs an Ethical Guiding Light, Speakers Say*, U.S. CONF. CATH. BISHOPS (Jan. 12, 2023), https://www.usccb.org/news/2023/north-star-technology-needs-ethical-guiding-light-speakers-say [https://perma.cc/KF6P-PGET] (discussing a recent meeting at the Vatican in which representatives of the Muslim, Catholic, and Jewish faiths came together to sign a document calling for a code of ethics for the use of AI). Islamic and Jewish scholars have also weighed in separately. *See* Z.H. Rappaport, *Robotics and Artificial Intelligence: Jewish Ethical Perspectives*, 98 ACTA NEUROCHIRURGICA SUPPLEMENT 9 (2006); Amana Raquib et al., *Islamic Virtue-Based Ethics for Artificial Intelligence*, 2 DISCOVER A.I. 11 (2022).

[143] *See* Shackelford & Dockery, *supra* note 6, at 311 (listing academic universities and civil rights organizations).

[144] *See* Clark Barrett et al., *Stanford Center for AI Safety*, https://aisafety.stanford.edu/whitepaper.pdf [https://perma.cc/UE82-KK3R] (last visited Mar. 28, 2023).

[145] *About*, STAN. UNIV. HUM.-CENTERED A.I., https://hai.stanford.edu/about [https://perma.cc/U5MP-QZZJ] (last visited Mar. 28, 2023).

comprehensive data for policymakers, researchers, journalists, executives, and the general public to develop a deeper understanding of the complex field of AI.[146]

Another illustrative example is New York University's Center for Responsible AI, which is a comprehensive laboratory for accelerating responsible AI practices.[147] It has released numerous reports, including a comprehensive report about auditing AI in hiring.[148] It offers a free course to introduce the public to the social and ethical implications of AI in modern life. New York University's Human Capital Analytics and Technology Master's Program teaches the next generation of HR leaders about the practical, legal, and responsible use of AI technology in the workplace. In 2022, its students were able to work with the EEOC on high-level policy issues focusing on technology and the future of work.[149] Similarly, Duke University's Initiative for Science and Society through the Duke University School of Law now teaches courses to further the lawful and ethical use of AI, such as the Ethical Technology Practicum and AI Law and Policy.[150] This program has also provided students to assist EEOC Commissioners' offices with their efforts in regulating this space.

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[146] *2021 AI Index Report*, STAN. UNIV. HUM.-CENTERED A.I., https://hai.stanford.edu/ai-index-2021 [https://perma.cc/WV7V-C56H] (last visited Mar. 28, 2023).

[147] *Center for Responsible AI*, N.Y.U. TANDON SCH. OF ENG'G, https://engineering.nyu.edu/research-innovation/centers/center-responsible-ai [https://perma.cc/T9ND-9JSV] (last visited Mar. 28, 2023).

[148] *Work*, CTR. FOR RESPONSIBLE AI, https://airesponsibly.net/work/ [https://perma.cc/8ZPJ-MEGU] (last visited Mar. 28, 2023).

[149] *Two Division of Programs in Business HCAT Grads Experience Policy-Making First-Hand Through Internships at US Equal Employment Opportunity Commission*, N.Y.U. SCH. OF PRO. STUD. (June 24, 2022), https://www.sps.nyu.edu/homepage/academics/divisions-and-departments/division-of-programs-in-business/human-capital-management/two-dpb-hcat-grads-experience-policy-making-through-internships-us-equal-employment-opportunity-commision.html [https://perma.cc/8FKJ-KLND].

[150] *476 Ethical Technology Practicum*, DUKE SCH. OF L., https://law.duke.edu/academics/course/476/ [https://perma.cc/W6P3-8W2U] (last updated Nov. 2019).

F. Industry and Professional Group Efforts

Industry groups have also played a pivotal role in promoting the responsible use of AI. Industry and professional groups, representing either employers or employees, are critical because they attempt to constantly refine and improve their standards to account for changing circumstances and challenges in a fast-paced data economy.[151] Likewise, these groups strive to ensure that organizations live up to commitments they have made to the public—and even governments—to abide by various data-handling best practices.[152] Commentators contend that such "efforts go a long way toward helping to promote a culture of responsibility among leading AI innovators."[153]

Civil rights groups have also been at the vanguard of providing useful materials to guide companies. In 2019, the Center for Democracy & Technology ("CDT") was one of the first organizations to establish a framework of principles to address the problem of biased automation based on the principles of fairness, explainability, auditability, and reliability.[154] In 2020, CDT released a comprehensive report on the significant issues AI-based hiring tools may have on those with disabilities.[155] In late 2022, CDT published new recommendations and guidance "to ensure that tools used to make employment decisions are fair and equitable."[156] According to CDT, the document, which is designed to be model legislation, was "drafted so that policymakers, industry groups, and

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[151] *See* Thierer, *supra* note 43.

[152] *Id.*

[153] *Id.*

[154] *AI Machine Learning*, CTR. FOR DEMOCRACY & TECH., https://cdt.org/ai-machine-learning/ [https://perma.cc/X292-K5U4] (last visited Mar. 29, 2023).

[155] Lydia X. Z. Brown et al., *Report—Algorithm-driven Hiring Tools: Innovative Recruitment or Expedited Disability Discrimination?*, CTR. FOR DEMOCRACY & TECH. (Dec. 3, 2020), https://cdt.org/insights/report-algorithm-driven-hiring-tools-innovative-recruitment-or-expedited-disability-discrimination/ [https://perma.cc/X8AY-CD2S].

[156] Center for Democracy & Technology et al., *Civil Rights Standards for 21st Century Employment Selection Procedures*, CTR. FOR DEMOCRACY & TECH. (Dec. 2020), https://cdt.org/wp-content/uploads/2022/12/updated-2022-12-05-Civil-Rights-Standards-for-21st-Century-Employment-Selection-Procedures.pdf [https://perma.cc/PLY4-2WC4].

employers alike can reference them when determining what information candidates should receive, how selection procedures should be audited, and how to ensure accountability when selection procedures threaten workers' civil rights."[157] The powerful influence of employee advocate groups like CDT should not be underestimated. The EEOC's Legal Counsel, who is responsible for developing policy guidance and rules for the agency, serves on the advisory committee for CDT's Project on Disability Rights & Algorithmic Fairness.[158]

Many civil rights groups have teamed up to provide enhanced guidance. One of the most notable examples is the Leadership Conference on Civil and Human Rights, a coalition of more than 230 national organizations that seeks to promote and protect civil and human rights. In 2020, the Leadership Conference released a document entitled "Civil Rights Principles for Hiring Assessment Technologies" which consists of principles to guide the development, use, auditing, and oversight of hiring assessment technologies.[159] It provides the public with the five clear principles of what civil rights groups demand from employer use of AI

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[157] *Id.*

[158] *CDT Project on Disability Rights & Algorithmic Fairness—Advisory Committee*, CTR. FOR DEMOCRACY & TECH., https://cdt.org/areas-of-focus/cdt-project-on-disability-rights-algorithmic-fairness-advisory-committee/ [https://perma.cc/E3GP-A8FX] (last visited Mar. 29, 2023). Rebecca Bond, the Chief of the Disability Rights Section within the DOJ's Civil Rights Division, also serves on this advisory committee. *Id.* For additional information on the EEOC's legal counsel, *see* Press Release, *Carol R. Miaskoff Appointed as Legal Counsel*, EQUAL EMP. OPPORTUNITY COMM'N (June 24, 2021), https://www.eeoc.gov/newsroom/carol-r-miaskoff-appointed-legal-counsel [https://perma.cc/UXR4-XE2M]. The legal counsel is the head of EEOC's Office of Legal Counsel and "provides legal advice to the Chair and the Commission on a wide range of substantive, administrative, and procedural matters." *Id.* Additionally, the Office of Legal Counsel "is responsible for developing Commission rules and guidance under the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, the Equal Pay Act, and the Genetic Information Nondiscrimination Act." *Id.*

[159] *Civil Rights Principles for Hiring Assessment Technologies*, LEADERSHIP CONF. ON CIV. & HUM. RTS. (July 29, 2020), https://civilrights.org/resource/civil-rights-principles-for-hiring-assessment-technologies/ [https://perma.cc/75HX-XSYF].

technology: (1) nondiscrimination; (2) job-relatedness; (3) notice and explanation; (4) auditing; and (5) oversight and accountability.[160]

Another noteworthy example is Upturn, a nonprofit that advances equity and justice in the design, governance, and use of technology, which has spent considerable resources on raising awareness of the potentially discriminatory impact of AI in the workplace.[161] In 2018, Upturn released a detailed examination of the then-most widely used AI HR software, providing a screen-by-screen account of how AI programs can discriminate in real-time.[162] It then provided recommendations to vendors, employers, and the EEOC on best practices on how to prevent such unintended harm.[163]

Another industry body, the Society for Industrial and Organizational Psychology ("SIOP"), is ensuring that industrial and organizational psychologists are providing their input to vendors, employers, and employees. To guide professionals and inform those responsible for staffing in organizations, SIOP has published the "Principles for the Validation and Use of Personnel Selection Procedures," which is updated regularly to reflect current scientific research and best practices in hiring and promotion.[164] These principles include the following five criteria for evaluating AI-based hiring assessments: (1) assessment tools results should be fair and unbiased; (2) content and scoring should be job-related; (3) scores should predict future job performance accurately; (4) reassessments should produce consistent scores; and (5) accurate documentation for all steps and decisions for verification and audit.

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[160] *Id.*

[161] *Our Work*, UPTURN, https://www.upturn.org/work/ [https://perma.cc/HBW9-ZD3V] (last visited Mar. 29, 2023).

[162] Aaron Rieke & Miranda Bogen, *Help Wanted*, UPTURN (Dec. 10, 2018), https://www.upturn.org/work/help-wanted/ [https://perma.cc/GJA9-H7V3].

[163] *Id.*

[164] PRINCIPLES FOR THE VALIDATION AND USE OF PERSONNEL SELECTION PROCEDURES (Am. Psych. Ass'n, 5th ed., 2018), https://www.apa.org/ed/accreditation/about/policies/personnel-selection-procedures.pdf [https://perma.cc/S3YH-8DDP].

Meanwhile, the International Coaching Federation ("ICF"), the main accrediting body for training programs and professional coaches, has addressed the growing impact AI is having on executive and employee coaching.[165] To ensure AI coaching programs and coaches who use AI can better develop employees, ICF released AI-specific coaching standards.[166] ICF's guidelines contain thirteen principles imperative for consideration for the designers of the AI programs and the coaches using these tools, such as demonstrating ethical practices, efficacy and reliability, security and privacy, and prevention of bias.[167]

IV. THE BENEFITS OF SELF-REGULATION

Many commentators argue that prioritizing self-regulation within the private sector over government regulation is imperative for addressing the legal and ethical use of AI.[168] These arguments favoring self-regulation largely center around the newness of AI innovations coupled with the expertise asymmetries in private versus public sectors.[169] As demonstrated throughout this Article,

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[165] Dave Zielinski, *Virtual Coaching Takes off*, SHRM (June 2, 2022), https://www.shrm.org/hr-today/news/hr-magazine/summer2022/pages/virtual-coaching-takes-off-.aspx [https://perma.cc/VBY2-V973].

[166] *The Value of Artificial Intelligence Coaching Standards*, INT'L COACHING FED'N (Aug. 17, 2021), https://coachingfederation.org/app/uploads/2021/08/The-Value-of-Artificial-Intelligence-Coaching-Standards_Whitepaper.pdf [https://perma.cc/2RJP-QULF].

[167] *See id.*

[168] *See, e.g.*, Beena Ammanath, *Investors Are Pouring Billions into Artificial Intelligence. It's Time for a Commensurate Investment in A.I. Governance*, FORTUNE (Jan. 16, 2023), https://fortune.com/2023/01/16/investors-billions-artificial-intelligence-self-regulation-governance-tech/ [https://perma.cc/G4CE-9P68] ("Self-regulation fills the gap between innovation and government-made rules. Not only does It [sic] set the enterprise on a path to meeting whatever regulations emerge in the future, but it also delivers significant enterprise value by maximizing investment and minimizing negative outcomes. For all we have spent on building A.I. capabilities, we should also look toward investing in how we manage and use these tools to their full potential in a trustworthy way—and we should not wait for governments to tell us how.").

[169] *Regulatory Transparency Project's Fourth Branch Podcast: The Implications of AI Innovation and Regulation*, FEDERALIST SOC'Y (Dec. 21, 2022) (downloaded using Apple Podcasts).

private industry leaders already have immense expertise in developing not only the underlying technology, but also policies on the ethical use of AI, and these policies are widely available for both the private sector and governments to implement at no cost.[170] Commentators have explained that self-regulation can help fill any gaps between innovation and government regulation.[171] By not only establishing a framework to successfully respond to any regulations that may emerge in the future, self-regulation simultaneously provides "significant enterprise value by maximizing investment and minimizing negative outcomes."[172]

Continuing to allow free innovation, unincumbered by burdensome regulation, in this arena has serious merits. If government regulations are hastily adopted without the technical and practical input from industry, they would not only potentially ruin the economic and social benefits that AI is poised to bring during this current technological revolution, but they would also squander a myriad of competitive advantages private businesses possess. The lack of federal legislation in the U.S., along with high-level broad statements on AI by federal agencies, confirm the government's own recognition that it must rely heavily on private industry and market demands for safe products to drive the development of AI systems.[173] This Section addresses some of the most common benefits of private industry self-regulation.

A. Expertise

The greatest benefit of self-regulation is that it best leverages the collection of available talent, which is overwhelmingly pooled in the private sector because of the financial resources available.[174] The private industry has expertise that is incomparable to any other

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[170] *Supra* Part III.

[171] *See* Ammanath, *supra* note 168.

[172] *Id.*

[173] Jackson, *supra* note 24, at 51.

[174] *See* Axel Walz & Kay Firth-Butterfield, *Implementing Ethics into Artificial Intelligence: A Contribution, from a Legal Perspective, to the Development of an AI Governance Regime*, 18 DUKE L. & TECH. REV. 176 (2019).

entity involved in the regulatory process.[175] Indeed, the private industry is in the best position to develop the standards and rules that will guide continued innovation while minimizing public risk.

When it comes to technology and innovation, scholars regularly point out that the public sector suffers from a lack of experts and resources.[176] Ultimately, government regulators will struggle to monitor systemic risks within the sector without experts capable of understanding the workings of AI and novel algorithms.[177] Regulators are, by their very nature, outsiders who do not have the levels of expertise in AI or machine learning that are available to the private sector.[178] As one commentator explains, regulators "cannot look into every enterprise, understand at a technical level what [AI] programs are emerging, forecast the potential issues that may result, and then rapidly create rules to prevent problems before they occur."[179] This problem is further exacerbated by the unwillingness of talented software engineers to forgo lucrative technology sector salaries in favor of public service.[180] Thus, adding a bureaucratic layer that imposes an examination and approval of highly complex AI systems by an ill-equipped regulator fails to protect the public while simultaneously depriving the public of the economic and social benefits of AI.

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[175] *See, e.g.*, Egger, *supra* note 9, at 556; Magnuson, *supra* note 14, at 373 (contending that "it is likely that self-regulation will be significantly more effective at cabining artificial intelligence's risks than regulatory enforcement actions could ever be.") Regulators are, by their very nature, outsiders. They do not know the inner workings of financial institutions nearly as well as insiders do, and they do not have the levels of expertise in machine learning that are available to the private sector. *See also* Michael Guihot et al., *Nudging Robots: Innovative Solutions to Regulate Artificial Intelligence*, 20 VAND. J. ENT. & TECH. L. 385, 455 (2017) (explaining that public regulators lack the requisite knowledge to understand the problem that needs regulating).

[176] *See, e.g.*, Magnuson, *supra* note 14, at 372.

[177] *Id.*

[178] *Id.*

[179] *See* Ammanath, *supra* note 160.

[180] Drew Friedman, *Feds' Pay Lags 22.5% Behind Private Sector, The Federal Salary Council Reports*, FED. NEWS NETWORK (Aug. 5, 2022), https://federalnewsnetwork.com/pay/2022/08/feds-pay-lags-22-5-behind-private-sector-the-federal-salary-council-reports/ [https://perma.cc/4HU2-SGTQ].

Industry self-regulatory approaches are highly effective mechanisms to manage risk because of the rapidly changing nature of the underlying technology.[181] In the HR space, private companies are the preferred customers for technology companies who develop and sell these AI products. Since private companies are the users of this technology, they can better comprehend the AI tools and unintended impacts of regulation, making their perspectives essential for public regulators.[182] Without this hands-on knowledge and learned experiences from companies using AI, regulators are merely guessing about where guidance, regulation, or enforcement is most needed. This and other self-regulatory efforts, especially if they are thorough and successful, will potentially deter more heavy-handed governmental obligations in the future.[183]

Self-regulation also combats the ex-ante (or anticipatory) problem inherent with regulating AI.[184] A common concern with AI regulation is the difficulty of making ex-ante regulation due to AI's "discreet, diffuse, discrete and opaque" nature.[185] Ex-ante regulation, however, is necessary in addressing this AI problem to curtail both liability issues and harm to consumers.[186] Self-regulation by the industry designing the AI systems is a more viable option for developing ex-ante regulation, as opposed to independent action by a federal agency, because the industry has firsthand expertise in its development.[187]

By combining diverse groups of AI researchers and professionals in its working groups, private initiatives can mediate the challenges caused by rapidly accelerating technological growth that usually outpaces the existing regulatory structures meant to govern them by keeping regulatory solutions closely tied to

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[181] *See* Guihot et al., *supra* note 175, at 432; Maya Medeiros, *Public and Private Dimensions of AI Technology and Security*, CIGI (Nov. 16, 2020), https://www.cigionline.org/articles/public-and-private-dimensions-ai-technology-and-security/ [https://perma.cc/76RK-L8E5].

[182] Lohr, *supra* note 11.

[183] *See* Guihot et al., *supra* note 175, at 433.

[184] *See generally* Egger, *supra* note 9.

[185] *Id.* at 556 (citation omitted).

[186] *Id.*

[187] *Id.*

innovations.[188] This approach simultaneously avoids challenges associated with uncertainties of these technologies as AI researchers and professionals can work on setting standards for innovations before they become widely adopted. Adherence to its tenets could help anticipate ex-ante issues in the development of AI and establish clear frameworks for liability in the case of ex-post harm done by AI systems.

It should be noted that the important developments in ethical, legal, and practical AI frameworks such as the ones described above are nonetheless incremental additions to the conversation rather than revolutionary overhauls of it. One commentator has accurately observed that "the slew of AI [e]thics principles hovering around is all coalescing to the same overall coverage."[189] Regardless of whether the principles are being generated from the private or public sector, they are mostly all identifying the same "pressure points" and offering guidance on how to navigate these situations. But despite the iterative nature of these guidelines, the newness of this field, coupled with the fact that innovations are indeed still occurring, cautions against concretizing soft principles into hard law.

B. Laboratories of Technological Innovation

As demonstrated throughout this Article, the private sector can and *has* formed a laboratory of technological innovation. Widely regarded as the world's preeminent technology hub, Silicon Valley provides a useful case study exemplifying some of the features and benefits of such laboratories. Some key drivers in Silicon Valley's success is its innovative ecosystem consisting of major technology companies, leading universities and research centers, and "a

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[188] *See* Adam Thierer, *The Pacing Problem and the Future of Technology Regulation*, MERCATUS CTR. (Aug. 8, 2018), https://www.mercatus.org/economic-insights/expert-commentary/pacing-problem-and-future-technology-regulation [https://perma.cc/4JDP-QUYX].

[189] Lance Eliot, *Responsible AI Relishes Preeminent Boost Via AI Ethics Proclamation by Top Professional Society the ACM*, FORBES (Nov. 27, 2022), https://www.forbes.com/sites/lanceeliot/2022/11/27/responsible-ai-relishes-mighty-boost-via-ai-ethics-proclamation-rolled-out-by-esteemed-computing-profession-association-the-acm/?sh=4fc8c0e333c6 [https://perma.cc/ZA2F-CYRM].

hypercompetitive yet collaborative culture that celebrates both risk and failure."[190] Highly important to capitalizing on these features is that in Silicon Valley "U.S. authorities (but not those in other technologically advanced states) acted with deliberation to encourage new Internet enterprises by both reducing the legal risks they faced and largely refraining from regulating the new risks they introduced."[191] Other laboratories of technological innovation (e.g., New York for financial technology, Tel Aviv for security, and Austin, Texas for digital health) share these same key characteristics with Silicon Valley.[192]

Indeed, the antithesis of a laboratory of the technological innovation framework is the heavy-handed regulatory approach seen in the EU where there are no European counterparts of Silicon Valley-based companies such as Google, Facebook, or Apple.[193] Instead of encouraging technological innovation and economic growth, Europe has burdened the marketplace with unnecessary barriers to entry, including in the AI innovation space, effectively pushing small- and medium-sized businesses out of the market.[194]

Companies with effective programs in place can serve as models for others across the globe, easily scaled across industry and by governments. Notably, small- and medium-sized business entities who are unfamiliar with or do not have the resources to create their own programs now have models to replicate. As public and private industries stand to be revolutionized by AI technology, it will be important to avoid regulation that is ineffective or unduly stymies

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[190] Maximillian Schroeck et al., *How to Innovate the Silicon Valley Way*, DELOITTE UNIV. PRESS 1, 2, 4 https://www2.deloitte.com/content/dam/insights/us/articles/tapping-into-silicon-valley-culture-of-innovation/DUP_3274_Silicon-Valley_MASTER.pdf [https://perma.cc/J6HS-U3C9].

[191] Anupam Chander, *How Law Made Silicon Valley*, 63 EMORY L. J. 639, 645 (2014).

[192] Schroeck et al., *supra* note 190.

[193] *See* Adam Thierer, *Why Is the US Following the EU's Lead on Artificial Intelligence Regulation?*, THE HILL (July 21, 2022), https://thehill.com/opinion/technology/3569151-why-is-the-us-following-the-eus-lead-on-artificial-intelligence-regulation/ [https://perma.cc/WU25-BXBU] ("Europe's leading providers of digital technology services today are American-based companies").

[194] *Id.*

research and development.[195] An industry-driven private regulation approach also addresses the territorial limitation of state laws as well as the procedural complexity and length of legislative processes.[196] Any approach to the contrary risks killing the golden goose before the egg is even hatched.

These laboratories of innovation directly benefit government actors by providing the private sector with an effective platform to inform public officials about important issues and identify solutions supported by collaborative research, ideation, and development. Private initiatives can likewise provide model legislation and talking points tailored to specific concerns. Moreover, they also serve as a bridge to the other sectors using technology and, where appropriate, bring providers and users together to advocate effectively on core issues of mutual concern.

C. Government Encouraged Self-Regulation

The federal government itself encourages self-regulation, as several federal laws rely on voluntary compliance from the private sector to be effectual. For example, U.S. antidiscrimination laws rely heavily on voluntary compliance to have any meaningful effect.[197] Similarly, the Supreme Court has repeatedly emphasized that employer compliance with Title VII, including by non-litigation means, is "the preferred means of achieving the objectives of Title VII" and is "essential to the statutory scheme."[198] The Supreme Court has strongly cautioned that unless employers can act to avoid practices that have a disparate impact, the voluntary compliance efforts that Title VII calls for would come "to a near standstill."[199]

Several federal agencies have promoted voluntary compliance as an effective vehicle to deal with the challenges with AI. Initial AI guidance from the EEOC, FTC, and other federal agencies all serve

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[195] Guihot et al., *supra* note 175, at 436.

[196] Walz & Firth-Butterfield, *supra* note 174, at 215.

[197] Pauline T. Kim, *Data-Driven Discrimination at Work*, 58 WM. & MARY L. REV. 857, 931 (2017) (discussing the widespread uses of AI throughout the employment lifecycle).

[198] *Id.*; Ricci v. DeStefano, 557 U.S. 557, 581, 583 (2009) (quoting Firefighters v. City of Cleveland, 478 U.S. 501, 515 (1986)).

[199] *Ricci*, 557 U.S. at 581.

as mechanisms for companies to begin self-governance based on each agency's stated interests.[200] In particular, in an advisory note to companies on the use of AI and workplace technology, the FTC warned, "[h]old yourself accountable—or be ready for the FTC to do it for you."[201]

D. Singapore as a Model

Understanding these innovation-stifling concerns related to regulations and for its desire to be the leading technology hub in Asia, Singapore is implementing an aggressive self-regulatory approach to AI that can serve as a model for future American self-regulatory efforts. Singapore's Model AI Governance Framework is illustrative in that it has focused on providing an accountability-based framework to use AI responsibly.[202] In establishing this framework, the government of Singapore did not threaten compliance, but embraced industry. Recognizing its own limitations and competing interests, the Singapore government chose to work closely with industry associations to jointly develop industry standards.[203]

Singapore's approach to AI governance has benefitted from adapting and amending already-existing laws instead of creating new legislation.[204] Like the broad consensus of the private initiatives described above, this model framework explains that AI broadly should be human-centric and AI-made decisions should be

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[200] *See Artificial Intelligence and Algorithmic Fairness Initiative*, EQUAL EMP. OPPORTUNITY COMM'N, https://www.eeoc.gov/ai [https://perma.cc/W5GX-4HS7] (last visited Mar. 28, 2023); Andrew Smith, *Using Artificial Intelligence and Algorithms,* FED. TRADE COMM'N (Apr. 8, 2020), https://www.ftc.gov/news-events/blogs/business-blog/2020/04/using-artificial-intelligence-algorithms [https://perma.cc/6G8D-Y2WD].

[201] Elisa Jillson*, Aiming for Truth, Fairness, and Equity in Your Company's Use of AI*, FED. TRADE COMM'N (Apr. 19, 2021), https://www.ftc.gov/business-guidance/blog/2021/04/aiming-truth-fairness-equity-your-companys-use-ai [https://perma.cc/LAT2-JH8R].

[202] *See* Shackelford & Dockery, *supra* note 6, at 311.

[203] *See Singapore's Approach to AI Governance*, PERS. DATA PROT. COMM'N, https://www.pdpc.gov.sg/help-and-resources/2020/01/model-ai-governance-framework [https://perma.cc/5WQG-3NYD] (last visited Mar. 29, 2023).

[204] *See* Shackelford & Dockery, *supra* note 6, at 311.

explainable, transparent, and fair.[205] This includes identifying clear roles and responsibilities of those in charge of implementing AI, minimizing the risk of harm and bias, communicating AI decisions to users in a clear and understandable way, and allowing users to give feedback on these decisions.[206]

Similar to many of the open-source technology and governance frameworks created by large technology companies and made available to the general public described in Part III above, Singapore launched their AI Verify governance testing framework and toolkit in 2022.[207] This toolkit works by allowing AI developers and owners to self-check the performance of their AI solutions against the model framework through a series of testing solutions and process checks.[208] This model framework and the resultant solutions developed by the Singaporean government to help implement its ideals are especially paradigmatic because the framework has only served to advance many of the familiar goals also established by private industry groups.

Industry leaders are embracing Singapore's approach. For instance, AWS, Google, Meta, and Microsoft have begun testing their AI innovations using this toolkit.[209] Much of this framework and its tools were developed by working closely with industry experts.[210] The fact that large corporations are willingly using this toolkit further indicates its helpfulness as well as a desire to adhere to these standards. As these tools become more sophisticated, companies may begin to certify adherence to the standards established by the framework, further increasing public trust and confidence in their AI. Used in this way, governments can act as AI facilitators rather than obstructors. Such regulatory bodies can have their cake and eat it too as they achieve their sought-after regulatory goals while also maintaining a hands-off approach to governance.

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[205] *See* PERS. DATA PROT. COMM'N, *supra* note 203.
[206] *See id*.
[207] *See id.*
[208] *See id.*
[209] *See id.*
[210] *See id.*

E. Responding to Criticisms

Critics of private initiatives contend there is a risk that self-regulation may be insufficient.[211] One of the most common criticisms is that the principles and codes created by private initiatives are not binding and require voluntary compliance by companies using the technology. Another frequent critique is that self-regulation is insufficient because private initiatives lack governing bodies to ensure effective enforcement and compliance monitoring. Even if they do contain some element of obligation, participants may lack the will to enforce those obligations. Another criticism is that some of the self-regulatory guiding principles are vague and thus open to interpretation.[212]

Although these criticisms have merit, they are ultimately misplaced by overlooking the role of "soft law" compliance, an important mechanism of the U.S. legal system. Soft law compliance has widely been described as more flexible, adjusting more easily to technical developments, and more specific than binding laws.[213] These criticisms also ignore that joint industry efforts require a concerted effort by all to uphold the tenets promulgated. Enforcement mechanisms are therefore baked into such private initiatives. Participating in a private initiative gives significant social legitimacy, ostensible independence, and credible authority within the industry. Consumers will undoubtedly question the companies who do not incorporate or adhere to the standards their own industry and competitors are incorporating and self-policing. Ultimately, as more companies publicly disclose their AI principles and self-governance, it will be difficult to gain market share without public self-governance commitments.

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[211] *See* Guihot et al., *supra* note 175, at 435–36.

[212] *See* Gijs Leenders, *The Regulation of Artificial Intelligence—A Case Study of the Partnership on AI*, MEDIUM (Apr. 13, 2019), https://becominghuman.ai/the-regulation-of-artificial-intelligence-a-case-study-of-the-partnership-on-ai-c1c22526c19f [https://perma.cc/4Q5K-SJNL].

[213] Walz & Firth-Butterfield, *supra* note 174, at 217. *See also* U.S. CHAMBER OF COM., *supra* note 117 ("[N]onbinding, self-regulatory approaches provide the flexibility of keeping up with rapidly changing technology as opposed to laws that risk becoming outdated quickly.").

Critics also fail to account for the fact that AI applications are already regulated by a wide variety of existing laws.[214] In the employment context, federal antidiscrimination laws apply with equal force to emerging technologies as they did to HR professionals making decisions by pen and paper since the 1960s. Beyond the employment front, existing laws can undoubtedly address other deficiencies with AI-based systems and applications using tort law, contract law, property law, and class action lawsuits. Existing laws provide sufficient, enforceable protections to the public without being overly restrictive.[215] Without the context of a concrete and pressing deficiency in AI use, regulators would be doing little more than throwing darts. Preemptive regulation works best in arenas in which private behavior is predictable and well understood. The newness and interminability of potential AI use precludes this.

These criticisms also miss the mark because the key to competitive advantage in AI will be openness to entrepreneurialism, investment, and talent, plus a flexible governance framework to address any risks. Moreover, as used in the employment decision space, AI does not need to be perfect (although this is a worthy aspiration) in order to be normatively desirable. This is because AI only needs to, on balance, outperform its human counterparts before it is worth implementing.[216]

Notwithstanding these concerns, the AI industry is still relatively new, constantly improving, and does not yet have a formalized system for self-regulation. Critics fail to understand that hard law would likely and significantly undermine algorithmic innovation because algorithmic systems can change by the minute and require an agile and adaptive system of governance by their very

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[214] *See generally* Sonderling et al., *supra* note 3 (arguing that existing laws can effectively combat employment discrimination).

[215] *See* Thierer, *supra* note 43 (arguing that it is "[b]etter to treat innovators as innocent until proven guilty than the other way around").

[216] People consistently overestimate their abilities, and so they will be particularly wary of AI. But even in its nascent stages, AI outperforms humans in a multitude of various social and economic metrics. For a discussion on this phenomenon among other irrationalities when it comes to adopting AI innovations, *see* Jean-François Bonnefon, *Who's Afraid of Driverless Cars?*, MIT PRESS READER (June 21, 2022), https://thereader.mitpress.mit.edu/whos-afraid-of-driverless-cars/ [https://perma.cc/8P4L-M3P3].

nature.[217] Scholars routinely point out the inescapable conclusion that traditional regulatory schemes can be draconian, inflexible, and slow to adapt to the complicated and rapidly evolving technologies.[218] On the other hand, private initiatives governed by soft law can be flexible and respond quickly to technology's rapid changes.

These criticisms of private initiatives further ignore the profit-driven nature of private actors, especially technology companies. Indeed, most companies are eager to take proactive mitigation measures to avoid harmful practices that automate discrimination, which often result in front-page news stories.[219] Private initiatives are understandably concerned about their brand's reputation and possible exposures to liability, thus they want to be associated with software that is ethically designed and adheres to the industry's best practices.[220] As one expert aptly explains: "While government regulations are enforced with fines and litigation, the consequences of failing to self-regulate are potentially much more impactful."[221]

Moreover, although voluntary regulation in this arena has been likened to "voluntary taxation"[222] and some have argued that it would otherwise "result in a competitive disadvantage,"[223] this line of criticism is inapplicable to AI in the antidiscrimination law context. Many studies have shown that companies who are successful in implementing robust equal employment opportunity initiatives will enjoy better economic outcomes than companies who

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[217] *See* Thierer, *supra* note 43.

[218] *Id.*

[219] *See* Eccles & Vogel, *supra* note 38.

[220] *See* Shackelford & Dockery, *supra* note 6, at 316.

[221] *See* Ammanath, *supra* note 168.

[222] Devin Coldewey, *Turing-Winning AI Researcher Warns Against Secretive Research and Fake "Self-Regulation,"* TECHCRUNCH (Apr. 4, 2019), https://techcrunch.com/2019/04/04/turing-winning-ai-researcher-warns-against-secretive-research-and-fake-self-regulation/ [https://perma.cc/ZLE4-AQVL] (quoting Yoshua Bengio, the referenced Turing winner).

[223] Dylan John Mencia, *Regulating Artificial Intelligence: Self-Regulation, State-Regulation, and Everything In-Between*, UNIV. MIA. L. REV. (Apr. 18, 2019), https://lawreview.law.miami.edu/regulating-artificial-intelligence-self-regulation-state-regulation-in-between/ [https://perma.cc/BSZ9-6CU2].

fail to do so.[224] This has even been demonstrated where the discrimination is exhibited in the form of compensation bias, in which a group of people are paid less than their similarly situated co-workers who do not belong to that group.[225] Workplace discrimination based on legally protected characteristics imposes heavy human, social, and financial costs. In addition, governments are usually responsible for protecting citizens after any harm has occurred. Because AI impacts society at an unprecedented speed and scale, governments must adopt a more agile regulatory approach that protects the public before the harm occurs by proactively working with companies to promote the responsible design and development of AI.[226] The considerable success achieved in Singapore provides a fruitful template for other governments to follow.

Because the economic and social incentives of private initiatives are clearly aligned with the same goals of public regulation, the only remaining benefit of advocating for a regulatory regime and against soft laws would be because a government agency or legislative body holds some expertise that private industry lacks. As has already been explained and which is becoming more obvious, this is simply not the case. Even if governments were able to attract the talent needed to understand and regulate AI at the same level that private industry is currently able to, which they will not, such a move would do little more than needlessly redistribute the existing talent pool of experts in this field at a substantial cost to innovation. Even worse, the

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[224] The economic advantages of equitable practices can even be observed as it relates to paying equitable wages. Indeed, underpaying certain protected classes actually harms companies' bottom lines. Other equal employment practices have also been studied and found to be economically advantageous. *See* Merida L. Johns, *Breaking the Glass Ceiling: Structural, Cultural, and Organizational Barriers Preventing Women from Achieving Senior and Executive Positions*, 10 PERSPS. HEALTH INFO. MGMT. (2013), for more discussion on these phenomena.

[225] Tom Harbert, *Compensation Bias is Bad for Business. Here's How to Fix It.*, MIT MGMT. SLOAN SCH. (Apr. 17, 2019), https://mitsloan.mit.edu/ideas-made-to-matter/compensation-bias-bad-business-heres-how-to-fix-it [https://perma.cc/9LH2-JQDH] ("[A] 2016 survey of 22,000 companies worldwide by the Peterson Institute for International Economics found that companies with at least 30% women in senior management had 15% higher profits.").

[226] *See* Walz & Firth-Butterfield, *supra* note 174, at 216.

mosaic of local, state, and federal governments all establishing similar—but slightly different—regulatory regimes have the potential to drive up compliance costs while compartmentalizing AI experts into their respective jurisdictions. This would grind the current speed of innovation in this area to a halt, giving away a massive competitive advantage that the U.S. currently enjoys over the more regulation-heavy approaches seen in Europe and China.[227]

The introduction of a unilateral, overzealous government-led regulatory AI regime would run the risk of upsetting the existing private-public equilibrium that has been struck. The careless introduction of regulation would not only needlessly stand to squander significant economic benefits, but it would also be depriving the public of myriad social benefits introduced by AI technologies such as reducing bias in employment decision-making. Even in the rare event that regulators overcame the talent gap described above or somehow struck the right balance of regulation notwithstanding their lack of expertise, AI governance would ultimately mirror what technology companies, civil rights groups, and the industry already have publicly proposed. As such, regulators should avoid these risks and continue allowing AI to develop without needlessly stifling innovation as it has in many other industries.

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[227] *See* Adam Thierer, *A Global Clash of Visions: The Future of AI Policy*, THE HILL (May 4, 2021), https://thehill.com/opinion/technology/551562-a-global-clash-of-visions-the-future-of-ai-policy/ [https://perma.cc/JJ5H-DRRN] (arguing that while the U.S. has so far adopted a fairly light-touch approach for AI for both regulation and industrial policy efforts, China has aggressively sought to promote specific sectors and firms; meanwhile, the European approach is heavy-handed in both regulation and industrial policy). It is important to emphasize that there is more at stake in this space than mere economic gain, as the very national security of the United States could depend on a successful regulation approach. *See Commission on Artificial Intelligence Competitiveness, Inclusion, and Innovation*, U.S. CHAMBER OF COMM. TECH. ENGAGEMENT CTR. (Mar. 8, 2023), https://www.uschamber.com/assets/documents/CTEC_AICommission2023_Report_v5.pdf [https://perma.cc/Z8Q2-3JKQ] ("The United States faces stiff competition from China in AI development. This competition is so fierce that it is unclear which nation will emerge as the global leader, raising significant security concerns for the United States and its allies.").

V. CONCLUSION

Ultimately, AI private initiatives lay the foundation for other self-regulatory efforts that companies may want to pursue. Those who participate in such initiatives, whether through the design and development phase or by simply replicating them at any scale, will be better off than those who do not. At a minimum, a joint effort between private initiatives and public governments is needed to create a more agile regulatory framework that is fully responsive to the accelerating pace of disruptive technologies. Any AI regulatory efforts should include key guidance and workable directives developed in cooperation with private initiatives.

The private sector is the leading researcher, developer, and deployer of AI applications and is constantly discovering new ways that AI can be used for good. As a result, businesses must be at the vanguard of our national discussions on AI to ensure that it is developed and deployed responsibly and consistent with our shared values. To do so, businesses should collaborate with the government to facilitate this goal. Because of their normative value in both the social and economic spaces, governments should take a faciliatory rather than a hindering role for these innovations, just as Singapore has opted to do. This is especially the case in the employment space where civil, social, and economic goals are aligned.

Regulating AI will continue to be debated for the foreseeable future. However, the longstanding laws that companies are obligated to comply with are not up for debate. In the absence of comprehensive regulation, self-regulation based upon existing laws and innovative applications offers the most viable path forward to address the issues raised by AI now and in the future.