Governing Global Gig Platforms in the Age of AI: When the Manager is an Algorithm

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ABSTRACT

Gig workers are vulnerable to discrimination from the sharing economy platforms on which they work. This challenge is worsened by these platforms' dependence on algorithms and artificial intelligence (AI) systems, which are used to control and direct gig workers. These platforms also often operate globally, and discrimination embedded within their algorithms can be magnified when exported into new cultural contexts.

These platforms exercise significant influence over gig workers, but their for-profit nature means that their boards and directors often prioritize shareholder value over gig worker protection. This tension has led to intense debates, as platforms attempt to minimize the rights and benefits they provide to gig workers. Yet, recent legal developments from the European Union—specifically, the European Union's Platform Workers' Directive, AI Act, and Framework Convention on AI—signal the beginning of a global legal and policy shift towards protecting gig workers and regulating AI use.

This Article examines the intricate interplay among algorithmic discrimination, corporate governance, and growing global legal scrutiny to protect gig workers and govern AI. This emerging legal and regulatory framework from the European Union has the potential to align platforms' incentives with gig workers' rights. Finally, this Article offers policy recommendations and actionable organizational changes for platforms to navigate this evolving legal landscape.

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I. INTRODUCTION

In Jakarta, Indonesia's sprawling capital and home to over thirty million people, motorcycles are a key component of the transportation system.[1] Motorcycle drivers use super-apps like Gojek to more efficiently book rides and deliveries.[2] One such driver is an Indonesian woman named Iin, who shared in an interview, "If I got an order from a male passenger, I always asked: 'I am a woman, is that okay with you?' . . . If they said, 'Okay,' I would ask again: 'Do you want to drive?'"[3] It may seem counterintuitive to ask the passenger if he wants to drive, but for Iin, this was a protective mechanism from unwanted touching. She explained, "I felt safer when the male passenger wanted to drive. It prevented me from sexual harassment. If I sat in the back, they could not touch me . . . ."[4]

Iin's experience is not unique for women motorcycle drivers in Indonesia.[5] Armyla, another Indonesian woman driver, stated that, "Several old male customers touched my body while riding with me. They said they were afraid of riding on a motorcycle, so they needed to hold onto my waist. Their attitude sickens me . . . ."[6]

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1. Grace Stanhope, *Lessons in Urban Development from Jakarta's Mass Rapid Transit Project*, LOWY INST. (Dec. 1, 2023), https://www.lowyinstitute.org/publications/lessons-urban-development-jakarta-s-mass-rapid-transit-project [https://perma.cc/HS3Y-EJS3].

2. *The Japanese Super App Race: Who Is Winning?*, HUMBLE BUNNY (Aug. 27, 2023), https://www.humblebunny.com/japanese-super-app-race/#:~:text=We%20Can%20Help!-,What%20Is%20A%20Super%20App?,across%20an%20array%20of%20services [https://perma.cc/X7VR-S44N]. A super application, or super-app, is a smartphone application that offers various functions through a single, integrated interface. *Id.* Such efficiency allows users to access multiple services without exiting the application and having to navigate from one application to another. *Id.* Many of the world's most highly used smart phone applications such as WeChat in China or Gojek in Southeast Asia are examples of super-apps. *Id.*

3. Joan Aurelia Rumengan & Muhammad Fadli, *The Dangers of Being a Female Rideshare Driver in Jakarta*, REST OF WORLD (Mar. 29, 2023), https://restofworld.org/2023/women-gig-workers-trials-indonesia/ [https://perma.cc/28XL-4VUL].

4. *Id.*

5. *Female Drivers Face Tough Challenge*s, JAKARTA POST (Dec. 29, 2017), https://www.thejakartapost.com/news/2017/12/29/female-drivers-face-tough-challenges.html [https://perma.cc/349Q-PDEJ].

6. *Id.*

Beyond sexual harassment, women drivers face an even more fundamental issue—many men do not want to be matched with a woman driver. As related by a different Indonesian woman, "[male passengers] are normally surprised to find out that I am a woman. They feel a little bit awkward, with some of them offering to switch with me . . . ."[7] This reluctance to be driven by a woman driver leads to ride cancellations, which has an impact on a driver's performance ratings that are calculated by the ride-hailing application.[8] As another woman driver explained:

> If the customer (man) were canceling his order, he would be asked the reason for the cancellation, which includes several options. However, the reason for cancellation due to our gender (the driver is [a woman]) is not available. We usually [ask] them to choose "the driver [is] too far away" option, which has the least impact on our working performance.[9]

The driver's reference to performance stems from the rating systems companies use in their smartphone applications to facilitate gig work, such as ride hailing or food delivery.[10] The role of rating systems is important because they affect access to work opportunities. For example, Uber's policy explicitly states that, "[a] driver or delivery person can lose access to part or all of the Uber platform for ratings that are below the minimum average rating in their city."[11] Unwarranted cancellations or low ratings motivated by characteristics like gender or race can adversely impact a gig worker's overall rating and cause a loss of work even if their driving performance is not an issue.[12]

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7.   *Id.*

8.   *Id.*

9.   Treviliana Eka Putri, Amelinda Pandu Kusumaningtyas, Ruth T. Simanjuntak & Paska Darmawan, *#ChoosetoChallenge Unfair Gig Work: Indonesian Women Driver Experience in Ojek Online Industry*, CTR. FOR DIGIT. SOC'Y (Mar. 25, 2021), https://digitalsociety.id/20 21/03/25/choosetochallenge-unfair-gig-work-indonesian-women-driver-experience-in-ojek-online-industry/5663/ [https://perma.cc/4AK4-YL2H].

10.   *Id.*

11.   *Understanding Why Drivers and Delivery People Can Lose Access to Their Accounts*, UBER, https://www.uber.com/us/en/drive/driver-app/deactivation-review/ [https://perma.cc/3YXD-F4X2] (last visited Feb. 24, 2025).

12.   Seb Murray, *Ratings Systems Amplify Racial Bias on Gig-Economy Platforms*, YALE INSIGHTS (Aug. 14, 2023), https://insights.som.yale.edu/insights/ratings-systems-amplify-racial-bias-on-gig-economy-platforms [https://perma.cc/7WHU-W4HL] (discussing Fei Teng, Tristan Botelho & K. Sudhir, Can Customer Ratings Be Discrimination Amplifiers? Evidence from a Gig Economy Platform (2023) (unpublished manuscript), https://insights.som.yale.edu/sites/de fault/files/2023-08/Customer_Prejudice_and_Minority_Earnings_Gap.pdf [https://perma.cc/98H5-BYCU]).

The above experiences represent a microcosm of the embedded discrimination that can manifest itself in modern gig work.[13] Though companies rely on technology to broker the interaction between drivers and riders, discriminatory biases and behavior may still reveal themselves in both the behavior of the parties (e.g., driver or rider) as well as in the algorithms that underpin these services.

Algorithmic bias often manifests when an algorithm uses data that is incomplete, false, unrepresentative, or otherwise problematic to make decisions.[14] Besides data issues, the design and programming of algorithms, as well as how their decisions are interpreted and applied, can also lead to algorithmic bias.[15] Decisions influenced by algorithmic bias can lead to discriminatory outcomes. For example, Amazon discontinued the use of a hiring algorithm it had developed when the algorithm produced results that discriminated against women.[16] The algorithm had been trained on the resumes of Amazon applicants, the majority of whom were men, leading to a preference for men in the hiring process while penalizing women.[17]

This Article highlights the vulnerability of gig workers to algorithmic discrimination caused by biases in the algorithms used by companies, often referred to as platforms, that facilitate gig work.[18] As

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13.   *E.g.*, Feli Oliveros, *Gig Worker vs. Independent Contractor: What's the Difference?*, GUSTO (Dec. 2, 2023), https://gusto.com/resources/articles/business-finance/gig-worker-vs-independent-contractor [https://perma.cc/E3YF-VLZH]. Gig work represents on-demand, paid labor that is typically temporary or project based. *See id.* Accordingly, gig workers are normally classified as independent contractors and not employees. *See id.* Modern gig work is often facilitated by technology like super-apps or other applications, which match a gig worker with opportunities. *See id.*

14.   *See generally* SOLON BAROCAS, MORITZ HARDT & ARVIND NARAYANAN, FAIRNESS AND MACHINE LEARNING: LIMITATIONS AND OPPORTUNITIES 8–10 (2023); *Preventing Algorithmic Bias*, BOOZ ALLEN HAMILTON, https://www.boozallen.com/s/insight/blog/algorithmic-bias.html [https://perma.cc/EUV6-3LLQ] (last visited Feb. 26, 2025); EUR. UNION AGENCY FOR FUNDAMENTAL RTS., BIAS IN ALGORITHMS: ARTIFICIAL INTELLIGENCE AND DISCRIMINATION 20 (2022), https://fra.europa.eu/sites/default/files/fra_uploads/fra-2022-bias-in-algorithms_en.pdf [https://perma.cc/C973-E2A7]; Alexandra Jonker & Julie Rogers, *What Is Algorithmic Bias?*, IBM (Sept. 20, 2024), https://www.ibm.com/think/topics/algorithmic-bias [https://perma.cc/7F9Y-UF6W].

15.   *See generally* Jonker & Rogers, *supra* note 14.

16.   Jeffrey Dastin, *Insight - Amazon Scraps Secret AI Recruiting Tool That Showed Bias Against Women*, REUTERS (Oct. 11, 2018, 7:50 PM), https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G/ [https://perma.cc/5AC3-2JUK].

17.   *Id.*

18.   *See* Putri et al., *supra* note 9. A platform facilitates the exchange of goods and services between participants through the use of technology. *See The Japanese Super App Race: Who Is Winning?*, *supra* note 2. Typically, the platform is not a participant itself but serves only as a broker, often taking a fee for matching platform participants. *See id.* Besides matching

the scope and influence of artificial intelligence (AI) grows, this concern is likely to become increasingly more relevant. The potential impact of algorithmic discrimination poses several risks for these companies, including litigation, regulatory, and reputational.[19] These risks represent significant concerns for platforms enabling gig work and should be key considerations for their executives and boards tasked with operating and governing platforms in the age of AI.

Additionally, this Article contributes to the existing literature at the intersection of corporate governance and technology by examining how a platform's governance strategies affect gig workers, which is especially relevant for platforms that rely heavily on technology to manage and monitor gig workers as part of their business models. It explores the interplay of algorithmic management between algorithms and gig workers, as well as the impact new laws in this area—such as the European Union's Platform Work Directive and AI Act—have on platforms operating globally.[20]

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participants, platforms often monitor and manage platform exchanges through ratings systems and feedback, effectively serving as de facto algorithmic managers. *See id.* Gig work, like ride-hailing and food delivery, are usually facilitated through smartphone applications offered by platforms like Gojek, DoorDash, Lyft, and Uber. *See id.* Additionally, some platforms offer multiple services through super-apps as discussed in footnote 2. *See id.*

19.   *See* discussion *infra* Part II.

20.   DEL. DIV. OF CORPS., U.S. ANNUAL REPORT STATISTICS (2023), https://corp.delaware.gov/stats/ [https://perma.cc/T9TU-LY8K]. In this Article, the analysis of corporate legal principles is grounded in Delaware law. This is because Delaware is widely considered the corporate capital and capital markets center in the U.S. *Id.* ("In 2023, more than 298,165 entities were formed in the First State. As precedent shows, the First State continues to lead as the domicile of choice for Fortune 500 companies at nearly 67.6 percent. Approximately 80% of all U.S. initial public offerings in 2023 were registered in Delaware." (emphasis removed)). The Authors of this Article have conducted a review of public filings and based on this research, many of the leading platform companies are Delaware corporations. These include Uber, Lyft, Grubhub, DoorDash, Instacart, Upwork, and Postmates, amongst others. *See, e.g.*, UBER TECHNOLOGIES, INC., ANNUAL REPORT (FORM 10-K) (Feb. 15, 2024); LYFT, INC., ANNUAL REPORT (FORM 10-K) (Feb. 20, 2024); UPWORK INC., ANNUAL REPORT (FORM 10-K) (Feb. 15, 2024); MAPLEBEAR INC. D/B/A INSTACART, REGISTRATION STATEMENT (FORM S-1) (Aug. 25, 2023). The Delaware Court of Chancery is *also* known for its expertise in handling corporate disputes and has played a significant part in shaping corporate law within the U.S. Delaware corporate law has also heavily influenced corporate law and corporate governance practices within the U.S. generally. *See* DEL. DIV. OF CORPS., *supra*.
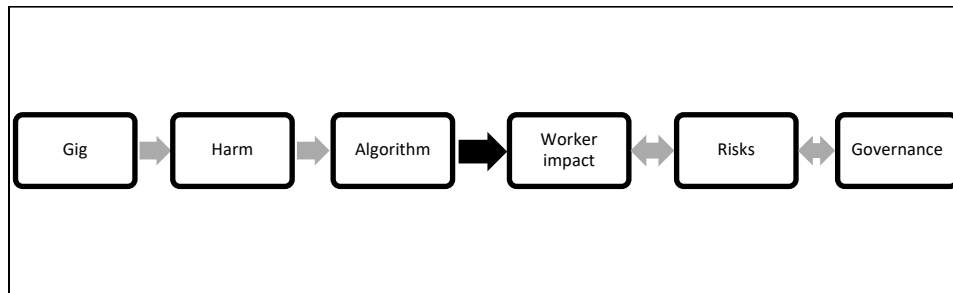
Figure 1. Flow chart detailing how discriminatory harm faced by gig workers leads to governance considerations.[21]

Part II of this Article provides a brief overview of how gig work is situated in the sharing economy. Though a specific definition of sharing economy can vary, key characteristics generally include accessing instead of owning (e.g., hailing a ride versus owning a vehicle), transacting between peers, and allocating resources that might otherwise remain idle.[22] Though elements of the sharing economy certainly predate modern technology, it is "the diffusion of digital technologies, particularly the Internet and smart phones, [that have] enabled sharing economy platforms to become sufficiently scalable to generate a critical mass of users."[23]

Part III then highlights the challenges gig workers confront due to the sharing economy business model and the black box nature of the algorithms that many of these platforms employ. Specifically, this Article focuses on three discriminatory threats: (1) safety concerns and harassment, (2) algorithmic bias, and (3) pay gaps and economic inequality. Additionally, it introduces the role of culture and its impact on the vulnerability of gig workers to discrimination, considering examples from outside of Europe and North America. This is significant, given that many of the largest and fastest growing platforms are headquartered outside Western countries or extensively operate in non-Western markets.[24] Culture can exacerbate algorithmic discrimination caused by the global reach of these platforms and the

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21.   Algorithms can amplify real-world discriminatory harm, as indicated by the middle arrow. This discriminatory harm leads to heightened risks and governance issues for the platforms. However, as platforms adopt improved risk management and governance practices, such efforts can flow back to positively impact workers, as represented by the dual-sided arrows.

22.   Ioanna Constantiou, Attila Marton & Virpi Kristiina Tuunainen, *Four Models of Sharing Economy Platforms*, 16 MIS Q. EXEC. 231, 234 (2017) (identifying key characteristics of the sharing economy).

23.   *Id.*

24.   *See The Japanese Super App Race: Who Is Winning?*, *supra* note 2.

technologies they employ in ways that have been underexplored within existing literature.

After examining algorithmic discrimination faced by gig workers and the mechanisms behind them, Part IV addresses the governance considerations these threats create. The confluence of sharing economy platforms, gig work, and AI gives rise to a host of issues that boards, executives, and regulators must face. In Part V, we examine emerging legal and regulatory prescriptions—especially from the European Union—that are designed to address the vulnerability of gig workers to algorithmic discrimination and regulate platforms that hire them. Lastly, Part VI outlines a series of recommendations, including organizational and strategic changes for companies to implement in this new legal and regulatory landscape.

II. THE GIG WORKER IN THE SHARING ECONOMY

Technology has catalyzed the creation of new business models.[25] One example is the emergence of platforms that are a critical component of the sharing economy. Platforms like Airbnb, Gojek,[26] and Uber use technology to enable, mediate, and manage peer-to-peer exchange.[27] The peer exchange aspect of platforms highlight the importance of network effects since "network effects are at the core of sharing economy business models and value propositions; platforms

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25.   *See generally* R. SRINIVASAN, PLATFORM BUSINESS MODELS: FRAMEWORKS, CONCEPTS AND DESIGN 112 (2021); MICHAEL A. CUSUMANO, ANNABELLE GAWER & DAVID B. YOFFIE, THE BUSINESS OF PLATFORMS: STRATEGY IN THE AGE OF DIGITAL COMPETITION, INNOVATION, AND POWER (2019).

26.   *See generally* Karen Gilchrist, *How These Millennial Tech Founders Pulled Off Indonesia's Biggest-Ever Business Deal*, CNBC: MAKE IT, https://www.cnbc.com/2021/06/09/goto-how-gojek-and-tokopedia-teamed-up-in-indonesias-biggest-merger.html [https://perma.cc/SPK7-PKC8] (June 8, 2021, 11:02 PM). Initially focused on ride hailing, Gojek has emerged as a leading consumer technology company. *Id.* GoJek is a subsidiary of GoTo, which is a holding company that was created from a merger between GoJek and Tokopedia, a large Indonesian e-commerce company. *Id.* Gojek now offers a diverse range of services including ride hailing and shopping through its smartphone application. *Id.*

27.   Although a uniform definition of a sharing economy platform has not been established, there has been a growing body of scholarship on the topic. *See, e.g.*, Christoph Busch, Hans Schulte-Nölke, Aneta Wiewiórowska-Domagalska & Fryderyk Zoll, *The Rise of the Platform Economy: A New Challenge for EU Consumer Law?*, 5 J. EUR. CONSUMER & MKT. L. (SPECIAL ISSUE) 3 (2016); Cristiano Codagnone & Bertin Martens, *Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues* 11–13 (Inst. for Prospective Tech. Stud. Digit. Econ., Working Paper No. 1, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2783662 [https://perma.cc/V2GK-PSHW]; Will Sutherland & Mohammad Hossein Jarrahi, *The Sharing Economy and Digital Platforms: A Review and Research Agenda*, 43 INT'L J. INFO. MGMT. 328, 328 (2018); Sarah Netter, Esben Rahbek Gjerdrum Pedersen & Florian Lüdeke-Freund, *Sharing Economy Revisited: Towards a New Framework for Understanding Sharing Models*, 221 J. CLEANER PROD. 224, 224 (2019).

rely on the self-reinforcing loop of participants on one side attracting more participants on the same and the other side."[28] As the number of platforms and participants has grown, the resulting network effects have made platforms integral to the global economy, positioning them among the most valuable and influential companies in the world.[29] As additional AI use cases emerge for platforms, their impact on the global economy is likely to grow further.[30]

Gig work is one subset of today's sharing economy.[31] The emergence of platforms, along with technological tools that facilitate remote work, like video conferencing and instant messaging, have contributed to the concomitant rise of gig work as an important part of the sharing economy.[32]

Gig work takes on various forms. There are gig workers whose full-time work is entirely gig-based, like a computer programmer or designer who exclusively takes on projects through a gig platform like Fiverr and works forty hours a week.[33] Another gig worker may take on the same work but opt to work fewer hours. Others may be employed full-time in a traditional sense but opportunistically take on gig work on the side to supplement income or pursue an interest. Since gig work can require only downloading an application to a smartphone to start, it has a low barrier to entry. Additionally, gig work offers time flexibility since workers generally choose when to work providing more control over time.

The original concept of modern gig work envisioned platforms as providers of work opportunities with workers classified as independent contractors rather than employees.[34] Defining workers as independent contractors is a critical part of the gig economy business model because independent workers are paid on a project basis, are not entitled to employee benefits (e.g., health insurance and a retirement plan), and are not subject to the same labor protections as employees.[35] Currently,

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28.   Constantiou et al., *supra* note 22.

29.   *See* Michael A. Cusumano, David B. Yoffie & Annabelle Gawer, *The Future of Platforms*, MIT SLOAN MGMT. REV. (Feb. 11, 2020), https://sloanreview.mit.edu/article/the-future-of-platforms/ [https://perma.cc/JEN8-RA6T].

30.   Ying Chen, Catherine Prentice, Scott Weaven & Aaron Hsiao, *A Systematic Literature Review of AI in the Sharing Economy*, 32 J. GLOB. SCHOLARS MKTG. SCI. 434, 434–35 (2021).

31.   *See id.* There are also platforms, like Airbnb, that facilitate sharing economy transactions involving asset use instead of labor or services such as in gig work. *See id.*

32.   *See id.*

33.   Oliveros, *supra* note 13.

34.   *See* JENNIFER SHERER & MARGARET POYDOCK, FLEXIBLE WORK WITHOUT EXPLOITATION 1, 3 (2023).

35.   SARAH A. DONOVAN, DAVID H. BRADLEY & JON O. SHIMABUKURO, CONG. RSCH. SERV., R44365, WHAT DOES THE GIG ECONOMY MEAN FOR WORKERS? 11 (2017).

the legal dichotomy between independent contractor and employee is a key source of dispute between platforms that offer gig work opportunities and the individuals that provide the labor.[36]

As independent contractors, most platform produced gig work comes with a lack of benefits and protection that leave women and minorities particularly vulnerable to discrimination.[37] As a result, independent contractors are not part of the company's internal workforce, and unlike employees, gig workers often lack the same recourse to human resource channels to resolve disputes that arise when performing gig work.[38] Further, platform policies and the algorithms used by platforms often fail to consider discriminatory behavior, which contribute to perpetuating various forms of discrimination.[39] Indeed, platform work can reproduce, reinforce, and exacerbate existing inequalities, leading to increased risks of violence, harassment, and abuse for women gig workers.[40]

III. CHALLENGES FACED BY GIG WORKERS

A. Examples of Discrimination

Though gig workers face a variety of issues, this Article focuses on the three following discriminatory threats that are intricately

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36.   For an explanation of the context of governance issues that arise for organizations employing gig workers *see infra* Part III.

37.   *See generally* Abigail Hunt & Emma Samman, *Gender and the Gig Economy: Critical Steps for Evidence-Based Policy* 13 (ODI, Working Paper No. 546, 2019), https://euagenda.eu/upload/publications/untitled-198213-ea.pdf [https://perma.cc/6G3D-2D73]; ANJALI KRISHAN, KAVITA DATTANI, GEORGINA LUBKE, GIULIA VARASCHIN & MARK GRAHAM, FAIRWORK, GENDER AND PLATFORM WORK: BEYOND TECHNO-SOLUTIONISM 11 (2023); Megan Carnegie, *The Gig Economy Is Much Worse for Women*, WIRED (May 8, 2023, 2:00 AM), https://www.wired.com/story/the-gig-economy-is-much-worse-for-women/ [https://perma.cc/F36X-UVCW]; Philippa Kelly, '*So Many Reports of Violence and Abuse': How the Gig Economy Fails Women Around the World*, GUARDIAN (June 26, 2023, 2:00 PM), https://www.theguardian.com/global-development/2023/jun/26/violence-and-abuse-how-the-gig-economy-fails-women-around-the-world [https://perma.cc/7KXD-6KXM]; *Lower Tips, Poor Ratings: Gig Economy Workers Face Racism and Sexism on the Job*, CTV NEWS (Dec. 15, 2020, 9:30 AM), https://www.ctvnews.ca/business/article/lower-tips-poor-ratings-gig-economy-workers-face-racism-and-sexism-on-the-job/ [https://perma.cc/M38M-B5RN].

38.   *See generally Fact Sheet 13: Employee or Independent Contractor Classification Under the Fair Labor Standards Act (FLSA)*, U.S. DEP'T OF LABOR, https://www.dol.gov/agencies/whd/fact-sheets/13-flsa-employment-relationship [https://perma.cc/FKY7-BNUF] (Mar. 2024); Russ Wiles, *Many People Are Working In Jobs That Lack Key Protections Against Discrimination*, USA TODAY (Oct. 25, 2018, 7:02 AM), https://www.usatoday.com/story/money/personalfinance/columnist/2018/10/25/independent-contractors-not-protected-workplace-discrimination/1674496002/ [https://perma.cc/77RV-5VNC].

39.   KRISHAN ET AL., *supra* note 37, at 12.

40.   *Id.* at 22.

intertwined with modern gig work: (1) safety concerns and harassment, (2) algorithmic bias, and (3) pay gaps and economic inequality. These discriminatory threats are analyzed in the context of ride-hailing services.

<div align="center">1. Safety Concerns and Harassment</div>

Ride hailing is an important locus for dissecting discriminatory harm that especially women gig workers face for a few key reasons. In terms of scale, ride-hailing services comprise a significant portion of the gig economy globally.[41] Additionally, algorithms play a key role in the operations of ride-hailing platforms.[42] And unlike other forms of gig work that can be completed asynchronously and nonproximately, like food delivery or freelance work from home, ride hailing requires both parties (i.e., driver and passenger) to be in sustained physical proximity with one another, creating increased risk for potential harm.[43] The general paradigm of protection for ride-hailing services has focused on protecting passengers from the actions of drivers, usually when the driver is a man, and the passenger is a woman.[44]

Accordingly, regulations, policies, and practices have evolved to protect passengers, an undoubtedly important objective.[45] The focus on passenger protection, however, has overshadowed the protection of drivers—specifically women drivers. Women represent a minority of drivers for ride-hailing services and therefore there are less policies to protect them from possible harassment from passengers.[46]

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41.   Shane McFeely & Ryan Pendell, *What Workplace Leaders Can Learn from the Real Gig Economy*, GALLUP (Aug. 16, 2018), www.gallup.com/workplace/240929/workplace-leaders-learn-real-gig-economy.aspx [https://perma.cc/R2WS-2BP7]. For example, Gallup estimates that 36 percent of American workers engage in gig work in some way. *Id.*

42.   Yanyou Chen, Yao Luo & Zhe Yuan, Driving the Drivers: Algorithmic Assignment in Ride-Hailing 7 (May 25, 2024) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4299499 [https://perma.cc/N7M4-KGBX].

43.   *See Female Drivers Face Tough Challenge*s, *supra* note 5.

44.   *Rider Safety Features*, UBER, https://www.uber.com/br/en/ride/safety/rider-safety-features/ [https://perma.cc/2ZQE-5DFQ] (last visited Feb. 24, 2025); *Uber Adds Safety Measures Aimed at Protecting Women Riders*, WNKY (Apr. 11, 2024), https://www.wnky.com/uber-adds-safety-measures-aimed-for-women-riders/ [https://perma.cc/8ZWU-DFDS].

45.   *See* Press Release, Josh Gottheimer, Rep., US House of Representatives, House Passes Gottheimer-Sponsored Bipartisan Sami's Law — Enhances Safety for Rideshare Passengers — Requires Uber, Lyft to Adopt Digital Verification Systems (July 29, 2020), https://gottheimer.house.gov/posts/house-passes-gottheimer-sponsored-bipartisan-samis-law-enhances-safety-for-rideshare-passengers-requires-uber-lyft-to-adopt-digital-verification-systems [https://perma.cc/MG2U-QT8J].

46.   Ellen Huet, *Why Aren't There More Female Uber And Lyft Drivers?*, FORBES (Apr. 9, 2015, 11:00 AM), https://www.forbes.com/sites/ellenhuet/2015/04/09/female-uber-lyft-drivers/

Consequently, women drivers confront safety and harassment issues that remain unaddressed compared to passengers who may face the same type of harm.[47] In those situations, it appears that a woman passenger has greater institutional protection offered by a ride-hailing platform than what is offered to a woman driver on the same platform.[48]

The experience of a woman Uber driver named Tara is one example.[49] Tara experienced a distressing incident when a male customer exposed himself to her during a ride.[50] Tara reported the passenger to Uber, which "assured her that she would not be paired with that rider again, but said nothing about his ability to use the app in the future."[51] A few months later, Tara discovered that two other women drivers had also separately picked up the same passenger weeks after Tara had already reported him.[52] So though Uber's policy protected Tara, this passenger still posed a potential risk to other drivers. In the case of Uber's women drivers, Tara's experience does not appear to be unique.[53]

Michelle Dottin, another woman Uber driver and advocate, noted that, "[t]hey [Uber] don't do enough when a driver is assaulted" and that "[s]afety, in general, should be for everyone. It shouldn't be one-sided, and the way that these companies do it, it feels more one-sided — they don't really worry as much about their drivers."[54] The experience of these Uber drivers represents a microcosm of the multifaceted challenges that women gig workers face in the sharing economy.

2. Algorithmic Bias and its Impact

Ride-hailing platforms depend on computer models consisting of algorithms to match passengers with drivers.[55] In its most basic form, an algorithm is a set of rules and procedures constructed to answer a

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[https://perma.cc/99EL-4ZJ5]; INT'L FIN. CORP., DRIVING TOWARD EQUALITY: WOMEN, RIDE-HAILING, AND THE SHARING ECONOMY 9 (2018).

47.   *See generally* Huet, *supra* note 46.

48.   *See id.*; *Rider Safety Features*, *supra* note 44.

49.   Anna Betts, *Women Who Drive for Uber and Lyft Are Being Left to Fend for Themselves*, THE VERGE (Jan. 18, 2022, 8:00 AM), https://www.theverge.com/2022/1/18/22878214/uber-lyft-women-drivers-sexual-assault-harassment-safety [https://perma.cc/T6SD-M2XX].

50.   *Id.*

51.   *Id.*

52.   *Id.*

53.   *Id.*

54.   *Id.*

55.   *See* Chen et al., *supra* note 42, at 1.

question or make a decision.[56] The growth of computing power coupled with increased access to greater amounts of data have made computer models and their underlying algorithms more powerful and prevalent, which enhance their role and impact on the ride-hailing platforms that rely on them.[57] Algorithms are a crucial component of AI, and the term "AI systems" will be frequently used in this Article to remain consistent with its use in various AI regulations, which will be explored subsequently.

Such technological advancements and the growing prevalence of algorithmic decision-making create unintended consequences. One of those unintended consequences presents the key concern of algorithmic susceptibility to both implicit and explicit bias. When bias becomes embedded into algorithms, a variety of issues concerning accuracy and discriminatory impact arise.[58]

Bias can enter an algorithm in several ways. First, those designing and creating code can unknowingly inject their own biases into the code, which may influence algorithmic outcomes.[59] Programmers, like employees in other industries, unknowingly bring their own biases to work. These biases can be shaped by cultural, legal, religious, and social traditions.[60] For example, a programmer in a particular country with a certain set of values may not realize the code being created reflects those underlying biases. This form of implicit bias was acutely illustrated by an experiment conducted by the MIT Media Lab examining the preferences of respondents evaluating accident

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56.   Kristian Lum & Rumman Chowdhury, *What Is an "Algorithm"? It Depends Whom You Ask*, MIT TECH. REV. (Feb. 26, 2021), https://www.technologyreview.com/2021/02/26/1020007/what-is-an-algorithm/ [https://perma.cc/D6CX-Y5DD].

57.   *See* Chen et al., *supra* note 42, at 1.

58.   Iain Walker & Susie Wang, *Implicit Bias*, *in* THE ROUTLEDGE INTERNATIONAL HANDBOOK OF DISCRIMINATION, PREJUDICE AND STEREOTYPING 197, 197 (Cristian Tileagă et al. eds., 2021); Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1513–14 (2005). *See generally* JOY BUOLAMWINI, UNMASKING AI: MY MISSION TO PROTECT WHAT IS HUMAN IN A WORLD OF MACHINES 14–16 (2024); CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY 43–45 (2016); Runshan Fu, Yan Huang & Param Vir Singh, *Artificial Intelligence and Algorithmic Bias: Source, Detection, Mitigation, and Implications*, *in* PUSHING THE BOUNDARIES: FRONTIERS IN IMPACTFUL OR/OM RESEARCH 39, 42 (2020).

59.   *See* Souti Chattopadhyay, Nicholas Nelson, Audrey Au, Natalia Morales, Christopher Sanchez, Rahul Pandita & Anita Sarma, *Cognitive Biases in Software Development*, 65 COMMC'NS ACM 115, 115 (2022).

60.   *See* Paul Pu Liang, Chiyu Wu, Louis-Philippe Morency & Ruslan Salakhutdinov, *Towards Understanding and Mitigating Social Biases in Language Models*, *in* PROCEEDINGS OF THE 38TH INTERNATIONAL CONFERENCE ON MACHINE LEARNING (2021), https://arxiv.org/pdf/2106.13219 [https://perma.cc/8BJ4-347U].

scenarios involving an autonomous vehicle.[61] Respondents demonstrated distinct geographic and cultural affiliations, which the researchers categorized as cultural clusters.[62] Presumably, such preferences could account for differences in how an algorithm is programmed by a developer from one particular cultural cluster versus a counterpart from a different one.

Another avenue by which discrimination can become embedded in algorithmic decision-making is through biased data.[63] Data is a key input for algorithms, but in the same way that programming may be biased, so too can data. In one scenario, there could be historical data from rides on the platform that an algorithm might rely on which influences outcomes. For instance, if a set of training data for a particular model is based on transactions or rides from a particular location that is homogeneous or otherwise not representative of the area in which it is ultimately deployed, an algorithm that makes decisions based on data from the former location could lead to biased outcomes in the latter.

Biased data is not just limited to ride sharing. One egregious example of the impact of biased data is the Dutch childcare benefits scandal where the Dutch tax authority incorrectly claimed that tens of thousands of people had committed fraud in receiving government childcare funds.[64] Many of those falsely identified as fraudsters were ethnic minorities and largely from low-income households.[65] The risk classification algorithm used by the Dutch tax authority relied on factors such as dual nationality and foreign-sounding names.[66] The government's pursuit of rapid repayment led to economic distress,

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61.   Edmond Awad, Sohan Dsouza, Richard Kim, Jonathan Schulz, Joseph Henrich, Azim Shariff, Jean-François Bonnefon & Iyad Rahwan, *The Moral Machine Experiment*, NATURE, Oct. 24, 2018, at 59, 60.

62.   *Id.* at 62. The three cultural clusters were labeled as Eastern, Southern, and Western. *Id.* The Eastern cluster reflected Asia, the Southern cluster included Central and South America, while the Western cluster represented North America and Europe. *Id.*

63.   James Manyika, Jake Silberg & Brittany Presten, *What Do We Do About the Biases in AI?*, HARV. BUS. REV. (Oct. 25, 2019), https://hbr.org/2019/10/what-do-we-do-about-the-biases-in-ai [https://perma.cc/7VJY-FBG2].

64.   AMNESTY INT'L, XENOPHOBIC MACHINES: DISCRIMINATION THROUGH UNREGULATED USE OF ALGORITHMS IN THE DUTCH CHILDCARE BENEFITS SCANDAL 5 (2021).

65.   *Id.* at 6.

66.   Stefan Dege, *'AI Leads to a Cultural Upheaval'*, DW (Apr. 19, 2023), https://www.dw.com/en/ai-leads-to-a-cultural-upheaval/a-65372980 [https://perma.cc/HQ5B-8P6W].

physical health problems, mental health issues, and in some cases children being separated from parents and placed in foster care.[67]

Besides historical data, models and algorithms are constantly fed new data. Consider a ride-hailing platform like Uber or Gojek where every ride is contributing to the corpus of data that the ride-hailing platform's model relies on to make decisions.[68] For platforms where both driver and passengers are rating the quality of the journey, these inputs can be subject to bias.[69] For example, a smooth, uneventful ride could be rated the lowest possible score due to racial discrimination. The experience of Black passengers and other minority groups in the United States illustrates this issue, as many have reported encountering higher rates of pick-up cancellations and longer wait times for rides.[70] Similarly, passengers may give a driver a low rating for gender- or race-based reasons and not due to the quality of the ride.[71] The inputs that facilitate matching, pricing, and calculating driver and passenger ratings can represent an embedding of algorithmic bias and the reification of societal bias into the sharing economy, leading to a disproportionate impact on minority or women gig workers. Thus, platforms, which initially appeared to be objective, with the power to create a fair labor market due to their technological facade, actually might further facilitate discrimination.

Discrimination in the sharing economy landscape has real micro and macro impacts. At the micro level, algorithmic bias creates unequal access to opportunities and assignments. Though each ride-sharing platform employs different algorithms, most use some sort of rating mechanism.[72] These rating mechanisms provide ongoing data that is

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67.　　　*Id.*; *see also* Melissa Heikkilä, *Dutch Scandal Serves as a Warning for Europe Over Risks of Using Algorithms*, POLITICO (Mar. 29, 2022, 6:14 PM), https://www.politico.eu/article/dutch-scandal-serves-as-a-warning-for-europe-over-risks-of-using-algorithms/ [https://perma.cc/UV9N-Z8BJ].

68.　　　*See* Murray, *supra* note 12.

69.　　　*See id.*

70.　　　*See generally* Dara Kerr, *Discriminated Against by an Uber Driver? Study Says You're Not Alone*, CNET (Oct. 31, 2016, 4:09 PM), https://www.cnet.com/culture/uber-lyft-racially-discriminate-study-says/ [https://perma.cc/NLA3-CD6R]; Alexandra Kelley, *Lyft, Uber Passengers of Asian Descent Report Discrimination over Coronavirus Fears*, THE HILL (Feb. 4, 2020), https://thehill.com/changing-america/respect/equality/481356-lyft-uber-passengers-of-asian-descent-report-discrimination/ [https://perma.cc/9VTF-5Z8U].

71.　　　Bobby Allyn, *Uber Fires Drivers Based on 'Racially Biased' Star Rating System, Lawsuit Claims*, NPR (Oct. 26, 2020, 3:47 PM), https://www.npr.org/2020/10/26/927851281/uber-fires-drivers-based-on-racially-biased-star-rating-system-lawsuit-claims [https://perma.cc/8MJQ-BDES].

72.　　　*See generally How Star Ratings Work*, UBER, https://www.uber.com/us/en/drive/basics/how-ratings-work/ [https://perma.cc/8DLM-G9BQ] (last visited Feb. 24, 2025).

continuously fed to a platform's algorithms.[73] If these rating inputs are shaped by bias, the bias can impact the score of drivers, negatively skewing the data for a particular driver over time while possibly inflating ratings for other drivers.

Initially, these rating systems were created as both an incentive mechanism and a signaling mechanism.[74] They are an incentive mechanism used to encourage prosocial behavior by drivers, encouraging them to be polite, courteous, and safe when driving.[75] These ratings are also a signaling mechanism because potential ride hailers may be encouraged to select rides with drivers that have higher ratings. Drivers who are rated negatively because of discriminatory bias are impacted in a direct way because passengers may be less keen on riding with a driver possessing a relatively lower rating. This can lead to more cancellations and less rides, thereby creating a vicious cycle with less rides and greater cancellations feeding lower ratings.

At the macro level, aggregated data creates algorithmic outcomes that can deviate from what a company expected or intended due to bias. Ostensibly, companies designed and developed systems that would not reinforce bias and stereotypes, but algorithms can be influenced by bias embedded within the code and the data used by the algorithm. Though gig economy opportunities are often perceived as gender neutral and available irrespective of background, the biased dynamics ostracize women and potentially other minority groups and disincentivizes participation in this segment of the labor market.[76] Gig economy opportunities that provide the greatest flexibility in terms of time are an avenue for those who, due to child care, family care, or other income-earning obligations, are unable to work within the confines of a standard fixed workday.[77] By inadvertently creating a structure and system that puts women and other populations at risk of discrimination, platforms may dissuade such groups from engaging in this form of gig work, the type of gig work from which is perhaps the easiest to access and benefit.

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73.   *See id.*

74.   *See generally id.*; Kat Kane, *The Big Hidden Problem With Uber? Insincere 5-Star Ratings*, WIRED (Mar. 19, 2015, 7:00 AM), https://www.wired.com/2015/03/bogus-uber-reviews/ [https://perma.cc/Y8HM-PYYH]; Noam Scheiber, *How Uber Uses Psychological Tricks to Push Its Drivers' Buttons*, N.Y. TIMES (Apr. 2, 2017), https://www.nytimes.com/interactive/2017/04/02/technology/uber-drivers-psychological-tricks.html [https://perma.cc/KJF2-GXF2].

75.   *See generally How Star Ratings Work*, *supra* note 72.

76.   *See* Jacki Silbermann, *Gender-Based Pay Gaps in the Gig Economy*, HARV. J. OF L. & GENDER, https://journals.law.harvard.edu/jlg/2020/02/gender-based-pay-gaps-in-the-gig-economy/ [https://perma.cc/3SLY-MH8E] (last visited Feb. 24, 2025).

77.   *See id.*

3. Pay Gaps and Economic Inequality

Discrimination has an economic cost for individuals and nations.[78] As University of Chicago economist Kilian Huber writes, "[w]hen intolerance prevents individuals from exercising their talents, there tend to be widespread, long-lasting negative economic effects."[79] In research conducted by Federal Reserve Bank of San Francisco President Mary Daly and her colleagues, they found that the impact of a more inclusive economy from the perspective of race and ethnicity could lead to "significant economic gains, measured in trillions of dollars of GDP."[80] Another study estimates that promoting racial equity could expand the US economy $8 trillion by 2050.[81]

Discriminatory factors embedded within the technology that powers platforms can contribute to pay gaps, ultimately exacerbating existing economic inequality. Pay discrepancies that women and underrepresented minorities face are well-documented.[82] Most research in this space has focused on pay gaps that exist between male and female CEOs and executives or pay discrepancies that exist between White versus Black workers or those from other minority groups.[83] Such pervasive pay discrepancies have led to legislative efforts around pay transparency. As of 2024, eleven states have passed legislation focused

78. Joseph Losavio, *What Racism Costs Us All*, FIN. & DEV., Sept. 2020, at 32, 33–34; *see* Kilian Huber, Volker Lindenthal & Fabian Waldinger, *Discrimination, Managers, and Firm Performance: Evidence from "Aryanizations" in Nazi Germany* 2–4 (Nat'l Bureau of Econ. Rsch., Working Paper No. 28766, 2021).

79. Kilian Huber, *How Discrimination Harms the Economy and Business*, CHI. BOOTH REV. (July 15, 2020), https://www.chicagobooth.edu/review/how-discrimination-harms-economy-and-business [https://perma.cc/5FY6-BJU5].

80. Shelby R. Buckman, Laura Y. Choi, Mary C. Daly & Lily M. Seitelman, *The Economic Gains from Equity*, BROOKINGS PAPERS ON ECON. ACTIVITY, Fall 2021, at 71, 71.

81. ANI TURNER, ALTARUM, W.K. KELLOGG FOUND., THE BUSINESS CASE FOR RACIAL EQUALITY: A STRATEGY FOR GROWTH 3 (2018), https://wkkf.issuelab.org/resources/30463/30463.pdf [https://perma.cc/VPL9-XMHA]. The study argues that removing racial disparities in areas like education, employment, and health can lead to higher productivity, fairer compensation, reduced costs in some cases, and increased spending, which the authors estimate can collectively contribute to growing the U.S. economy $8 trillion by 2050. *See generally id.*

82. *See* Rakesh Kochhar, *The Enduring Grip of the Gender Pay Gap*, PEW RSCH. CTR. (Mar. 1, 2023), https://www.pewresearch.org/social-trends/2023/03/01/the-enduring-grip-of-the-gender-pay-gap/ [https://perma.cc/2W9Q-AHDX].

83. *See, e.g.*, Eileen Patten, *Racial, Gender Wage Gaps Persist in U.S. Despite Some Progress*, PEW RSCH. CTR. (July 1, 2016), https://www.pewresearch.org/short-reads/2016/07/01/racial-gender-wage-gaps-persist-in-u-s-despite-some-progress/ [https://perma.cc/J7Y8-UMAP]; U.S. GOV'T ACCOUNTABILITY OFF., GAO-23-106041, WOMEN IN THE WORKFORCE: THE GENDER PAY GAP IS GREATER FOR CERTAIN RACIAL AND ETHNIC GROUPS AND VARIES BY EDUCATION LEVEL 2, 6 (2022).

on creating greater transparency around salaries to minimize gender and racial discrimination.[84]

For example, California's Fair Pay Act was signed into law by Governor Jerry Brown in 2015, which further buttressed its already existing Equal Pay Act.[85] Over the last few years, additional amendments to the law have enhanced the protections afforded to employees to set standards and guidelines to ensure compensation is fair and not driven by bias or discriminatory factors.[86]

Though legislative progress has been made to address the issue of discriminatory pay gaps, these laws do not typically apply to gig workers.[87] Most of the extant laws are focused on protecting employees, not independent contractors like gig workers.[88]

The confluence of algorithmic bias and the lack of fair pay protections for drivers can lead to pay inequality amongst drivers who initially might appear to be similarly situated.[89] Higher-rated drivers are more likely to get matched to better trips that produce higher compensation per trip.[90] Additionally, depending on the system, these drivers may be more frequently matched or otherwise prioritized by a platform's algorithm, giving them not only better trips but greater frequency of trips as well.[91] As a result, these higher-rated drivers have

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84. *Pay Transparency Laws by State*, GOVDOCS, https://www.govdocs.com/pay-transparency-laws/ [https://perma.cc/DJK6-VGFY] (Oct. 2024). At the time of this writing, states that have passed laws related to compensation transparency include California, Colorado, Connecticut, Hawaii, Illinois Maryland, Minnesota, Nevada, New York, Rhode Island, and Washington. *Id.* Additionally, the District of Columbia has also passed its own law on compensation transparency. *Id.*

85. *California Equal Pay Act*, DEP'T OF INDUS. RELS., https://www.dir.ca.gov/dlse/california_equal_pay_act.htm [https://perma.cc/N485-69UT] (last visited Feb. 25, 2024).

86. *See id.* For example, California's Equal Pay Act explicitly bars pay differences based on sex, race, or ethnicity. *Id.*

87. *See infra* Part IV.

88. *See infra* Part IV.

89. See Megan Cerullo, *How Companies Get Inside Gig Workers' Heads with "Algorithmic Wage Discrimination"*, CBS NEWS, https://www.cbsnews.com/news/algorithmic-wage-discrimination-artificial-intelligence/ [https://perma.cc/J8BX-LJ49] (Apr. 18, 2023, 4:34 PM). It is important to note that some jurisdictions, like New York City, have introduced minimum pay rules for drivers. *See Mayor Adams Announces First Annual Increase in Minimum Pay Rate for App-Based Restaurant Delivery Workers*, NYC CONSUMER & WORKER PROT. (Apr. 1, 2024), https://www.nyc.gov/site/dca/news/018-24/mayor-adams-first-annual-increase-minimum-pay-rate-app-based-restaurant-delivery [https://perma.cc/A23P-9LUK]. Such policies are usually designed to provide a floor for a driver's earnings but still maintain the incentive structure offered by many platforms. *See id.*

90. *See, e.g.*, *Introducing Advantage Mode & Standard Mode*, UBER BLOG (Feb. 18, 2025), https://www.uber.com/blog/advantage-and-standard-mode/ [https://perma.cc/Y4A6-3P7V].

91. *See id.*

a higher overall income than lower-rated drivers.[92] Performance should drive this pay difference and not discrimination.

Until now, we have focused on drivers providing passenger rides. However, other types of gig workers face a similar dynamic with rating systems. For example, food delivery platforms often provide higher pay per order to workers who deliver more.[93] Food delivery drivers who are more highly rated can also benefit in securing a greater number of delivery gigs, and the speed by which they complete them also creates economic incentives to be faster and more responsive.[94] Admittedly, food delivery gigs generally do not face the same potential for discrimination that exists when interacting directly with a client, such as a passenger, but the experience of food delivery workers is another example of how algorithmic decision-making shapes incentives and rewards, creating a virtuous cycle for some but a vicious cycle for others.

The black box nature of most platforms' algorithms creates a structural impediment to improving them.[95] Though organizations can observe the input and output of an algorithm, many do not fully understand the intricacies of how an algorithm works or why a particular decision was made.[96] Given that, it can be difficult to audit models and algorithms, let alone isolate specific factors to improve and provide fair and transparent results. Consequently, drivers face several discriminatory factors whose effects compound one another: algorithms that are difficult to analyze and assess, algorithms that embed bias, and data that captures both implicit and explicit bias. Collectively, this may result in those most at risk and vulnerable to discrimination confronting it again in the context of labor in the shared economy.

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92. *See id.*

93. *See Women Workers in China's Gig Economy Face Discrimination, Lower Pay, Unsafe Conditions*, CHINA LAB. BULL. (May 23, 2023), https://clb.org.hk/en/content/women-workers-china%E2%80%99s-gig-economy-face-discrimination-lower-pay-unsafe-conditions [https://perma.cc/M7PD-YYH5].

94. *See* Andy Newman, *My Frantic Life as a Cab-Dodging Tip-Chasing Food App Deliveryman*, N.Y. TIMES (July 21, 2019), https://www.nytimes.com/2019/07/21/nyregion/doordash-ubereats-food-app-delivery-bike.html [https://perma.cc/A73Y-GCSB]. An intrepid New York Times reporter documented his stint as a food deliverer. *See id.* His story captures how incentives and algorithms intersect to shape gig worker behavior. *See id.*

95. *See* Hamilton Nolan, *Wage-Setting Algorithms Are an Abomination*, HOW THINGS WORK (Dec. 4, 2023), https://www.hamiltonnolan.com/p/wage-setting-algorithms-are-an-abomination [https://perma.cc/GC33-CD62].

96. *See generally* Cynthia Rudin & Joanna Radin, *Why Are We Using Black Box Models in AI When We Don't Need To? A Lesson from an Explainable AI Competition*, HDSR (Nov. 22, 2019), https://hdsr.mitpress.mit.edu/pub/f9kuryi8/release/8 [https://perma.cc/2KG8-FJYE]; FRANK PASQUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION (2015).

B. *Global Implications of Gig Economy Discrimination*

The issues analyzed in this Article have global implications. Platforms like Uber headquartered in the United States,[97] Didi Chuxing (Didi) based in China,[98] GoJek and Grab in Southeast Asia,[99] and other platforms collectively have a wide geographic scope. In some countries, approximately 20–25 percent of the labor force is engaged in gig work, which is often facilitated by platforms.[100]

It is estimated that women comprise 42 percent of digital gig workers globally.[101] Beyond the top-level number, looking at country level numbers reveals the disproportionate impact that women may bear when it comes to discrimination in the gig economy. For example, in the United States, approximately 22 percent of the labor force is engaged in the gig economy.[102] Of that group, 46 percent are women.[103] In Vietnam, it is estimated that 38.1 percent of the labor force is engaged in gig work, with women comprising close to 56 percent of that number.[104] At a high level, in many economies, women are engaging in the labor market through gig work, either on a part-time or full-time basis. Although women participation in gig work can vary, ranging from the high end of approximately 56 percent in Vietnam or on the low end of roughly 19 percent in Indonesia,[105] what remains consistent is that discrimination disproportionately impacts women.[106] Even in countries where the women participation rate in the gig economy is low,

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97.   *FAQ and Resources*, UBER INV., https://investor.uber.com/faq-resources/default.aspx [https://perma.cc/RMU9-QC34] (last visited Feb. 25, 2025).

98.   Chris Ciaccia, *DiDi Chuxing: The Chinese Ride-Sharing Giant*, INVESTOPEDIA, https://www.investopedia.com/articles/small-business/012517/didi-chuxing.asp#:~:text=DiDi%20Chuxing%20is%20a%20mobile,%2C%20Central%20Asia%2C%20and%20Russia [https://perma.cc/9HM4-A8T3] (Feb. 15, 2022).

99.   Dadang Irsyam, *How Gojek and Grab Became the Kings of Digital Transportation Despite the Challenges*, MEDIUM (Jan. 5, 2025), https://medium.com/@dirsyamuddin29/how-gojek-and-grab-became-the-kings-of-digital-transportation-despite-the-challenges-ccf47c6d6af8 [https://perma.cc/BEH9-KXCQ].

100.   *See* RHEA C. HERNANDO & SYLWYN C. CALIZO JR., APEC POL'Y SUPPORT UNIT, UNPACKING ISSUES IN THE GIG ECONOMY: POLICY APPROACHES TO EMPOWER WOMEN IN APEC 3–4 (2024), https://www.apec.org/docs/default-source/publications/2024/1/224_psu_unpacking-issues-in-the-gig-economy.pdf?sfvrsn=55c3a4fd_2 [https://perma.cc/KY9R-F9PV].

101.   *Id.* at 3.

102.   *Id.* at 4.

103.   *Id.*

104.   *Id.*

105.   *Id.*

106.   *See generally* Carnegie, *supra* note 37.

discrimination and harm encountered by gig workers is almost entirely borne by women participants.[107]

Discrimination is caused by many factors, driven by both explicit and implicit bias. Frequently, gender discrimination is shaped by socio-cultural norms, which can, but do not always, intersect with religious beliefs.[108] For example, in Indonesia, the world's most populous Muslim country, there are layers of custom and religious belief that shape perceptions of women outside the home, the clothes they wear, and their proximity to an unrelated man (let alone sitting on a motorcycle together).[109]

Beyond that, there are traditional stereotypes about the quality of women drivers versus men, and other cultural tropes that shape how women participate in the shared economy.[110] Ultimately, a platform that matches drivers with passengers does not act to filter discrimination. Instead, it potentially serves as a conduit that amplifies and proliferates discriminatory behavior, including types of discrimination that are often unintended and committed by unaware individuals.

As platforms proliferate globally, this trend will only continue. Though platforms in the ride-hailing space, companies like Uber, Didi, and GoJek, may operate in different geographies, they often reflect very similar competitive market dynamics.[111] Platforms typically develop under a winner-takes-all or winner-takes-most competitive landscape, and when the market reaches a certain level of maturity, the remaining platforms—the "winners"—find themselves in markets that are often duopolies and even monopolies.[112] For example, the ride-hailing market in the United States is now a duopoly and controlled entirely by Uber

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107.   *See generally id.*

108.   *See generally The Trouble with Tradition*, HUM. RTS. WATCH, https://www.hrw.org/node/259925 [https://perma.cc/MR65-BQRB] (last visited Feb. 25, 2025); TARA PATRICIA COOKSON, LORENA FUENTES, MARIA KLARA KUSS & JENNIFER BITTERLY, UN WOMEN, SOCIAL NORMS, GENDER AND DEVELOPMENT: A REVIEW OF RESEARCH AND PRACTICE 17 (2023).

109.   *See generally* Kathryn Robinson, *Religion, Gender and the State in Indonesia*, E. ASIA F. (June 22, 2016), https://eastasiaforum.org/2016/06/22/religion-gender-and-the-state-in-indonesia/ [https://perma.cc/2TKF-PRCQ]; Uzair Thamrin, *Indonesia's Aceh Bans Unrelated Men and Women from Being Together in Public*, BENAR NEWS (Aug. 11, 2023), https://www.benarnews.org/english/news/indonesian/aceh-sharia-men-women-separation-tightened-08112023103810.html [https://perma.cc/U7QE-YNKL].

110.   *See* discussion *supra* Part II.

111.   *See* Jason P. Davis, *The Real Story Behind Uber's Exit from Southeast Asia*, INSEAD KNOWLEDGE (Sept. 19, 2018), https://knowledge.insead.edu/entrepreneurship/real-story-behind-ubers-exit-southeast-asia [https://perma.cc/7DG6-T63E].

112.   *See id.*

(76 percent) and Lyft (24 percent).[113] Similarly, in Indonesia, the ride-hailing market is roughly split equally between Gojek and Grab.[114] In China, Didi controls over 90 percent of the ride-hailing market.[115] In Latin America, Uber and a company called 99, which is owned by Didi, essentially control most major markets like Mexico and Brazil.[116] As these platforms become dominant players and are not subject to competitive pressures, the influence of their potential algorithmic bias will become further entrenched. With no alternatives for drivers or passengers, as platforms become institutionalized, so will the discrimination that is embedded within their systems. With minimal competitive pressure, the only options remaining for remedying the situation are legal action or regulatory pressure.

Related to the global expansion of platforms, companies like Uber and Didi (the two largest ride-hailing platforms by market capitalization) often seek growth opportunities beyond their native shores. They typically accomplish this through: (1) a greenfield initiative where they enter international markets directly, (2) establishing a joint venture or taking a significant investment stake in a local incumbent player, or (3) acquiring an existing player in the local market.[117] Determining why a company takes a particular strategic approach is beyond the scope of this Article, but what should be highlighted is that in any of the three approaches, the larger player's processes and procedures often influence the operations of the incumbent business. Though these strategies are intended to assist the business in being successful in other countries, one of the potential unintended side effects is that algorithmic bias, or at least the processes and procedures that facilitate such bias, become exported globally, thus expanding the reach of the problem.

Many technology companies express an idealistic approach to the services they offer. For example, Uber's self-stated approach to

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113.   Michal Kaczmarski, *Uber vs. Lyft: Who's Tops in the Battle of U.S. Rideshare Companies*, BLOOMBERG SECOND MEASURE (Apr. 15, 2024), https://secondmeasure.com/datapoints/rideshare-industry-overview/ [https://perma.cc/D7DC-LMZU].

114.   Charlie Sheng, *Inside the Duopoly: Gojek vs Grab on Indonesia's Ride-Hailing Market*, MEASURABLE AI (Mar. 9, 2023), https://blog.measurable.ai/2023/03/09/inside-the-duopoly-gojek-vs-grab-on-indonesias-ride-hailing-market/ [https://perma.cc/YHU7-CD5X].

115.   Tracy Wen Liu, *Didi's Revival Shows China Can't Live Without Big Tech*, WIRED (Feb. 14, 2023, 7:00 AM), www.wired.com/story/didis-revival-shows-china-cant-live-without-big-tech/ [https://perma.cc/Q98R-E2AB].

116.   Michelle Tang, *Ride-Hailing in Latin America: A Race Between Uber and Didi's 99*, MEASURABLE AI (Aug. 18, 2022), https://blog.measurable.ai/2022/08/18/ride-hailing-in-latin-america-a-race-between-uber-and-didis-99/ [https://perma.cc/U866-CWLY].

117.   *See* Davis, *supra* note 111.

impact is "[m]aking movement equal for all."[118] Uber further expands, "[w]e know that, for centuries, access to movement—to safe places, better choices, healthcare, work opportunities, the same rights—has been unequal."[119] Uber states it tries to accomplish this by addressing four challenges: economic empowerment, safety, equity, and sustainability.[120] Unfortunately, what has emerged is a failure to address that embedded technological and data driven bias runs counter to Uber's commitment to three out of the four challenges, namely economic empowerment, safety, and equity.

Though such challenges are certainly not unique to Uber and plague many companies, these types of issues get to the heart of business purpose. If a business has stated a particular purpose and its actions result in a deviation from that purpose, then this raises questions concerning executive leadership and strategic direction, as well as heightened litigation risk or potential increased regulatory oversight–each of which constitutes a board-level issue. When considered collectively, effective corporate governance seemingly requires a company's board of directors and executive leadership to act. Directors and executives must consider how technology is changing the ways platforms implement their business models and the new realities of discrimination.

III. GOVERNANCE ISSUES

A. The Connection Between Corporate Governance and Gig Workers

Generally, platforms—including their directors and executives—have so far overlooked their treatment of gig workers. While a number of articles delve into the reason behind this, there is a shortage of academic analyses addressing this issue from a corporate governance and technology law perspective.[121] As this Article explains

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118. *Making Movement Equal for All*, UBER, https://www.uber.com/be/en/impact/ [https://perma.cc/MH8B-H5KU] (last visited Feb. 25, 2025).

119. *Id.*

120. *Id.*

121. *See, e.g.*, Charlotte Garden, *The Seattle Solution: Collective Bargaining by For-Hire Drivers and Prospects for Pro-Labor Federalism*, HARV. L. & POL'Y REV.: ONLINE PIECES, https://journals.law.harvard.edu/lpr/online-articles/ [https://perma.cc/ML3C-D77C] (last visited Mar. 8, 2025) (focusing on a Seattle ordinance allowing for-hire drivers to unionize and bargain collectively); MARC T. MOORE, FLEXIBLE WORK: A LAW AND ECONOMICS PERSPECTIVE (2018), https://ssrn.com/abstract=3105306 [https://perma.cc/PLQ8-Z8AF] (providing an economic analysis of law relating to flexible work); Keith Cunningham-Parmeter, *From Amazon to Uber: Defining Employment in the Modern Economy*, 96 B.U. L. REV. 1673, 1686 (2016); Sanjukta M. Paul, *Uber*

further below, the for-profit nature of gig platforms means that platforms prioritize shareholder gains and maximizing profits over worker welfare.[122] As a result, gig workers, who have long been classified as independent contractors instead of employees, often find their well-being neglected by the platforms that hire them.[123]

Yet, for platforms to achieve long-term success, they must implement effective corporate governance measures to address significant risks related to gig workers and ensure compliance with emerging laws in this area. Within a corporation, the board and executives hold significant influence and power over the corporation's short-term and long-term decision-making and the extent to which the corporation prioritizes gig workers.[124] As part of that, the board and executives are responsible for governing the corporation and ensuring that it operates in an ethical and legally compliant manner.[125] Further, directors and executives have power to shape the corporation's internal and external strategic direction, including corporate culture, from the top by fostering a supportive culture for gig workers.[126]

1. Gig Workers Have Often Been Overlooked Within Corporate Governance

The board of directors and executives are fiduciaries responsible to the corporation and its shareholders.[127] Because of this, directors and executives are legally obligated to act in the corporation's best

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as For-Profit Hiring Hall: A Price-Fixing Paradox and Its Implications, 38 BERKELEY J. EMP. & LAB. L. 233 (2017) (arguing in favor of collective bargaining rights for Uber drivers by applying the antitrust concept of price-fixing).

122.   *See, e.g.*, Scott Tong, *How Shareholders Jumped to First in Line for Profits*, MARKETPLACE (Apr. 25, 2022), https://www.marketplace.org/2022/04/25/how-shareholders-jumped-to-first-in-line-for-profits-rerun/ [https://perma.cc/88WN-Q6FV]; Ann M. Lipton, *Will the Real Shareholder Primacy Please Stand Up?*, 137 HARV. L. REV. 1584, 1588–89 (2024) (reviewing STEPHEN M. BAINBRIDGE, THE PROFIT MOTIVE: DEFENDING SHAREHOLDER VALUE MAXIMIZATION (2023)).

123.   *See* Jill Habig, Veena Dubal & Mishal Khan, *Unrigging the Gig Economy*, STAN. SOC. INNOVATION REV. (Sept. 27, 2023), https://ssir.org/articles/entry/unrigging_the_gig_economy [https://perma.cc/G5RK-URL6]; BEN ZIPPERER, CELINE MCNICHOLAS, MARGARET POYDOCK, DANIEL SCHNEIDER & KRISTEN HARKNETT, ECON. POL'Y INST., NATIONAL SURVEY OF GIG WORKERS PAINTS A PICTURE OF POOR WORKING CONDITIONS, LOW PAY 2 (2022).

124.   *See* Lenore Palladino, *Why Workers on Corporate Boards Just Makes Sense*, ROOSEVELT INST. (Aug. 14, 2018), https://rooseveltinstitute.org/blog/why-workers-on-corporate-boards-just-makes-sense/ [https://perma.cc/9LAS-RJGT].

125.   *See id.*

126.   *See id.*

127.   *See* DEL. CODE ANN. tit. 8, §§ 141–142 (2024); Gantler v. Stephens, 965 A.2d 695, 709 (Del. 2009) (holding that the fiduciary duties of officers are the same as those of directors).

interests.[128] However, directors' and executives' role as fiduciaries does not extend to the corporation's other important stakeholders such as employees, independent contractors, customers, or suppliers.[129] This creates a distinction between prioritizing the corporation and its shareholders and addressing the needs of other stakeholders, such as gig workers. In that vein, a corporation's decision to hire gig workers and how they decide to treat gig workers have generally been considered business decisions that are outside of the scope of corporate governance and even the reach of courts.[130] Further, directors are also well protected from personal liability under the existing legal framework.[131] It is against this landscape that gig workers have been left out of discussions relating to corporate governance, despite their importance to the very platforms which depend on their labor.[132]

2. Few Internal Controls to Protect Gig Workers

As part of their fiduciary duty, directors and executives are also responsible for overseeing and managing the corporation's risks and creating effective systems to ensure the corporation complies with its legal and ethical obligations.[133] The board is expected to adopt

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128.   *See* Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984), *overruled by* Brehm v. Eisner, 746 A.2d 244 (Del. 2000).

129.   S*ee Shareholder Primacy*, CFI, https://corporatefinanceinstitute.com/resources/ equities/what-is-shareholder-primacy/ [https://perma.cc/KSG9-LZ9L] (last visited Feb. 25, 2025). To note, there are some states which explicitly allow the board of directors to take into consideration the interests of stakeholders other than shareholders, such as employees, suppliers, and customers. *See, e.g.*, 15 PA. CONST. STAT. § 515(a) (2024). However, Delaware law does not provide for a similar provision. tit. 8, § 141.

130.   *See* Sinclair Oil Corp. v. Levien, 280 A.2d 717, 720 (Del. 1971). Courts generally use the business judgment rule, a standard of review that is highly deferential to businesses, when reviewing decisions made by corporate boards. *See, e.g.*, *id.* Courts generally defer to the directors' "business judgment" and do not question their business decisions in hindsight, unless their decision cannot be attributed to any rational business purpose. *See id.*; *In re* Walt Disney Co. Derivative Litig., 906 A.2d 27, 74 (Del. 2006).

131.   *See* Allison L. Land & Peter D. Luneau, *Indemnification Considerations for Directors and Officers of Delaware Entities*, SKADDEN (Feb. 9, 2021), https://www.skadden.com/insights/ publications/2021/02/indemnification-considerations [https://perma.cc/T3Z4-XKJH]. In addition to the business judgment rule, directors and officers are also protected by indemnification statutes and directors and officer insurance, amongst others. *See id.*

132.   *See Corporate Governance in the Gig Economy: New Challenges and Opportunities*, DIRS. INST. (July 11, 2024), https://www.directors-institute.com/post/corporate-governance-in-the-gig-economy-new-challenges-and-opportunities [https://perma.cc/27U9-2J22].

133.   *See In re* Caremark Int'l Inc. Derivative Litig., 698 A.2d 959, 971 (Del. Ch. 1996). The Delaware Court of Chancery has also recently held that similar to directors, officers also owe a fiduciary duty of oversight. Further, the court reiterated that officers owe the same fiduciary duties as directors under Delaware law. *See In re* McDonald's Corp. S'holder Derivative Litig., 289 A.3d 343, 349 (Del. Ch. 2023).

"reasonable information and reporting systems" to monitor the corporation's operations and appropriately address red flags that arise.[134] Courts may impose a higher standard upon directors and officers within corporations that operate in industries with "mission critical" regulatory risks.[135] There have been few laws and regulations relevant to gig workers on platforms, and corporations have generally not faced legal or compliance consequences for failing to protect their gig workers.[136] As such, there has been scarce discourse on taking gig workers into account within a corporation's internal controls and policies. However, this approach may soon change as governments worldwide are starting to proactively protect gig workers.

3. The Turning Tide

Gig work was originally understood as a potential game changer for individuals pursuing flexible work arrangements.[137] However, the realities of gig work and the lack of protection platforms provide gig workers have dampened this initial optimism.[138] For example, a

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134.   *Caremark*, 698 A.2d at 972; *see McDonalds*, 289 A.3d at 350.

135.   *In re* Clovis Oncology, Inc. Derivative Litig., No. 2017-0222, 2019 WL 4850188, at *12–13 (Del. Ch. Oct. 1, 2019).

136.   *See, e.g.*, Ruth Berins Collier, V.B. Dubal & Christopher Carter, *Labor Platforms and Gig Work: The Failure to Regulate* (Inst. for Rsch. on Lab. & Emp., Working Paper No. 106-17, 2017), https://irle.berkeley.edu/wp-content/uploads/2017/09/Labor-Platforms-and-Gig-Work.pdf [https://perma.cc/9JVF-GCPH]; Elizabeth Pollman, *Tech, Regulatory Arbitrage, and Limits*, 20 EUR. BUS. ORG. L. REV. 567 (2019).

137.   *See* Anne-Marie Slaughter, *The Gig Economy Can Actually Be Great for Women*, WIRED (Oct. 13, 2015, 6:50 AM), https://www.wired.com/2015/10/unfinished-business-women-men-work-family/ [https://perma.cc/TRW9-NZEL]; JAMES MANYIKA, SUSAN LUND, JACQUES BUGHIN, KELSEY ROBINSON, JAN MISCHKE & DEEPA MAHAJAN, MCKINSEY GLOB. INST., INDEPENDENT WORK: CHOICE, NECESSITY, AND THE GIG ECONOMY (2016), https://www.mckinsey.com/~/media/mckinsey/featured%20insights/employment%20and%20growth/independent%20work%20choice%20necessity%20and%20the%20gig%20economy/independent-work-choice-necessity-and-the-gig-economy-executive-summary.pdf [https://perma.cc/XY2A-DH9A]; Camille Fetter, *The Gig Economy Opportunity: Let's Get Women Back into the Workplace Post-Pandemic*, FORBES (May 2, 2022, 7:00 AM), https://www.forbes.com/councils/forbeshumanresourcescouncil/2022/05/02/the-gig-economy-opportunity-lets-get-women-back-into-the-workplace-post-pandemic/ [https://perma.cc/N9DA-PJFM].

138.   *See, e.g.*, Navneet Gidda & Sudeep Bhargava, *The Gig Economy Risks Rolling Back Hard-Fought Gender-Based Entitlements in the Workplace*, BMZ DIGITAL.GLOBAL, https://www.bmz-digital.global/en/news/the-gig-economy-risks-rolling-back-hard-fought-gender-based-entitlements-in-the-workplace/ [https://perma.cc/C3F7-PNDW] (last visited Feb. 25, 2025); Callum Cant, *Be Warned: Deliveroo's Victory over Its Riders Shows Just How Vulnerable British Workers Are*, GUARDIAN (Nov. 23, 2023, 9:14 AM), https://www.theguardian.com/commentisfree/2023/nov/23/deliveroo-victory-riders-british-workers-gig-economy-europe [https://perma.cc/R4PZ-JUMR]; Richard Heeks & Trevi Putri, *Indonesia's Gig Economy Falling Short on Decent Work Standards*, E. ASIA F. (Feb. 3, 2022), https://eastasiaforum.org/2022/02/03/indonesias-gig-

national survey of gig workers in the United States showed that about 14 percent of gig workers made less than the federal minimum wage.[139] Further, a study by the University of Texas found that gig workers surveyed experienced poorer overall health and psychological distress in comparison to employees.[140] A recent report by UC Berkeley shows an even more harrowing statistic—delivery drivers in metropolitan areas outside California within their study earned a mere forty cents net per hour after adjusting for expenses and tips.[141] Some have even described the connection between the profitability that platforms enjoy, which often comes at the expense of gig workers' rights and benefits, as the "regulatory arbitrage of employment rights."[142] In light of the disillusioning realities of gig work, the tide has started to turn against platforms' treatment of gig workers in recent years, with politicians,[143]

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economy-falling-short-on-decent-work-standards/ [https://perma.cc/F8FN-RGK7]; Funda Usetk-Spilda, Mark Graham, Alessio Bertolini, Srujana Katta, Fabian Ferrari, Adam Badger, Kelle Howson, Mounika Neerukonda & Pradyumna Taduri, *COVID-19 Policies Leave Gig Workers Out in the Cold*, BOT POPULI (Apr. 9, 2020), https://botpopuli.net/covid-19-gigwork-precarity-platforms/ [https://perma.cc/89ZY-55W6].

139. ZIPPERER ET AL., *supra* note 123.

140. *See Despite Flexibility, Gig Work and Insecure Income Are Harmful to U.S. Workers, According to UTHealth School of Public Health*, UTHEALTH HOUS., https://sph.uth.edu/news/story/despite-flexibility-gig-work-and-insecure-income-are-harmful-to-us-workers-according-to-uthealth-school-of-public-health [https://perma.cc/4NBG-ZSQE] (Aug. 22, 2022).

141. Noah Sheidlower & Jacob Zinkula, *Many Drivers for Uber, Lyft, and DoorDash Are Earning Well Below Minimum Wage, Even with Tips, a New Paper Finds*, BUS. INSIDER (May 21, 2024, 4:45 AM), https://www.businessinsider.com/uber-lyft-doordash-drivers-earn-below-minimum-wage-tips-study-2024-5 [https://perma.cc/PDE5-LFGK]; KEN JACOBS, MICHAEL REICH, TYNAN CHALLENOR & AIDA FARMAND, INST. FOR RSCH. ON LAB. & EMP., GIG PASSENGER AND DELIVERY DRIVER PAY IN FIVE METRO AREAS 3 (2024).

142. *See* WILLIAM GORE-RANDALL, LAZARD ASSET MGMT., UNDERSTANDING THE INVESTMENT IMPLICATIONS OF THE GIG ECONOMY 2 (2020); *see also* Pollman, *supra* note 136, at 578.

143. *See* Ben Christopher, *Harris Belatedly Joins Other Presidential Candidates in California Fight over "Gig" Workers,* CALMATTERS, https://calmatters.org/economy/2019/08/elizabeth-warren-dynamex-califronia-gig-economy-presidential-primary/ [https://perma.cc/A5XZ-YE4J] (Aug. 23, 2019); Pieter Haeck, *EU Finalizes Gig Work Rules After Countries Back Deal*, POLITICO (Mar. 11, 2024, 6:07 PM), https://www.politico.eu/article/european-union-gig-work-labor-estonia-greece-germany-france/ [https://perma.cc/GM6U-TDSU]; Sarah Butler, *Frank Field Demands Action on 'Rampant Injustice' in the Gig Economy*, GUARDIAN (Mar. 24, 2019, 12:14 PM), https://www.theguardian.com/business/2019/mar/24/frank-field-demands-action-on-ramapant-injustice-in-the-gig-economy [https://perma.cc/N26Q-H4PX]. Politicians who have been vocal in advocating for gig workers include Elizabeth Warren, Bernie Sanders, Alexandra Ocasio-Cortez, Kamala Harris, and Gavin Newsom in the U.S., as well as Nicolas Schmit and Frank Field in Europe. Christopher, *supra*; Haeck, *supra*; Butler, *supra*.

academics,[144] and international organizations,[145] among many others, demanding platforms provide greater protections to the gig workers on whom their business models depend.[146]

IV. LEGAL AND REGULATORY PRESCRIPTIONS

Boardrooms have largely failed to consider gig workers in their decision-making and internal processes, leaving gig workers unprotected by the platforms that hire them. Existing labor law—and attempts to use labor law to protect gig workers—have fallen short in addressing gig workers' situation. Nevertheless, emerging regulatory and legal responses are starting to tackle the unique challenges that gig workers face. These new approaches recognize the distinct nature of gig work and—with the management and utilization of gig workers increasingly done through technology—the importance of regulating the algorithms and AI the platforms use. Further, new laws in this area have important implications for platforms and their corporate governance practices.

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144.   *See* Arun Sundararajan, *The 'Gig Economy' Is Coming. What Will It Mean for Work?*, NYU STERN (July 25, 2015), https://www.stern.nyu.edu/experience-stern/faculty-research/gig-economy-coming-what-will-it-mean-work [https://perma.cc/U89J-FCDD]; ALEXANDREA RAVENELLE, HUSTLE AND GIG: STRUGGLING AND SURVIVING IN THE SHARING ECONOMY (2019); Veena Dubal, *A Brief History of the Gig*, LOGIC(S) (May 4, 2020), https://logicmag.io/security/a-brief-history-of-the-gig/ [https://perma.cc/UE6L-TCGU]; ALEX ROSENBLAT, UBERLAND: HOW ALGORITHMS ARE REWRITING THE RULES OF WORK (2018).

145.   *See* UMA RANI, INT'L LAB. ORG., THE ROLE OF DIGITAL LABOUR PLATFORMS IN TRANSFORMING THE WORLD OF WORK 8 (2021); Cyrille Schwellnus, Assaf Geva, Mathilde Pak & Rafael Veiel, *Gig Economy Platforms: Boon or Bane?* 3 (Org. for Econ. Coop. & Dev., Working Paper No. 1550, 2019), https://www.oecd.org/en/publications/gig-economy-platforms-boon-or-bane_fdb0570b-en.html [https://perma.cc/T4XW-E55Z].

146.   *See, e.g.*, Felicity Lawrence, *Uber Is Treating Its Drivers as Sweated Labour, Says Report*, GUARDIAN (Dec. 9, 2016, 8:51 AM), https://www.theguardian.com/technology/2016/dec/09/uber-drivers-report-sweated-labour-minimum-wage [https://perma.cc/432A-8J8Q]; Press Release, Sherrod Brown, Sen., Congress, Brown to Uber: Stop Exploiting Your Workers, Treat Them as Full Employees (July 19, 2022), https://www.brown.senate.gov/newsroom/press/release/sherrod-brown-uber-stop-exploiting-workers-treat-them-as-full-employees [https://perma.cc/8MC7-QCGM]; Alison Moodie, *Hillary Clinton Criticises the Uber Business Model for Exploiting Workers*, GUARDIAN (July 14, 2015, 8:18 AM), https://www.theguardian.com/sustainable-business/2015/jul/14/hillary-clinton-criticises-the-uber-business-model-for-exploiting-workers [https://perma.cc/94ER-V6WY].

A. Legal Status of Gig Workers under Labor Law

1. The Debate Surrounding the Appropriate Classification for Gig
Worker

There has been considerable disagreement surrounding the appropriate classification of gig workers under existing labor law frameworks. This debate has mostly focused on whether gig workers should be characterized as employees or independent contractors,[147] which has significant implications for the rights and benefits to which workers are entitled.[148] In the United States for example, workers characterized as "employees" receive a regular income stream and have access to an array of benefits.[149] Employees also receive legal protections that cover minimum wage requirements, a safe working environment, employment discrimination, unjust termination, and employer retaliation.[150] Independent contractors, in contrast, are not entitled to these benefits and protections.[151] Given the differences in cost and flexibility, platforms may be more incentivized to hire workers as independent contractors instead of employees.[152] Further, classifying gig workers as independent contractors in the United States is typically based on guidelines from federal and state labor laws as well as case law.[153] The Internal Revenue Service (IRS) describes the general principle that distinguishes the two, which is that "an individual is an independent contractor if the payer has the right to control or direct only the result of the work and not what will be done and how it will be

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147.   *See* Yuki Noguchi, *Gig Economy Renews Debate over Whether Contractors Are Really Employees*, NPR (Mar. 7, 2018, 3:00 PM), https://www.npr.org/2018/03/07/589840595/gig-economy-renews-debate-over-whether-contractors-are-really-workers [https://perma.cc/C7JG-K2KL]; Eric A. Posner, *The Gig Economy and Independent Contractors*, *in* HOW ANTITRUST FAILED WORKERS 136, 136 –60 (2021).

148.   *See, e.g.*, THE LEGAL AID SOC'Y OF S.F., INDEPENDENT CONTRACTOR OR EMPLOYEE? HOW YOU SHOULD BE CLASSIFIED 1 (2024) https://www.law.berkeley.edu/files/FAQ-IndepContractorsvsEmployees.pdf [https://perma.cc/M2Y8-W9FF].

149.   *See* Sterling Miller, *Employee vs. Independent Contractor: What's the Difference?*, THOMSON REUTERS (Mar. 21, 2022), https://legal.thomsonreuters.com/en/insights/articles/independent-contractor-vs-employee-what-does-it-matter [https://perma.cc/GNG9-FDZD]; *e.g.*, U.S. DEP'T OF LAB., HANDY REFERENCE GUIDE TO THE FAIR LABOR STANDARDS ACT, https://www.dol.gov/agencies/whd/compliance-assistance/handy-reference-guide-flsa [https://perma.cc/L6NR-U72Y] (last visited Feb. 26, 2025).

150.   Miller, *supra* note 149.

151.   THE LEGAL AID SOC'Y OF S.F., *supra* note 148.

152.   *See*, *e.g.*, GORE-RANDALL, *supra* note 142, at 4.

153.   *See* Miller, *supra* note 149; *e.g.*, KEN JACOBS, ENRIQUE LOPEZLIRA & VIVIAN VÁZQUEZ, UC BERKELY LAB. CTR., THE VAST MAJORITY OF CALIFORNIA'S INDEPENDENT CONTRACTORS ARE STILL COVERED BY THE ABC TEST 1 (2023).

done."[154] The degree of control the hiring entity exercises over the worker provides an important distinction between independent contractors and employees.[155] Independent contractors, who enjoy more flexibility in how they do their work, are responsible for their own business expenses and are paid based on the completed project.[156] However, gig work often involves a degree of control that exceeds the level typically associated with independent contractors.[157] Similar to employees, gig workers must follow the platform's rules, expectations, and performance evaluation metrics when they carry out their work.[158] Yet, gig workers may also enjoy greater autonomy over the tasks they choose to accept and their working hours, which resembles characteristics of an independent contractor.[159] Because of this, gig workers can exhibit elements of both independent contractor and employee status under existing definitions in labor law.[160]

The implications of being classified as an independent contractor are demonstrated through the agreement Uber enters with its drivers. To drive on Uber, drivers must enter into a platform access agreement—instead of an employment agreement—with Uber.[161] This agreement generally portrays Uber as a technology company that facilitates drivers' provision of ride-sharing transportation service, while simultaneously emphasizing the lack of control that Uber has over drivers on its platform.[162] For example, Uber highlights that it does not have any right to "direct" or "control" the driver; instead, it emphasizes the driver's control over whether to offer the ride-sharing

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154. *Independent Contractor Defined*, IRS, https://www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-defined [https://perma.cc/29UY-4BE4] (Oct. 21, 2024).

155. *See Independent Contractor (Self-Employed) or Employee?*, IRS, https://www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-self-employed-or-employee [https://perma.cc/5JTQ-UENU] (Feb. 6, 2025).

156. THE LEGAL AID SOC'Y OF S.F., *supra* note 148, at 3.

157. *See* Alex Kirven, Note, *Whose Gig Is It Anyway? Technological Change, Workplace Control and Supervision, and Workers' Rights in the Gig Economy*, 89 U. COLO. L. REV. 249, 286 (2018).

158. *See* David Weil, *What's a 'Gig' Job? How It's Legally Defined Affects Workers' Rights and Protections*, BRANDEISNOW (Jan. 9, 2023), https://www.brandeis.edu/now/2023/january/gig-economy-explained.html [https://perma.cc/A6EZ-4HHK]; Oliveros, *supra* note 13.

159. Weil, *supra* note 158.

160. *See id.*

161. *See* Uber Technologies, Inc., Platform Access Agreement (Jan. 1, 2022), https://tb-static.uber.com/prod/reddog/country/UnitedStates/licensed/f5f1f4a9-4e6d-4810-8aa3-21b663290294.pdf [https://perma.cc/8NSS-PQKP].

162. § 2.1 of the Platform Access Agreement states that the driver "may receive lead generation and other technology-based services that enable those operating independent business enterprises like you to provide P2P Service requested by Riders . . . ." *Id.* § 2.1. The same section also notes that Uber grants the driver a "license" to use the Uber platform. *Id.*

service and whether to accept or decline.[163] The agreement mentions paying the driver for rides completed,[164] but there is no mention of any other benefits. The driver (and not Uber) is responsible for compliance with all laws and obtaining required licenses.[165] The driver is also the sole party responsible for fulfilling the obligations and liabilities associated with providing rides and waives the right to bring class actions.[166]

2. Attempts to Protect Gig Workers through Labor Law

The appropriate classification for gig workers is a hotly debated subject in the United States and worldwide. At a state level, California passed Assembly Bill 5 (AB5) in 2019 to protect gig workers by introducing the rebuttable presumption that gig workers are employees unless hiring companies can prove otherwise.[167] In 2024, the United States Department of Labor published a new final rule establishing when to classify a worker as an employee or independent contractor under the Fair Labor Standards Act.[168] The rule intends to reduce employers misclassifying employees as independent contractors and protect workers subject to misclassification.[169] Within the courts, the Massachusetts Attorney General won a "historic" settlement by securing a $32.50 per hour minimum wage—on top of other benefits and protections such as paid sick leave—for Uber and Lyft drivers.[170]

163. *Id.* §§ 1.2, 2.1.

164. *See id.* § 4.1.

165. *Id.* § 2.2.

166. *Id.* §§ 2.3, 13.4(a).

167. Assemb. 5, 2019-2020 Leg., Reg. Sess. (Cal. 2019). However, platform companies have been successful in passing Prop 22 to exempt them from reclassifying workers as employees. *See* Samantha J. Prince, *The AB5 Experiment – Should States Adopt California's Worker Classification Law?*, 11 AM. UNIV. BUS. L. REV. 43, 43–96 (2022) (analyzing AB5, including its relationship with Prop 22).

168. Employee or Independent Contractor Classification Under the Fair Labor Standards Act, 89 Fed. Reg. 1638 (Jan. 10, 2024) (to be codified at 29 C.F.R. pts. 780, 788, 795). This new final rule replaces the prior 2021 Independent Contractor Rule. *Id.* at 1639. The U.S. Department of Labor noted that the prior rule is "out of sync with longstanding judicial precedent and increased the likelihood of misclassification." Mark Nuelle, *Demystifying the Employee Versus Independent Contractor Rulings*, B2B CFO (Feb. 9, 2024), https://www.b2bcfo.com/mark-nuelle/rulings/ [https://perma.cc/35FD-H5WD] (quoting since removed Department of Labor blog post).

169. *Misclassification of Employees as Independent Contractors Under the Fair Labor Standards Act*, U.S. DEP'T OF LAB., https://www.dol.gov/agencies/whd/flsa/misclassification [https://perma.cc/6CZG-WGMN] (last visited Feb. 26, 2025).

170. Press Release, Off. of the Att'y Gen., AG Campbell Reaches Nation-Leading Settlement with Uber and Lyft, Secures Landmark Wages, Benefits, and Protections for Drivers (June 27, 2024), https://www.mass.gov/news/ag-campbell-reaches-nation-leading-settlement-with-

Outside of the United States, many court cases characterize gig workers as employees and not independent contractors.[171] Similarly, other jurisdictions have also passed laws to better protect gig workers on platforms.[172]

Platforms have offered substantial resistance to these protections for gig workers. Categorizing gig workers as independent contractors instead of employees generally results in significant cost savings and reduced legal responsibilities for platform companies because they can avoid the financial costs associated with providing gig

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uber-and-lyft-secures-landmark-wages-benefits-and-protections-for-drivers [https://perma.cc/V2JD-KUDK]; *see generally* Healey v. Uber Techs., Inc., No. 2084CV01519-BLS1, 2021 WL 1222199 (Mass. Supp. Mar. 25, 2021).

    171.   *See, e.g.*, Uber BV v. Aslam [2021] UKSC 5, [1]–[2] (appeal taken from Eng.). A few examples illustrate the prevalence of the independent contractor or employee debate worldwide. In February 2021, the UK Supreme Court ruled in *Uber BV v. Aslam* that Uber drivers should be classified as workers rather than independent contractors, which entitles them to employment benefits such as minimum wage and holiday pay. *See id.* Throughout Europe, there is a growing body of court rulings which classify gig workers as employees rather than independent contractors. In the 2020 Glovo Riders Case, the Spanish Supreme Court ruled that riders for the delivery company Glovo should be categorized as employees. *See* S.T.S., Sept. 25, 2020 (R.J., No. 805) (Spain). In the same year, France's highest court, the Court of Cassation, also ruled that an Uber driver should be classified as an employee. Romain Dillet, *Uber Driver Reclassified as Employee in France*, TECHCRUNCH (Mar. 4, 2020, 8:51 AM), https://techcrunch.com/2020/03/04/uber-driver-reclassified-as-employee-in-france/ [https://perma.cc/4VQ5-7ZWU]. Outside of Europe, the Australian Fair Work Commission has made decisions that categorized gig workers, including food delivery drivers, as employees. *See, e.g.*, *Klooger v Foodora Australia Pty Ltd* [2018] FWC 6836 (16 November 2018) (Austl.); *Gupta v Portier Pac Pty Ltd* [2020] FWCFB 1698 (21 April 2020) (Austl.); *Deliveroo Australia Pty Ltd v Franco* [2022] FWCFB 156 (17 August 2022) (Austl.).

    172.   A number of countries in Latin and South America have passed, or are introducing, legislation and legal reforms to better protect gig workers. *See, e.g.*, *Chile Modified the Labour Code to Include Provisions on Telework (Law N. 21.220)*, INDUS. RELS. & LAB. L. (May 2020), https://industrialrelationsnews.ioe-emp.org/industrial-relations-and-labour-law-may-2020/news/article/1590154111-chile-modified-the-labour-code-to-include-provisions-on-telework-law-n-21-220 [https://perma.cc/43X9-5Q89]. For example, Chile passed Law No 21.220 (Remote Work Law) in 2020 to grant gig workers access to better healthcare, safety and pay. *See id.* Uruguay has also proposed a law to protect gig workers on platforms. *See Platform Workers and Social Security: Recent Developments in the Americas*, ISSA (Aug. 25, 2023), https://www.issa.int/analysis/platform-workers-and-social-security-recent-developments-americas [https://perma.cc/92BT-6KEE]. In Asia, South Korea has created measures that would extend labor law protections to gig workers as well and additional laws to protect gig workers have been proposed in 2024. *See* Elizabeth Shim, *South Korea Passes Law to Protect Delivery Workers*, UPI (Dec. 9, 2020, 10:06 AM), https://www.upi.com/Top_News/World-News/2020/12/09/South-Korea-passes-law-to-protect-delivery-workers/3111607525489/ [https://perma.cc/2GQF-GWDG]; Son Ji-hyoung, *Yoon Proposes New Law for Gig, Freelance Workers*, KOREA HERALD (May 14, 2024, 3:19 PM), https://www.koreaherald.com/view.php?ud=20240514050558 [https://perma.cc/C6SN-N2T5]. More recently, in 2024, China introduced three guidelines to address workers participating in few forms of employment associated with platform companies. Cheng Si, *Guidelines to Protect Gig Workers*, CHINA DAILY, https://www.chinadaily.com.cn/a/202403/05/WS65e66e62a31082fc043ba940.html [https://perma.cc/4A2E-VAR8] (Mar. 5, 2024, 08:59 AM).

workers with full-time salaries and employee benefits.[173] Given this, platform companies have traditionally fought tooth and nail to avoid classifying gig workers as employees.[174] They have also launched public campaigns to gain public support for classifying gig workers as independent contractors.[175] In response to California's passage of AB5, platforms began advocating to pass Proposition 22 (more widely known as "Prop 22") in California to exempt app-based transportation and delivery drivers from employee classification under AB5.[176] This resistance against gig workers' employee classification is also prevalent in the European Union, which has long been seen as friendly to workers' rights.[177]

3. The Emergence of a New 'Hybrid Worker' Category

Increasingly, governments are beginning to recognize a new category of workers that blurs the line between employees and independent contractors to account for gig workers. This new approach, which is coined the hybrid worker approach, creates an intermediate category of workers.[178] Hybrid workers receive some (but not all) of the

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173. *See Contractor or Employee? Local or Global? Cost Comparisons for Your Next Great Hire*, GUSTO (Dec. 3, 2024), https://gusto.com/resources/articles/global-cost-analysis [https://perma.cc/599Z-J9L2]. Platform companies can also reduce costs in other areas when they classify gig workers as independent contractors, including reducing their state payroll tax obligation. Tom Spiggle, *Uber Paying $100 Million in Back Taxes Is a Positive Sign for Gig Workers*, FORBES (Oct. 3, 2022, 10:00 AM), https://www.forbes.com/sites/tomspiggle/2022/10/03/uber-paying-100-million-in-back-taxes-is-a-positive-sign-for-gig-workers/?sh=669832c73c9e [https://perma.cc/3Y9U-T4RV]. For example, Uber paid the New Jersey Department of Labor and Workforce Development's Unemployment Trust Fund $100 million in unpaid state payroll taxes in connection with misclassifying workers as independent contractors instead of employees. *Id.* This highlights the potential costs associated with misclassification in one state within the U.S. alone. *Id.*

174. *See* Julie E. Cohen, *Law for the Platform Economy*, 51 U.C. DAVIS L. REV. 133, 177 (2017) ("Platforms have developed a suite of powerful strategies for evading accountability in litigation.").

175. *See* Andrew J. Hawkins, *Uber and Lyft Had an Edge in the Prop 22 Fight: Their Apps*, THE VERGE (Nov. 4, 2020, 1:30 PM), https://www.theverge.com/2020/11/4/21549760/uber-lyft-prop-22-win-vote-app-message-notifications [https://perma.cc/RL8J-4PUA].

176. *See id.*

177. See *French Resistance Blocks EU Deal to Protect Gig Economy Workers*, RFI (Dec. 22, 2023, 3:51 PM), https://www.rfi.fr/en/international/20231222-french-resistance-blocks-eu-deal-to-protect-gig-economy-workers [https://perma.cc/53G2-ULHC]; Pieter Haeck, *Uber and Unions Face Off over EU Gig Work Law*, POLITICO (Nov. 8, 2023, 12:58 PM), https://www.politico.eu/article/uber-and-unions-face-off-over-eu-gig-work-law/ [https://perma.cc/AD75-T55C].

178. *See* Miriam A. Cherry & Antonio Aloisi, *"Dependent Contractors" in the Gig Economy: A Comparative Approach*, 66 AM. U. L. REV. 635, 637 (2017). Grab has also defined this new form

benefits and protections that are traditionally available only to employees.[179] For example, New York has extended minimum wage protections to app-based food delivery workers without recognizing these workers as employees.[180] Other countries are similarly creating a separate classification for gig workers.[181] The hybrid worker model recognizes and balances the vulnerabilities associated with being a gig worker and the profit-maximizing nature of platforms. This approach provides greater protections to gig workers compared to what they would otherwise receive under independent contractor status.[182] Further, platforms are not required to provide gig workers with the full slate of benefits and legal rights associated with being an employee, which allows platforms to still enjoy a considerable amount of cost savings and flexibility in their business models.[183]

B. Gig Workers' New Managers—AI

Platforms' extensive use of algorithms to manage gig workers creates novel issues and harms that are not adequately captured by labor law alone. As a result of this new labor dynamic, algorithms are now engaged in tasks that were previously the manager's role.[184] Novel issues arise when an algorithm controls and directs the worker. Resolving these new, AI-created problems, such as who should be liable when an algorithm causes a gig worker to make a mistake, with

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of work as "platform-enabled gig work." *See Grab Supports Building a Sustainable Gig Economy in Southeast Asia*, GRAB (Aug. 12, 2021), https://www.grab.com/sg/blog/public-policy/grab-supports-building-a-sustainable-gig-economy-in-southeast-asia/ [https://perma.cc/7GCX-7J9W].

179.   *See* Cherry & Aloisi, *supra* note 178, at 646.

180.   N.Y.C. DEP'T OF CONSUMER & WORKER PROT., NOTICE OF ADOPTION OF FINAL RULE (2023), https://rules.cityofnewyork.us/wp-content/uploads/2023/06/DCWP-NOA-Minimum-Pay-for-Food-Delivery-Workers.pdf [https://perma.cc/9UF3-EAQM].

181.   Si, *supra* note 172. The Chinese Ministry of Human Resources and Society Security has similarly issued guidance addressing "new forms of employment" to specifically address workers hired by digital platforms. *Id.* In September 2024, Singapore passed the Platform Workers Bill to recognize gig workers as a distinct category of workers in between employees and independent contractors. *See* Kok Yufeng, *Singapore Passes Landmark Bill Recognising Ride-Hail, Delivery Gig Workers as Distinct Labour Class*, STRAITS TIMES, https://www.straitstimes.com/singapore/politics/s-pore-passes-landmark-bill-recognising-ride-hail-delivery-gig-workers-as-distinct-labour-class [https://perma.cc/QG8K-X6N7] (Sept. 11, 2024, 9:34 AM).

182.   *See* Yufeng, *supra* note 181; *Grab Supports Building a Sustainable Gig Economy in Southeast Asia*, *supra* note 178.

183.   *See, e.g.*, *Grab Supports Building a Sustainable Gig Economy in Southeast Asia*, *supra* note 178.

184.   *See Commission Proposal for a Directive of the European Parliament and of the Council on Improving Working Conditions in Platform Work*, at recital 8, COM (2021) 762 final (Sept. 12, 2021) [hereinafter *Proposal for EU Platform Work Directive*].

traditional legal doctrines relating to employer-employee liability like *respondeat superior* is challenging.[185] Further, the lack of transparency behind the algorithms that platforms use raises new issues for workers relating to how their performance is measured, how work is allocated, and how ratings are generated. As a result, workers' livelihoods are increasingly dependent on algorithms, yet workers have fewer avenues of recourse to challenge algorithmic decisions.[186] Existing AI legal regimes do not adequately account for scenarios in which AI systems act as managers on platforms.[187] While governments and nongovernmental organizations have been proactive in mitigating the potential risks posed by AI systems,[188] such laws and policies have generally been aimed at addressing the harms presented by AI systems generally.[189] Gig workers experience a new set of issues when their manager is an algorithm instead of a human, ranging from the lack of information behind how the algorithms work and arbitrary decisions

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185.   *See, e.g.*, Murray v. Uber Techs., Inc., 486 F. Supp. 3d 468, 476–77 (D. Mass. 2020). In this case the plaintiff brought a case against her Uber driver and Uber for sexual assault. *Id.* Respondeat superior, a legal doctrine in tort law, holds the principal or employer vicariously liable for the employee or agent's unlawful acts. *See id.* This doctrine has been raised in cases involving platforms. *See* Karen Hao, *When Algorithms Mess Up, the Nearest Human Gets the Blame*, MIT TECH. REV. (May 28, 2019), https://www.technologyreview.com/2019/05/28/65748/ai-algorithms-liability-human-blame/ [https://perma.cc/AG25-NRWK].

186.   *See* Tim Noonan, *Digital Platforms Must Recognize Gig Workers' Rights*, WORLD ECON. F. (Mar. 13, 2020), https://www.weforum.org/stories/2020/03/digital-platforms-gig-workers-labour-rights/ [https://perma.cc/8W3C-379G]; Greetje (Gretta) Corporaal, *Navigating Disputes in the Gig Economy: Insights for Workers, Platforms, and Policymakers*, OXFORD INTERNET INST. (Nov. 3, 2024), https://www.oii.ox.ac.uk/news-events/navigating-disputes-in-the-gig-economy-insights-for-workers-platforms-and-policymakers [https://perma.cc/3PEY-S8VR].

187.   *See* CANSU SAFAK & JAMES FARRAR, WORKER INFO EXCH., MANAGED BY BOTS: DATA-DRIVEN EXPLOITATION IN THE GIG ECONOMY (2021), https://www.workerinfoexchange.org/wie-report-managed-by-bots [https://perma.cc/FW8D-JLU3]; *e.g.*, Phoebe V. Moore, *Making Algorithmic Management Safe for Workers: New Regulation Is Needed*, INST. FOR THE FUTURE OF WORK (July 28, 2023), https://www.ifow.org/news-articles/making-algorithmic-management-safe-for-workers-new-regulation-is-needed [https://perma.cc/93CF-RLU8].

188.   *See, e.g.*, INFOCOMM MEDIA DEV. AUTH. & PERS. DATA PROT. COMM'N, MODEL ARTIFICIAL INTELLIGENCE GOVERNANCE FRAMEWORK: SECOND EDITION 7, 8, 17, 63 (2020) [hereinafter INFOCOMM MEDIA DEV. AUTH.], https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Resource-for-Organisation/AI/SGModelAIGovFramework2.pdf [https://perma.cc/SHY2-GDDF]; Council Regulation 2024/1689, 2024 O.J. (L) (EU) [hereinafter *EU AI Act*]. As of the date of this article, many countries are still in the process of deliberating their legislation on AI. *See Global AI Law and Policy Tracker*, IAPP, https://iapp.org/resources/article/global-ai-legislation-tracker/ [https://perma.cc/7CL7-YUH6] (Nov. 2024). As such, we present a high-level summary here that is meant to be illustrative of the rapid pace at which regulatory approaches to AI are developing worldwide. These approaches range from voluntary guidelines, such as in Singapore, to enforceable laws that require compliance, such as those in the EU and Canada. *See* INFOCOMM MEDIA DEV. AUTH., *supra*; *EU AI Act*, *supra*.

189.   *See EU AI Act*, *supra* note 188, recitals 110, 142. These include misinformation and disinformation, economic inequality, and security concerns, to name a few. *See id.*

made by the algorithms to the lack of a formal grievance process for gig workers to challenge algorithmic decisions.[190]

1. The European Union's New Approach

The European Union has recently passed the Platform Work Directive (Directive)[191] and AI Act,[192] and signed the Framework Convention on AI (Framework Convention) that addresses algorithmic discrimination.[193] The Directive specifically focuses on protecting workers hired by gig platforms.[194] The AI Act addresses the potential harms that AI creates, including within the workplace, and complements the Directive through creating an environment of algorithmic transparency and oversight.[195] The Framework Convention, the first legally binding international treaty on AI, approaches algorithmic transparency and discrimination at a global level.[196] While the full impact of these nascent laws remains to be seen, they offer valuable insights into how platforms can integrate workers' rights into the design and operation of AI. Further, these laws help rebalance power dynamics towards workers and away from platforms. Platforms have a reduced ability to disclaim their responsibility over significant decisions that impact gig workers to AI.[197]

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190.   *See Proposal for EU Platform Work Directive*, *supra* note 184.

191.   Press Release, Eur. Parliament, Parliament Adopts Platform Work Directive (Apr. 24, 2024), https://www.europarl.europa.eu/news/en/press-room/20240419IPR20584/parliament-adopts-platform-work-directive [https://perma.cc/9WUD-JS9D]; Council Directive 2024/2831, 2024 O.J. (L) (EU) [hereinafter *EU Platform Work Directive*].

192.   European Commission Press Release IP/24/4123, European Artificial Intelligence Act Comes into Force (July 31, 2024), https://ec.europa.eu/commission/presscorner/detail/en/ip_24_4123 [https://perma.cc/UD8X-G3SR].

193.   *See* European Commission Press Release, Commission Signs Council of Europe Framework Convention on Artificial Intelligence (Sept. 5, 2024), https://digital-strategy.ec.europa.eu/en/news/commission-signs-council-europe-framework-convention-artificial-intelligence [https://perma.cc/TQ39-3AFT].

194.   *See* Press Release, Eur. Parliament, *supra* note 191.

195.   *See* European Commission Press Release IP/24/4123, *supra* note 192.

196.   *See* European Commission Press Release, *supra* note 193.

197.   *See* Will Knight, *Is the Gig Economy Rigged?*, MIT TECH. REV. (Nov. 17, 2016), https://www.technologyreview.com/2016/11/17/6355/is-the-gig-economy-rigged/ [https://perma.cc/J2RG-42MT]. For example, the platform Fiverr uses algorithms to rank freelancers and their visibility to potential clients. *Id.* Researchers conducted a study of Fiverr in 2016 and discovered that Black and Asian workers were rated lower compared to their white counterparts. *Id.* In 2022, Lars, a freelancer on Fiverr, shared that he could no longer pay the platform to advertise his profile due to "quality issues." Megan Carnegie, *Gig Workers Are Getting Crushed by the Review Mill*, WIRED (Dec. 15, 2022, 7:42 AM), https://www.wired.com/story/gig-workers-algorithm-downranked/ [https://perma.cc/W8E8-34XE]. According to the article, the Fiverr team informed Lars that

a. The European Union's Platform Work Directive—a Watershed Moment for Gig Workers?

The European Union's Platform Work Directive directly addresses platforms' treatment of workers and their automated systems which manage workers.[198] Similar to the European Union's General Data Protection Regulation (GDPR), the Directive is extraterritorial in nature and applicable to global platforms that have customers within the European Union.[199] The Directive helps address the longstanding misclassification of gig workers (or "bogus self-employment") through creating a rebuttable presumption that gig workers are employees.[200] Under the Directive, gig workers are classified as employees by default.[201] This grants gig workers with rights and protections associated with employee status.[202] For platforms to overcome this rebuttable presumption and classify gig workers as independent contractors, platforms must justify their reasoning and provide evidence to support their classification.[203]

The Directive also recognizes the power that algorithms exercise over gig workers on these platforms. The Directive creates new standards and processes to mitigate potential algorithmic bias and other issues when an algorithm is a gig worker's manager.[204] The Directive tackles the notoriously black box nature of algorithms by mandating greater transparency from these platforms.[205] Under the Directive, platforms must provide workers with information about the AI systems and their features that directly impact workers "at the latest on the first working day."[206] This includes the logic and effects of algorithmic decisions that negatively affect workers.[207] Platforms must

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"rankings switch around all the time" and did not provide any additional details on why the platform stopped allowing him to advertise his profile. *Id.*

198.   *See* Press Release, Eur. Parliament, *supra* note 191.

199.   *See EU Platform Work Directive*, *supra* note 191, art. 1(3); Press Release, Eur. Parliament, *supra* note 191.

200.   *See* Press Release, Eur. Parliament, *supra* note 191 (quoting Elisabetta Gualmini, rapporteur); *EU Platform Work Directive*, *supra* note 191, art. 5.

201.   *EU Platform Work Directive*, *supra* note 191, art. 5.

202.   *See id.*

203.   *Id.*; *see also EU Rules on Platform Work*, Eur. Council, https://www.consilium.europa.eu/en/policies/platform-work-eu/ [https://perma.cc/85HB-LJBR] (last visited Feb. 26, 2025).

204.   *See, e.g.*, *EU Rules on Platform Work*, *supra* note 203; *EU Platform Work Directive*, *supra* note 191, recital 49, art. 10(3).

205.   For a more detailed account of the black box nature of algorithms and AI systems, see generally Pasquale, *supra* note 96.

206.   *EU Platform Work Directive*, *supra* note 191, art. 9(3).

207.   *Id.* recital 49.

clarify how their algorithms are applied when conducting task assignments, performance evaluations, and pricing decisions.[208] Further, the Directive establishes that platforms must include human oversight over algorithmic decisions that impact gig workers.[209] Examples of these decisions cover factors that impact gig workers' "working conditions," such as hiring practices, work allocation, compensation, workers' safety, working hours, and account termination.[210] Significantly, platforms must consult workers' perspectives *before* they make changes to algorithms that directly affect workers.[211] This marks a drastic change from the prevailing attitude towards gig workers and the information they can demand from the platform. Lastly, the Directive also has some enforcement teeth, as EU member states are authorized to establish penalties for violations after the Directive has been adopted into national law.[212] That said, the Directive has limitations that are discussed within Section 2 below.

b. The Cumulative Impact of the AI Act

The European Union's AI Act creates a new global precedent for the level of transparency and oversight expected from AI systems used to manage workers.[213] The AI Act, similar to the Directive, is extraterritorial in nature.[214] Global platforms that offer services to EU users will also need to comply with the AI Act to access their consumers.[215] The Act classifies AI systems into different categories based on the potential risks they will impose.[216] These risk categories include AI systems that pose: (1) unacceptable risks, clearly threatening health, safety or individual rights (e.g., systems that

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208.   *Id.* art. 2(1)(i).

209.   *Id.* recital 51, art. 13(2).

210.   *Id.* art. 2(1)(i).

211.   *Id.* recital 51, art. 13(2).

212.   *Id.* art. 24(5). Gig workers and platforms are subject to both the Directive and the GDPR. *Id.* recital 38. The Directive cross-references the GDPR for data protection matters, especially within Articles 7 to 11 of the Directive. *Id.* recital 24(1). For completeness, this Article notes that the "upper limit for administrative fines" noted within Article 83(5) of the GDPR also "appl[ies] to infringements of Articles 7 to 11" within the Directive. *Id.* arts. 7–11, 24(1).

213.   *See* Press Release, Eur. Parliament, Artificial Intelligence Act: MEPs Adopt Landmark Law (Mar. 13, 2024), https://www.europarl.europa.eu/news/en/press-room/20240308IPR19015/artificial-intelligence-act-meps-adopt-landmark-law#:~:text=It%20 aims%20to%20protect%20fundamental,risks%20and%20level%20of%20impact. [https://perma.cc/ 384N-M3S2].

214.   *EU AI Act*, *supra* note 188, art. 2(1)(c).

215.   *Id.* art. 2(1)(g).

216.   *See id.* arts. 6, 51.

conduct social scoring or 'real-time' remote biometric identification);[217] (2) high risks, with the potential to significantly harm individuals' health, safety, or fundamental rights (e.g., systems used for critical infrastructure or employment);[218] (3) limited risks (e.g., chatbots);[219] and (4) minimal risks, encompassing all remaining AI systems.[220] AI systems used to make work-related decisions are classified as high-risk,[221] which must comply with strict requirements surrounding risk assessments and human oversight.[222] The scope of this classification is broad enough to capture platforms that hire gig workers,[223] especially given that these workers are also classified as employees by default under the Directive.[224]

The AI Act explicitly addresses the role that AI plays in perpetuating bias.[225] In fact, the AI Act explicitly promotes "diversity, nondiscrimination and fairness" by ensuring that AI systems support diverse actors while simultaneously preventing potential discriminatory effects.[226] The Act requires organizations to actively take into consideration fairness and bias mitigation within the AI system's life cycle.[227] This approach begins at the design stage of the AI system,[228] from examining the AI system's underlying training data to the system's deployment stage.[229] By addressing algorithmic bias throughout the various stages of an AI system's creation, the AI Act elevates bias mitigation from an afterthought to a principle to which companies must adhere to avoid running afoul of the law.[230] By doing

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217.   *Id.* recital 31.

218.   *Id.* recital 46, 48.

219.   *Id.* recital 53.

220.   European Commission Press Release IP/24/4123, *supra* note 192.

221.   *EU AI Act*, *supra* note 188, recital 57. The EU AI Act captures AI systems used for "employment, workers' management and access to self-employment." *Id.* annex III 4. More specifically, high-risk AI systems include those "intended to be used to make decisions affecting terms of work-related relationships." *Id.* annex III 4(b).

222.   European Commission Press Release IP/24/4123, *supra* note 192.

223.   *See id.*

224.   *EU Platform Work Directive*, *supra* note 191, art. 4.

225.   *See, e.g.*, *EU AI Act*, *supra* note 188, recitals 67, 70.

226.   *Id.* recital 27.

227.   *See id.*

228.   *Id.*

229.   *See id.* recital 27, art. 10(2)(f).

230.   *See, e.g.*, *AI Act*, EUR. COMM'N, https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai [https://perma.cc/A39T-EYDB] (last visited Feb. 26, 2025); Melissa Heikkilä, *Five Things You Need to Know About the EU's New AI Act*, MIT TECH. REV. (Dec. 11, 2023), https://www.technologyreview.com/2023/12/11/1084942/five-things-you-need-to-know-about-the-eus-new-ai-act/?gad_source=1&gbraid=0AAAAADgO_mhFHMN0WhcHa0blXDOV4A

so, companies will need to actively identify potential biases within their datasets and algorithms at each stage of the development cycle, engage in continuous monitoring to mitigate biases that arise, and create new best practices surrounding bias mitigation.[231]

The AI Act provides an extensive list of compliance requirements for companies.[232] This includes conducting quality management assessments,[233] maintaining records and documentation of the AI system,[234] and registering high-risk AI systems within the EU database.[235] Notably, compliance for high-risk AI systems also requires establishing and implementing a risk management system through the AI system's entire life cycle.[236]

Failure to comply with the AI Act is costly.[237] Breaches can result in fines up to €35 million or 7 percent of the company's total worldwide annual turnover, whichever is higher.[238] These novel enforcement and compliance standards for companies subject to the AI Act—an extensive list of new requirements relating to risk assessments, transparency, human oversight, and data governance—create new challenges and expectations for platforms and the technologies they use.[239] Companies that use AI systems, which were previously subject to few binding regulations (if any), must now carry out additional steps to comply with the AI Act before they can place their products within the EU market.[240] For operators of high-risk AI systems, these new expectations include building a quality

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h69&gclid=CjwKCAiAlPu9BhAjEiwA5NDSA_MyHPGmVctYtCO6qPlCu3bvz8_do5cxHngtxrOF8 D8INV8Rw67xJhoC4z4QAvD_BwE [https://perma.cc/U3ZA-9A2R].

231.   *See* ADRIAN BYRNE, DONGHYEOK LEE & QUAN LE, UCD GEARY INST. FOR PUB. POL'Y, BIAS IN AI: TACKLING THE ISSUES THROUGH REGULATIONS AND STANDARDS 8–10 (2024), https://publicpolicy.ie/wp-content/uploads/2024/10/Bias_in_AI.pdf [https://perma.cc/AM5E-WBXB].

232.   *See EU AI Act*, *supra* note 188, art. 16; *EU AI Act Compliance Checker*, EU A.I. ACT, https://artificialintelligenceact.eu/assessment/eu-ai-act-compliance-checker/ [https://perma.cc/AT96-WZU3] (last visited Feb. 26, 2025).

233.   *EU AI Act*, *supra* note 188, art. 17.

234.   *See id.* arts. 11–13.

235.   *Id.* art. 49(1).

236.   *Id.* art. 9(1).

237.   *See, e.g.*, *id.* art. 99.

238.   *Id.*

239.   *See* Paulina Pasławska, *Navigating the EU AI Act: Compliance, Risks, and Business Strategy*, NETGURU, https://www.netguru.com/blog/eu-ai-act#:~:text=With%20the%20EU%20 AI%20Act,opportunities%20for%20companies%20using%20AI [https://perma.cc/9JMT-2XEZ] (Nov. 26, 2024).

240.   *See* CHARLOTTE SIEGMANN & MARKUS ANDERLJUNG, CTR. FOR THE GOVERNANCE OF AI, THE BRUSSELS EFFECT AND ARTIFICIAL INTELLIGENCE: HOW EU REGULATION WILL IMPACT THE GLOBAL AI MARKET 76 (2022), https://cdn.governance.ai/Brussels_Effect_GovAI.pdf [https://perma.cc/MM28-HFPX].

management system to ensure compliance,[241] keeping detailed documentation throughout the AI system's lifecycle,[242] and implementing continuous monitoring of the AI system to ensure ongoing compliance.[243] One impact assessment conducted by the European Commission estimates that compliance with the AI Act will cost a company of fifty people around €300,000.[244] Even so, the costs associated with noncompliance with the AI Act are similarly (and potentially even more) expensive.

As highlighted by the GDPR, the impact of the Directive and the AI Act is unlikely to remain limited to Europe. These two laws may lead to the cascading Brussels Effect that will set the new global regulatory standard for the AI that platforms use going forward.[245] In fact, one of the visions for the Directive is to set a "real benchmark at [a] global level" for platforms; this may be the beginning of laws targeted towards protecting gig workers on platforms worldwide.[246] Platforms which rely on gig workers—especially those conducting business in the European Union—now have commercial reasons to consider these new laws in their business decisions and operations.[247] They will need to comply with both the Directive and AI Act to continue their operations in the European Union.[248] Not only that, but as the GDPR has highlighted, companies may also choose to apply these standards across their global

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241.   *See EU AI Act*, *supra* note 188, recital 81.

242.   *Id.* recital 71.

243.   *Id.* recital 91.

244.   Press Release, Digit. Eur., A Milestone Agreement, but at What Cost? Response to the Political Deal on the EU AI Act (Dec. 8, 2023), https://www.digitaleurope.org/news/23173/ [https://perma.cc/J77B-JRCK].

245.   The Brussels Effect refers to the influence regulations issued within the EU have outside the EU and how the EU shapes standards and norms outside of the EU. *See* ANU BRADFORD, THE BRUSSELS EFFECT: HOW THE EUROPEAN UNION RULES THE WORLD (2020). Beyond the EU, other jurisdictions are also proposing laws to shape how platforms use automated decision-making, which may impact gig workers. *See* Siegmann & Anderljung, *supra* note 240.

246.   Press Release, Eur. Parliament, *supra* note 191 ("With this directive, up to 40 million platform workers in the EU will have access to fair labour conditions . . . . It will correct bogus self-employment and prevent unfair competition, protect true self-employment, and introduce ground-breaking rules on algorithm management. This will become a real benchmark at global level." (quoting Elisabetta Gualmini, rapporteur)).

247.   *See, e.g.*, Michał Kowalewski, *EU Platform Work Directive and Its Impact on Hiring Contingent Workforce*, DEEL, https://www.deel.com/blog/eu-platform-work-directive/ [https://perma.cc/2DHH-6BWS] (Jan. 31, 2025); Saeed Ahmadi, *Are We Witnessing a Watershed Moment in AI Legislation?*, IOSH (Aug. 2, 2024), https://iosh.com/news-and-opinion/are-we-witnessing-a-watershed-moment-in-ai-legislation [https://perma.cc/E34N-JJDH].

248.   *EU AI Act*, *supra* note 188, recital 24.

operations to ensure compliance.[249] However, the gaps within the Directive and AI Act—along with their emerging nature—may mute their impact.[250]

c. The Council of Europe's Framework Convention on AI—the First Global Treaty on AI

In addition to these breakthrough laws, the European Union has also recently signed the Framework Convention, an international treaty on AI to create global norms surrounding the ethical development of AI.[251] The Framework Convention establishes a global legal framework to govern the entire AI lifecycle and ensure that AI is developed in a human-centric way.[252] The Framework Convention applies primarily to public authorities and private actors acting on their behalf.[253] However, each signatory to the Framework Convention can also specify how it will implement these requirements for private actors that are not acting on behalf of public authorities.[254] The treaty encourages the responsible use of AI generally through emphasizing the

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249.   *See* Olivia Solon, *How Europe's 'Breakthrough' Privacy Law Takes on Facebook and Google*, GUARDIAN (Apr. 19, 2018, 03:01 PM), https://www.theguardian.com/technology/2018/apr/19/gdpr-facebook-google-amazon-data-privacy-regulation [https://perma.cc/X6XM-6FTN]; Natasha Lomas, *Facebook to Roll Out Global Privacy Settings Hub – Thanks to GDPR*, TECHCRUNCH (Jan. 24, 2018, 8:05 AM), https://techcrunch.com/2018/01/24/facebook-to-roll-out-global-privacy-settings-hub-thanks-to-gdpr/ [https://perma.cc/P4AD-N2FK].

250.   There is already a body of scholarships that points out the insufficiencies in the EU's Platform Work Directive and AI Act. Criticisms include the inadequacies of the law to address bias and discrimination, limited transparency, and challenges with human oversight over algorithms and AI systems, amongst others. *See, e.g.*, Lukas Arnold, *How the European Union's AI Act Provides Insufficient Protection Against Police Discrimination*, UNIV. OF PA. CAREY L. SCH. (May 14, 2024), https://www.law.upenn.edu/live/news/16742-how-the-european-unions-ai-act-provides [https://perma.cc/8HN5-Y325]; Michael Veale & Frederik Zuiderveen Borgesius, *Demystifying the Draft EU Artificial Intelligence Act*, 22 COMPUT. L. REV. INT'L 97, 112 (2021); Shana Lynch, *Analyzing the European Union AI Act: What Works, What Needs Improvement*, STAN. UNIV. HAI (July 21, 2023), https://hai.stanford.edu/news/analyzing-european-union-ai-act-what-works-what-needs-improvement [https://perma.cc/BNE2-TTHJ]; AÍDA PONCE DEL CASTILLO & DIEGO NARANJO, ETUI, REGULATING ALGORITHMIC MANAGEMENT (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4243530 [https://perma.cc/UF3S-865B]; Antonio Aloisi, Silvia Rainone & Nicola Countouris, An Unfinished Task? Matching the Platform Work Directive with the EU and International "social acquis" (unpublished manuscript), https://webapps.ilo.org/static/english/intserv/working-papers/wp101/index.html [https://perma.cc/RZ25-AJVU].

251.   *See* European Commission Press Release, *supra* note 193.

252.   *See* Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law preamble, *opened for signature* Sept. 25, 2024, C.E.T.S. No. 225 [hereinafter Convention].

253.   *Id.* art. 3(a).

254.   *Id.* art. 3(b).

importance of human dignity,[255] algorithmic transparency,[256] accountability,[257] and nondiscrimination.[258] Parties must adopt frameworks to manage AI risks,[259] engage in follow-up consultations and reporting,[260] and establish oversight mechanisms.[261] The Framework Convention applies existing human rights principles to the realm of AI.[262] The treaty, which was drafted to be compatible with the AI Act and other EU laws,[263] further cements the European Union's principal role in shaping AI policy globally. In September 2024, the United States signed the Framework Convention.[264] Thus, the United States will need to adopt measures to implement the Framework Convention's requirements.[265] While the Framework Convention contains follow-up and reporting mechanisms to measure the progress and extent to which states are implementing these provisions,[266] there is no explicit deadline by which the United States has to implement the treaty.[267]

Given that the Framework Convention is focused on public authorities and private actors acting on public authorities' behalf, it

255.   *Id.* art. 7.

256.   *Id.* art. 8.

257.   *Id.* art. 9.

258.   *Id.* art. 10.

259.   *Id.* art. 16.

260.   *Id.* art. 23.

261.   *Id.* art. 26.

262.   *See* Bianca-Ioana Marcu, *The World's First Binding Treaty on Artificial Intelligence, Human Rights, Democracy, and the Rule of Law: Regulation of AI in Broad Strokes*, FUTURE OF PRIV. F. (June 20, 2024), https://fpf.org/blog/the-worlds-first-binding-treaty-on-artificial-intelligence-human-rights-democracy-and-the-rule-of-law-regulation-of-ai-in-broad-strokes/ [https://perma.cc/Y38G-LY7D]; Richard R. Verma, Remarks at the Signing Ceremony for the Council of Europe Framework Convention on Artificial Intelligence and Human Rights (Sept. 5, 2024), https://2021-2025.state.gov/remarks-at-the-signing-ceremony-for-the-council-of-europe-framework-convention-on-artificial-intelligence-and-human-rights/? [https://perma.cc/ZRC5-BPB7].

263.   *Commission Signed the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law*, EUR. COMM'N, https://digital-strategy.ec.europa.eu/en/news/commission-signed-council-europe-framework-convention-artificial-intelligence-and-human-rights#:~:text=The%20convention%20is%20consistent%20with,a%20risk%2Dbased%20approach [https://perma.cc/E53N-U7AQ] (Sept. 6, 2024).

264.   *The Council of Europe's Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law*, U.S. DEP'T OF STATE, https://www.state.gov/the-council-of-europes-framework-convention-on-artificial-intelligence-and-human-rights-democracy-and-the-rule-of-law/ [https://perma.cc/Q4CX-8MMW] (last visited Feb. 26, 2025).

265.   *See* Convention, *supra* note 252, arts. 17–22.

266.   *Id.* arts. 23–24.

267.   *See id.*

may not directly impact private actors such as platforms.[268] Further, the treaty primarily creates a shared set of norms and establishes minimum standards surrounding AI, and signatories have considerable flexibility in how they implement the Framework Convention within their respective jurisdictions.[269]

Nonetheless, the Framework Convention bolsters protection for gig workers by taking a step toward harmonizing AI governance standards globally. The principles of the Framework Convention and the European Union's approach toward AI will shape future discussions surrounding AI at an international level and encourage global platforms to engage in the ethical development of AI.[270] With the adoption of this treaty, Western countries are also converging AI with human rights principles.[271] The conversation around AI is no longer solely limited to the private sector or corporate world. Instead, the development of AI is increasingly becoming a human rights issue, with a growing emphasis globally on principles of transparency and fairness.[272] This development will necessarily influence how platforms develop their AI systems and shape their culture surrounding AI. Despite this positive momentum to address algorithmic discrimination and gig workers' rights, two critical gaps remain in this area: ongoing conflicts between AI laws and existing data protection laws, as well as the lack of legislation in the United States (at both the state and national levels) that address gig workers on platforms. As this Article describe in more detail in the following Section, these gaps pose significant risks to gig workers' protection and undermine the progress made by these new pieces of legislation from the European Union.

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268.   *See generally Excluding the Private Sector from Council of Europe AI Convention Poses Major Risks to Human Rights Protection*, ENNHRI (Jan. 29, 2024), https://ennhri.org/news-and-blog/excluding-private-actors-from-council-of-europe-ai-convention-poses-major-risks-to-human-rights-protection/ [https://perma.cc/3AMU-PDJY]; Marcu, *supra* note 262.

269.   S*ee generally* Lorenzo Cotino Hueso, *The Council of Europe's Convention on Artificial Intelligence, Human Rights, Democracy and the Rule of Law*, RIVISTA INTERDISCIPLINEARE SUL DIRITTO DELLE AMMINISTRAZIONI PUBBLICHE, July–Sept. 2024, at 53, https://ceridap.eu/pdf/estratti/Estratto-10.13130_2723-9195_2024-3-31.pdf [https://perma.cc/L99E-PGES]; Richard Sentinella, *Council of Europe's Framework Convention on AI and Its Global Implications*, IAPP (Oct. 30, 2024), https://iapp.org/news/a/council-of-europe-s-framework-convention-and-its-implications-for-global-ai-governance [https://perma.cc/L2QJ-G5Z6].

270.   *See* Siegmann & Anderljung, *supra* note 240.

271.   S*ee The Framework Convention on Artificial Intelligence*, COUNCIL OF EUR. PORTAL, https://www.coe.int/en/web/artificial-intelligence/the-framework-convention-on-artificial-intelligence [https://perma.cc/QH2M-WNPM].

272.   *See id.*

2. Current Gaps within the Legal Framework

a. Are Existing Data Protection Laws a Roadblock to Protecting Gig Workers?

Data plays a central role for platform companies. By analyzing large amounts of data, the AI systems that platforms develop can optimize operations and profitability to create personalized experiences for the end user.[273] Platforms use algorithms and AI systems for many purposes, including matching a worker with the consumer, generating pricing for each transaction, and predicting customer behavior.[274] Algorithms are trained on large sets of data, and creating accurate and representative algorithms requires diverse datasets.[275] At the same time, given the potential consequences associated with the handling (or mishandling) of data, many countries, including the United States,[276] China,[277] and countries within the European Union,[278] have enacted data sovereignty[279] and data localization laws to varying measures.[280] These data protection laws provide these countries with greater autonomy and control over how data, especially personal data, is stored

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273. *See, e.g.*, DELOITTE, CONNECTING WITH MEANING: HYPER-PERSONALIZING THE CUSTOMER EXPERIENCE USING DATA, ANALYTICS, AND AI 3, https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/deloitte-analytics/ca-en-omnia-ai-marketing-pov-fin-jun24-aoda.pdf [https://perma.cc/3H6B-ZCRZ] (last visited Feb. 26, 2025).

274. *See, e.g.*, *id.*

275. *See, e.g.*, EMILY WU, HARVARD KENNEDY SCH., SOVEREIGNTY AND DATA LOCALIZATION 8 (July 2021).

276. *See, e.g.*, Phaedra Boinodiris, *The Importance of Diversity in AI Isn't Opinion, It's Math*, IBM (Jan. 25, 2024), https://www.ibm.com/blog/why-we-need-diverse-multidisciplinary-coes-for-model-risk/ [https://perma.cc/C55X-Y4DW]; Angie Basiouny, *Diversity Is Critical for the Future of AI*, KNOWLEDGE WHARTON (Nov. 10, 2023), https://knowledge.wharton.upenn.edu/article/diversity-is-critical-for-the-future-of-ai [https://perma.cc/AE4J-K7Y8].

277. *See* Personal Information Protection Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Aug. 20, 2021, effective Nov. 1, 2021), arts. 1–3, *translated at* http://en.npc.gov.cn.cdurl.cn/2021-12/29/c_694559.htm [https://perma.cc/34VV-VJM8].

278. *See* Council Regulation 2016/679, 2016 O.J. (L 119) [hereinafter *GDPR*].

279. WU, *supra* note 275, at 1. Data sovereignty is the concept that data is subject to the laws and regulations of the country where the data is collected or stored. *Id.* Data localization, on the other hand, is the practice of retaining data within the region from which the data originated and which can be used as a measure to assert data sovereignty. *Id.*

280. *See* Satyajit Parekh, Stephen Reddin, Kayvaun Rowshankish, Henning Soller & Malin Strandell-Jansson, *Localization of Data Privacy Regulations Creates Competitive Opportunities*, MCKINSEY & CO. (June 30, 2022), https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/localization-of-data-privacy-regulations-creates-competitive-opportunities [https://perma.cc/287W-FN9Q]. Parekh et al., notes that 75 percent of all countries have data localization rules to some extent. *Id.*

and managed within their borders.[281] They also generally require corporations to store and process data locally instead of exporting the data overseas.[282]

While important, this existing regime of data protection laws may push against efforts to reduce algorithmic bias on platforms. As mentioned in Part III above, algorithms trained on datasets limited to a specific geographic location may not be representative of the population elsewhere. This can lead to unintended bias and skewed models that do not represent the full population of workers on a platform.[283] Given the global nature of many platforms, a platform that exports an algorithm trained on unrepresentative or biased data set to another context may fail to account for certain segments of gig workers.[284] As a result, the algorithm may export the bias into another geographical location.

Data protection laws may further influence which data inputs—particularly sensitive data categories such as race or ethnicity—are being used to train algorithms in the first place.[285] Training algorithms on sensitive data categories may not always lead to negative results; it may in fact help with identifying and reducing algorithmic bias.[286] Policies intended to address algorithmic bias on platforms must balance adherence to data protection laws against ensuring the datasets are sufficiently representative to reflect the diversity of gig workers on the platform. A number of technical solutions address this tension and have been endorsed by governments.[287] For

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281.   *See generally* Mesh Flinders & Ian Smalley, *What Is Data Sovereignty?*, IBM (June 3, 2024), https://www.ibm.com/think/topics/data-sovereignty [https://perma.cc/RL4Z-Z7EJ]; WU, *supra* note 275; WORLD BANK GRP., PRACTITIONER'S GUIDE 67–76 (2019), https://documents1.worldbank.org/curated/en/248371559325561562/pdf/ID4D-Practitioner-s-Guide.pdf [https://perma.cc/53UP-BEP6].

282.   WU, *supra* note 275.

283.   CIPL, ARTIFICIAL INTELLIGENCE AND DATA PROTECTION IN TENSION 18 (2018), https://www.informationpolicycentre.com/uploads/5/7/1/0/57104281/cipl_first_ai_report_-_ai_and_data_protection_in_tension__2_.pdf [https://perma.cc/VM47-WGJN].

284.   *See, e.g.*, *Gendered Experiences of AI-Mediated Work*, OXFORD INTERNET INST., https://www.oii.ox.ac.uk/research/projects/gendered-experiences-of-ai-mediated-work/ [https://perma.cc/QXH7-FJJQ] (last visited Feb. 26, 2025); Gidda & Bhargava, *supra* note 138.

285.   VICTORIA MATTHEWS & MATT MURPHY, THOMSON REUTERS, ADDRESSING BIAS IN ARTIFICIAL INTELLIGENCE 13 (2023), https://www.thomsonreuters.com/en-us/posts/wp-content/uploads/sites/20/2023/08/Addressing-Bias-in-AI-Report.pdf [https://perma.cc/C8P7-KD64] (stating that the GDPR "restricts the over-collection of 'special category data'").

286.   *See* CIPL, *supra* note 283, at 16.

287.   *See, e.g.*, *How Should We Assess Security and Data Minimisation in AI?*, ICO, https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/artificial-intelligence/guidance-on-ai-and-data-protection/how-should-we-assess-security-and-data-minimisation-in-ai/#whatdataminimisation [https://perma.cc/8T9K-25UU].

example, one emerging machine learning solution is federated learning, which allows corporations to train AI models on locally stored data without transferring personal or sensitive data.[288] Through this, corporations can improve the accuracy and representativeness of their AI models while remaining in compliance with data protection laws.[289]

The AI Act illustrates the challenges of addressing algorithmic bias while also protecting data. The Act understands that bias can creep into AI systems and data sets upon which the AI systems are trained, with the potential to exacerbate discrimination.[290] The Act suggests balancing the requirements for mitigating bias with data governance through third-parties that provide data compliance services.[291] Further, to correct bias on high-risk AI systems, the Act provides an exception for organizations that process sensitive data for matters of substantial public interest.[292] However, this is only permissible under "strictly necessary" circumstances, and the Act sets out six requirements which must be met before organizations can process sensitive data.[293]

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288.   *See id.*

289.   For example, the UK Information Commissioner's Office recommends a series of technical solutions to address this issue. *See generally id.*; Vinod Chugani, *Federated Learning: A Thorough Guide to Collaborative AI*, DATACAMP (Oct. 4, 2024), https://www.data camp.com/blog/federated-learning [https://perma.cc/7U7N-C4WH]; Nguyen Truong, Kai Sun, Siyao Wang, Florian Guitton & YiKe Guo, *Privacy Preservation in Federated Learning: An Insightful Survey from the GDPR Perspective*, 110 COMPUTS. & SEC., no. 102404, 2021, at 1, 2; Stephanie Rossello, Roberto Díaz Morales & Luis Muñoz-González, *Data Protection by Design in AI? The Case of Federated Learning*, 2021 COMPUTERRECHT 273.

290.   *EU AI Act*, *supra* note 188, recital 67.

291.   *Id.*

292.   *Id.* recital 70, arts. 10(2)(f), 10(5).

293.   *See id.* art. 10(5). The EU AI Act lists out the following six criteria that companies will have to meet before processing special categories of personal data:

(a) the bias detection and correction cannot be effectively fulfilled by processing other data, including synthetic or anonymised data;

(b) the special categories of personal data are subject to technical limitations on the re-use of the personal data, and state-of-the-art security and privacy-preserving measures, including pseudonymisation;

(c) the special categories of personal data are subject to measures to ensure that the personal data processed are secured, protected, subject to suitable safeguards, including strict controls and documentation of the access, to avoid misuse and ensure that only authorised persons have access to those personal data with appropriate confidentiality obligations;

(d) the special categories of personal data are not to be transmitted, transferred or otherwise accessed by other parties;

(e) the special categories of personal data are deleted once the bias has been corrected or the personal data has reached the end of its retention period, whichever comes first;

(f) the records of processing activities pursuant to Regulations (EU) 2016/679 and (EU) 2018/1725 and Directive (EU) 2016/680 include the reasons why the processing of

Processing special category data is a measure of last resort to correct algorithmic bias, with strict restrictions to safeguard personal privacy.[294] Further, companies will have to explain the reason they chose to process special category data to correct algorithmic bias.[295] The procedure for processing sensitive data is cumbersome and can be difficult to meet, which raises the bar for organizations that want to address bias.[296] It also raises the question of how willing companies are to combat algorithmic bias.[297]

Mitigating bias requires balance, and regulators should make it easier for platforms to tackle bias on their platforms. One potential approach is lowering the thresholds and requirements for companies that want to process special categories of personal data on their platforms in good faith, such as for bias mitigation reasons. Regulatory authorities can also reduce the uncertainty around potential enforcement penalties for companies that violate data protection laws when mitigating bias through creating more categories of exceptions for companies that process sensitive data for bias detection and mitigation purposes. Individuals should also have the opportunity to consent to have their special category data processed for bias correction, which mirrors exceptions granted for processing this type of data in the GDPR.[298] To minimize the potential risks associated with giving consent and echoing the principles of informed consent within the GDPR, data subjects who are giving informed consent to correct algorithmic bias should do so in a way that is "freely given, specific, informed and unambiguous . . . ."[299]

b. The United States' Role in this Conversation

While the European Union's Directive and AI Act have considerable potential to influence how platforms treat gig workers, a comprehensive US legal framework targeting this area is also needed

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special categories of personal data was strictly necessary to detect and correct biases, and why that objective could not be achieved by processing other data.

Id.

294.   *Id.*

295.   *Id.*

296.   *See* Zlatko Delev, *Comparing DPIA Requirements Across Global Jurisdictions*, GDPRLOCAL (Dec. 12, 2024), https://gdprlocal.com/comparing-dpia-requirements-across-global-jurisdictions/ [https://perma.cc/BP6N-LTQZ].

297.   *See generally* Moritz von Zahn, Stefan Feuerriegel & Niklas Kuehl, *The Cost of Fairness in AI: Evidence from E-Commerce*, 64 BUS. & INFO. SYS. ENG'G 335, 345 (2022).

298.   *See GDPR*, *supra* note 278, art. 9(1)–(2). For example, the GDPR allows individuals to grant consent to have their special category data processed. *Id.*

299.   *Id.* recital 32.

to address the issue effectively. A World Bank study shows that over 60 percent of platforms have headquarters in the European Union or the United States.[300] Many of the leading platforms are based in the United States, governed by US law, or otherwise have a US nexus that exposes them to accountability under US law.[301] The United States plays a pivotal role in governing global gig platforms and shaping their operations, but it does not yet have laws to govern the impact AI has on gig workers.

To note, governments and agencies within the United States were previously beginning to consider the impact AI systems have on workers generally.[302] Former President Biden, in his Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence (AI Executive Order 14110), which has since been revoked,[303] accounted for harms that AI systems may bring upon workers.[304] Other frameworks and guidelines surrounding AI development also target AI bias and discrimination more broadly such as the Blueprint for an AI Bill of Rights by the White House Office of Science and Technology Policy and the AI Risk Management Framework by the National Institute of Standards and Technology.[305]

However, even new laws and policies targeting algorithmic discrimination against workers focus on protecting employees and fail

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300. NAMITA DATTA, RONG CHEN, SUNAMIKA SINGH, CLARA ALEXANDRA STINSHOFF, NADINA ALEXANDRA IACOB, NATNAEL SIMACHEW NIGATU, MPUMELELO NXUMALO & LUKA KLIMAVICIUTE, WORKING WITHOUT BORDERS: THE PROMISE AND PERIL OF ONLINE GIG WORK 43 (2023).

301. *See* Jonathan Stempel, *Chinese Ride-Hailing Company Didi Global Must Face US Investor Lawsuit over IPO*, REUTERS (Mar. 14, 2024, 5:19 PM), https://www.reuters.com/technology/chinese-ride-hailing-company-didi-global-must-face-us-investor-lawsuit-over-ipo-2024-03-14/ [https://perma.cc/9H2U-W22L]. One example involving a non-U.S. platform is Didi Global Inc. *Id.* After the company's initial public offering in the U.S. in 2021, Investors sued the company in U.S. court for allegedly hiding compliance issues in China. *Id.*

302. *See, e.g.*, *WHAT THEY ARE SAYING: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence*, THE WHITE HOUSE (Oct. 31, 2023), https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/10/31/what-they-are-saying-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/ [https://perma.cc/MKW6-S6BF].

303. President Trump has since revoked the AI Executive Order 14110 and replaced it with his own Executive Order on Removing Barriers to American Leadership in Artificial Intelligence. This signals the beginning of a reversal from former President Biden's approach to AI governance. Exec. Order No. 14179, 90 Fed. Reg. 8741 (Jan. 23, 2025).

304. *See, e.g.*, Exec. Order No. 14110, 88 Fed. Reg. 75191 (Nov. 1, 2023).

305. THE WHITE HOUSE, BLUEPRINT FOR AN AI BILL OF RIGHTS (2022), https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/10/Blueprint-for-an-AI-Bill-of-Rights.pdf [https://perma.cc/QV3P-C5JQ]; NAT'L INST. OF STANDARDS & TECH., ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK (AI RMF 1.0) (2023), https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.100-1.pdf [https://perma.cc/9C29-K9EQ].

to address the needs of gig workers. For example, the language of the prior AI Executive Order 14110—previously a significant step towards protecting workers' from AI misuse—nonetheless appeared to focus on workers with employee status, and not gig workers with independent contractor status.[306] Further, the document mentioned the impact that AI may have on existing employee protections, such as labor unions and unemployment insurance.[307] Similarly, new laws being passed at the state level also describe protecting employees rather than gig workers.[308] In a short period of time, Colorado and New York have already passed laws addressing AI bias within an employment context with a focus on the recruitment and hiring process for employees.[309] While these new laws benefit employees, they leave gig workers unprotected from the emerging risks that AI systems create. As mentioned earlier, gig workers in the United States do not have access to the benefits and legal protections that come with employee status, such as healthcare insurance or protection against employment discrimination.[310] The lack of AI-related legislation for gig workers in the United States means they remain particularly vulnerable to algorithmic discrimination, especially given the important role that AI systems play in managing gig workers on the platforms they use.[311] Given this legal landscape, new laws designed to only protect employees from algorithmic bias—while well-intentioned—may have the unintended effect of further widening the divide between employees and gig workers in the United States. Considering AI's substantial decision-making power over the treatment of gig workers, it is imperative that the United States provides robust safeguards for gig workers in this area.

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306.   *See, e.g.*, Exec. Order No. 14110, 88 Fed. Reg. 75191 (Nov. 1, 2023).

307.   *Id.*

308.   *See generally* SANAM HOOSHIDAR, CHELSEA CANADA & LANDON JACQUINOT, NAT'L CONF. OF STATE LEGISLATURES, ARTIFICIAL INTELLIGENCE IN THE WORKPLACE: THE FEDERAL AND STATE LEGISLATIVE LANDSCAPE 3 (2024).

309.   Chris Marr, *US's First State AI Bias Law Lets Job Seekers Fight Rejections*, BLOOMBERG L. (May 22, 2024, 11:44 AM), https://news.bloomberglaw.com/daily-labor-report/colorado-ai-law-lets-job-seekers-contest-employers-rejections   [https://perma.cc/H6TE-J779].

310.   Spiggle, *supra* note 173.

311.   Olga Akselrod & Cody Venzke, *How Artificial Intelligence Might Prevent You from Getting Hired*, ACLU (Aug. 23, 2023) https://www.aclu.org/news/racial-justice/how-artificial-intelligence-might-prevent-you-from-getting-hired [https://perma.cc/P3Y6-W2H2].

C. The Impact of New Laws and Regulations on Corporate Governance

This onslaught of new laws means that, for the first time, protecting gig workers may be in a corporation's best interests. As part of their fiduciary duties, directors and executives also have a duty to comply with laws that could impact the corporation's performance and reputation.[312] Indeed, a director or executive who knowingly breaks the law engages in behavior that is evidence of bad faith and a breach of fiduciary duty.[313] This remains the case even if a director or executive breaks the law for the corporation's interest.[314] To remain in compliance with new laws surrounding the appropriate status of gig workers, platforms may need to re-classify gig workers into hybrid workers or employees, and provide them with commensurate benefits and legal protections.[315] As described in greater detail in Part V below, laws such as the Directive require boardrooms to make organizational and strategic changes and take gig workers into consideration when conducting risk management. Noncompliance with these laws could expose the corporation to significant (and expensive) risks, including nontrivial costs of financial penalties, legal liabilities, loss of market access, and disrupted business operations.[316]

Gig platforms have already paid the price for noncompliance. The Dutch Data Protection Authority recently fined Uber €290 million for transferring EU drivers' personal data to the United States without adequate safeguards.[317] This is in addition to the financial consequences platforms have already suffered for engaging in

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312.   *The Delaware Way: Deference to the Business Judgment of Directors Who Act Loyally and Carefully*, DELAWARE.GOV, https://corplaw.delaware.gov/delaware-way-business-judgment/ [https://perma.cc/PLW8-XTRU] (last visited Feb. 26, 2025).

313.   *See, e.g.*, Miller v. Am. Tel. & Tel. Co., 394 F. Supp. 58, 65 (E.D. Pa. 1975), *aff'd*, 530 F.2d 964 (3d Cir. 1976).

314.   Metro Commc'n Corp. BVI v. Advanced Mobilecomm Techs., Inc., 854 A.2d 121, 131 (Del. Ch. 2004).

315.   *See generally EU Platform Work Directive*, *supra* note 191, art. 5; *Platform Directive: A Win for Platform Workers and Their Unions*, EUR. TRANSP. WORKERS' FED'N (Mar. 12, 2024), https://www.etf-europe.org/platform-directive-a-win-for-platform-workers-and-their-unions/ [https://perma.cc/2FCF-RGL9]; Tom Lickess & Saul Howerton, *EU Platform Work Directive and the Importance of Worker Classification*, VISTRA (Jan. 5, 2024), https://www.vistra.com/insights/eu-platform-work-directive-and-importance-worker-classification [https://perma.cc/U54D-ETHL].

316.   *See, e.g.*, Peter Merkulov, *The True Cost of Compliance*, CCI (Mar. 26, 2018), https://www.corporatecomplianceinsights.com/true-cost-compliance/   [https://perma.cc/32YS-9ZN6].

317.   *Dutch Hit Uber with Huge Fine over Driver Data*, FRANCE 24, https://www.france24.com/en/live-news/20240826-dutch-hit-uber-with-290-mn-euro-fine-over-driver-data [https://perma.cc/K37P-95LN] (Aug. 26, 2024, 11:47 A.M.). This is over 305 million US dollars. *See id.*

algorithmic discrimination in Europe under the GDPR.[318] In 2021, Italy's data protection authority fined Deliveroo and Foodinho €2.5 million and €2.6 million, respectively, under the GDPR for the lack of transparency within their algorithms and failing to provide appeal processes for workers.[319] But noncompliance does not just result in short-term financial penalties, it may also result in intangible economic impact.[320] Platforms may face long-term losses to the corporation, such as damage to their reputation and goodwill, which can be challenging to regain.[321] In short, these new laws create new compliance requirements for platforms and new grounds upon which platform company directors and executives can be found for breaching their fiduciary duties.[322]

1. Seeking Recourse in the Existing Corporate Governance Framework

Despite these new laws and regulations, holding directors and executives accountable for breaching their fiduciary duties remains challenging under existing legal standards surrounding corporate governance and directors' fiduciary duties. To establish that a board director or senior executive breached fiduciary duty for knowingly breaking the law requires the plaintiff to establish a *Caremark* claim.[323] To show that the directors failed to exercise their oversight duties under *Caremark*, the plaintiff generally must show that the board either

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318. *Garante Serves up 2.5M Euro Fine over Gig Worker Privacy*, IAPP (Aug. 4, 2021), https://iapp.org/news/b/garante-serves-up-2-5m-euro-fine-over-gig-worker-privacy [https://perma.cc/ZH88-B8KR]; Press Release, Nat'l Supervisory Auth., Riders: Italian SA Says No to Algorithms Causing Discrimination A Platform in the Glovo Group Fined EUR 2.6 Million (July 5, 2021), https://www.edpb.europa.eu/news/national-news/2021/riders-italian-sa-says-no-algorithms-causing-discrimination-platform-glovo_en [https://perma.cc/T3RY-R8BL].

319. *Garante Serves up 2.5M Euro Fine over Gig Worker Privacy*, *supra* note 318; Press Release, Nat'l Supervisory Auth., *supra* note 318.

320. For a study on the negative impact of enforcement actions upon firm value, see for example Kathleen Donnelly Gowin, Daphne Wang, Surendranath Rakesh Jory, Robert Houmes & Thanh Ngo, *Impact on the Firm Value of Financial Institutions from Penalties for Violating Anti-Money Laundering and Economic Sanctions Regulations*, FIN. RSCH. LETTERS, May 2021, at 1.

321. *Id.*

322. *See, e.g.*, Robert G. Eccles & Miriam Vogel, *Board Responsibility for Artificial Intelligence Oversight*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Jan. 5, 2022), https://corpgov.law.harvard.edu/2022/01/05/board-responsibility-for-artificial-intelligence-oversight/ [https://perma.cc/ES6G-VEMC].

323. Caremark *Developments: Business Risk Versus* Massey *Claims*, SKADDEN (June 2024) https://www.skadden.com/insights/publications/2024/06/insights-the-delaware-edition/caremark-developments#:~:text=The%20Delaware%20Court%20of%20Chancery,affirmative%20violation%20of%20positive%20law [https://perma.cc/8AJX-A44L] *Caremark* sets the standard for the degree of director or executive oversight required when evaluating corporate compliance efforts. *See id.*; *In re* Caremark Int'l, Inc., Derivative Litig., 698 A.2d 959, 970 (Del. Ch. 1996).

"knowingly utterly failed" to put any controls in place,[324] "consciously failed to monitor legal compliance,"[325] or engaged in a "conscious failure" to "monitor a [reporting system] and make a good-faith effort to address identified risks or oversee its operations."[326] For the latter, these risks must be "legal violations so obvious and material that disregarding them amounts to bad faith."[327] The board can avoid liability by demonstrating that it made a good faith effort to install a "reasonable board-level system of monitoring and reporting" to provide the board with "timely" and "accurate information."[328]

Caremark claims frequently fail for a host of reasons, such as the plaintiff's failure to demonstrate the board did not implement a reporting system or consciously disregarded its duty to oversee the company's compliance with laws.[329] More recently, Delaware courts have shown greater willingness to hold corporations accountable for failing to have adequate reporting systems in place.[330] In addition, new laws and regulations like the European Union's Platform Work Directive and AI Act impose substantial penalties on corporations for noncompliance.[331] As discussed earlier in this Article, these new laws require corporations to put new corporate governance measures in place to ensure compliance.[332] Corporations with operations in the European Union—including global platforms—will need to adopt policies to address algorithmic bias towards gig workers,[333] engage in ongoing monitoring of their AI systems,[334] and adopt risk management practices to mitigate potential harms caused to gig workers.[335] If US-based global

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324. Stone *ex rel.* AmSouth Bancorporation v. Ritter, 911 A.2d 362, 370 (Del. 2006).

325. *See id.*

326. *In re* Transunion Derivative S'holder Litig., 324 A.3d 869, 886–87 (Del. Ch. 2024).

327. *Id.* at 887.

328. City of Detroit Police & Fire Ret. Sys. *ex rel.* NiSource, Inc. v. Hamrock, No. 2021-0370, 2022 WL 2387653, at *12 (Del. Ch. June 30, 2022).

329. *See, e.g.*, Reiter *ex rel.* Cap. One Fin. Corp. v. Fairbank, No. 11693, 2016 WL 6081823, at *14 (Del. Ch. Oct. 18, 2016); Oklahoma Firefighters Pension & Ret. Sys. v. Corbat, No. 12151, 2017 WL 6452240, at *26 (Del. Ch. Dec. 18, 2017).

330. *See* Hughes v. Xiaoming Hu, No. 2019-0112, 2020 WL 1987029, at *1, *17 (Del. Ch. Apr. 27, 2020). We are also starting to see Delaware courts deny motions to dismiss regarding *Caremark* claims. *See id.*; Marchand v. Barnhill, No. 2017-0586, 2018 WL 4657159, at *1, *2 (Del. Ch. Sept. 27, 2018), *rev'd*, 202 A.3d 805 (Del. 2019); *see also* Jennifer Arlen, *How Directors' Oversight Duties and Liability Under* Caremark *Are Evolving*, UNIV. OF OXFORD: FAC. OF L. BLOGS (Mar. 2. 2023), https://blogs.law.ox.ac.uk/oblb/blog-post/2023/03/how-directors-oversight-duties-and-liability-under-caremark-are-evolving [https://perma.cc/SC8E-QDNF].

331. *See* ISACA, UNDERSTANDING THE EU AI ACT: REQUIREMENTS AND NEXT STEPS (2024).

332. *See* discussion *supra* Part III.

333. *See EU Platform Work Directive*, *supra* note 191, art. 1.

334. *See, e.g.*, *EU AI Act*, *supra* note 188, art. 72.

335. *See, e.g.*, *id.*, art. 9.

platforms with operations in the European Union do not take reasonable steps to comply with these new laws, such as failing to implement a reporting system or oversee the corporation's compliance with laws, shareholders could potentially bring cases against the platforms under *Caremark*.[336] Yet, while *Caremark* may appear to show more promise as a route under which to hold directors liable,[337] plaintiffs still face a high bar to show that corporate directors breached their fiduciary duties.[338] Directors who make a "sincere effort" to meet their oversight duties are generally not found personally liable under *Caremark*.[339] There needs to be a trend of successful lawsuits asserting *Caremark* claims against directors before this approach can be considered a viable legal ground to protect gig workers on platforms.

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336.   *See generally* Jeffrey Saviano, Jonathan Hack, Vincent Okonkwo & Shuying (Christina) Huo, *Post #6: The* Caremark *Rule and Board Level AI Risk Management*, EDMOND & LILY SAFRA CTR. FOR ETHICS: AI ETHICS FOR BUS. LEADERS (Feb. 23, 2024), https://www.ethics.harvard.edu/blog/post-6-caremark-rule-and-board-level-ai-risk-management%C2%A0 [https://perma.cc/J8WU-DG24]; Tara K. Giunta & Lex Suvanto, *Board Oversight of AI*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Sept. 17, 2024), https://corpgov.law.harvard.edu/2024/09/17/board-oversight-of-ai/ [https://perma.cc/84MX-HJLQ]; Daniel Forman & Regina Sam Penti, *Corporate Governance, Professional Perspective - AI on the Board Agenda: A Focus on Strategy, Risk Oversight & Ethics*, BLOOMBERG L. (Dec. 2023), https://www.bloomberglaw.com/external/document/X5CTA87K000000/corporate-governance-professional-perspective-ai-on-the-board-ag [https://perma.cc/7YYJ-DEDS].

337.   *See, e.g.*, Avi Gesser, Bill Regner & Anna Gressel, *AI Oversight Is Becoming a Board Issue*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Apr. 26, 2022), https://corpgov.law.harvard.edu/2022/04/26/ai-oversight-is-becoming-a-board-issue/ [https://perma.cc/WH6J-77LE]; Sarah Eichenberger, Jonathan Rotenberg & Caroline Sabatier, *Artificial Intelligence: The New Frontier for Board Oversight?*, NACD (Dec. 20, 2022), https://www.nacdonline.org/all-governance/governance-resources/directorship-magazine/online-exclusives/artificial-intelligence-the-new-frontier-for-board-oversight2// [https://perma.cc/P8LZ-BQQC].

338.   *See* Katherine M. King, Marchant v. Barnhill*'s Impact on the Duty of Oversight: New Factors to Assess Directors' Liability For Breaching the Duty of Oversight*, 62 B.C. L. REV. 1925, 1966 (2021) (explaining that for a plaintiff to win on a *Caremark* claim, "[t]he corporation must first meet the two threshold requirements established in *Marchand*: (1) a monoline business, that is (2) subject to a primary regulator in a heavily regulated industry"); *see also* Gail Weinstein, Philip Richter & Steven Epstein, *2024* Caremark *Developments: Has the Court's Approach Shifted?*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (May 20, 2024), https://corpgov.law.harvard.edu/2024/05/20/2024-caremark-developments-has-the-courts-approach-shifted// [https://perma.cc/6LXN-8TJM] ("Under *Caremark*, directors face liability for breach of their oversight duties if, with respect to the key compliance risks facing the company, they have: (i) 'utterly failed to implement any reporting or information system or controls' (Prong One); or (ii) 'having implemented such a system or controls, consciously failed to monitor or oversee its operations thus disabling themselves from being informed of risks or problems requiring their attention' (Prong Two).").

339.   *In re* Transunion Derivative S'holder Litig., 324 A.3d 869, 887 (Del. Ch. 2024).

2. Potential Impact on Corporate Culture and Practices

The greater impact of these new laws lies in their potential to transform corporate attitudes concerning algorithms and gig workers within platforms. Even without holding the boardroom personally responsible through their fiduciary duties, emerging laws and regulations in this area require changes at the organizational and strategic level. Beyond these more immediate changes, there is also a sense of optimism about their long-lasting impact. This Article draws upon examples of the US Sarbanes-Oxley Act (SOX Act) and data protection laws, most notably the GDPR, to highlight the power that enforceable laws have in shaping for-profit corporations' governance practices.

The SOX Act and its impact on corporate governance in the United States—particularly its impact upon directors and executives—provides important insight for purposes of regulating AI systems on platforms.[340] It may be surprising to consider that, much like the current absence of laws governing AI on platforms, the accounting practices of publicly listed companies were once similarly unregulated.[341] It was only after a series of accounting-related corporate scandals, such as Enron,[342] that the SOX Act was enacted to improve financial disclosures and accountability within publicly listed companies.[343] After the SOX Act was enacted, publicly listed companies were for the first time required to establish internal controls,[344]

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340. *See* Lee Dittmar, *AI Lessons from Sarbanes-Oxley (SOX)*, OCEG, https://www.oceg.org/ai-lessons-from-sarbanes-oxley/ [https://perma.cc/T2UZ-YUZP] (last visited Feb. 27, 2025).

341. *See* Giunta & Suvanto, *supra* note 336.

342. *See* Simon Constable, *How the Enron Scandal Changed American Business Forever*, TIME (Dec. 2, 2021, 1:06 PM), https://time.com/6125253/enron-scandal-changed-american-business-forever/ [https://perma.cc/2LUT-T7ST] (explaining that Enron Corporation, a publicly-listed energy company, was involved in corporate accounting and securities fraud that led to its bankruptcy and significant financial losses to employees and investors).

343. *See The Sarbanes-Oxley Act (SOX)*, HYPERPROOF, https://hyperproof.io/sarbanes-oxley-act/#:~:text=The%20Sarbanes%2DOxley%20Act%20(SOX)%2C%20passed%20by%20Cong ress,the%20accuracy%20of%20corporate%20disclosures [https://perma.cc/5ER7-5ZHD] (last visited Feb. 27, 2025); *see also* Joe Sremack, *Understanding the EU's Artificial Intelligence Act: Key Points for Legal and Compliance Professionals*, MARCUM (Aug. 15, 2024), https://www.marcumllp.com/insights/understanding-the-eus-artificial-intelligence-act-key-points-for-legal-and-compliance-professionals [https://perma.cc/RZ7C-5WY7] (explaining that the EU AI Act contains provisions on auditing and transparency requirements to which companies must adhere, and as mentioned above, given the platforms which are the subject of our paper generally have global operations, they have incentive to keep good auditing and internal controls practices in place in any event.)

344. *See* Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 404(a), 116 Stat. 745 (codified as amended in scattered sections of 11, 15, 18, 28, and 29 U.S.C.).

reporting methods,[345] and external auditor independence.[346] The Act also demanded greater accountability from the boardroom.[347] Under the SOX Act, CEOs and CFOs are required to certify the accuracy of financial statements,[348] and directors are responsible for overseeing the corporation's financial statements and internal controls.[349] Further, the SOX Act contains provisions that could result in criminal liability and even imprisonment for directors and executives.[350] All of these mechanisms helped deter fraud and restore investors' trust in US capital markets,[351] which has also significantly shaped corporations' approach towards business and financial ethics.[352]

In the realm of data protection, the European Union's GDPR catalyzed a fundamental shift in terms of how platforms approached data management and consumer privacy.[353] Similar to the public's lack of awareness surrounding the importance of good accounting practices, the vulnerability of personal data and the consequences associated with the misuse of personal data was also not discussed widely until the

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345.   *See id.* § 1350(c).

346.   *See id.* § 209.

347.   *See, e.g.*, Joseph J. Riotto, *Understanding the Sarbanes-Oxley Act—A Value Added Approach for Public Interest*, 19 CRITICAL PERSPS. ON ACCT. 952, 952 (2008).

348.   *See* Sarbanes-Oxley Act § 302.

349.   *See id.* § 2(a)(3). Under the Sarbanes-Oxley Act, the board, either through an audit committee or the entire board, must supervise the corporation's accounting and financial reporting processes and financial statement audits. *See id.* These responsibilities extend to appointing a registered public accounting firm. *Id.* § 2(a)(10)(A). In effect, the audit committee must exercise more than business judgment with respect to internal controls under the Sarbanes-Oxley Act. *See* Bryan A. McGrane, Note, *The Audit Committee: Director Liability in the Wake of the Sarbanes-Oxley Act and* Tello v. Dean Witter Reynolds, 18 CORNELL J.L. & PUB. POL'Y 575, 595 (2009). Practically, the Sarbanes-Oxley Act helped catalyze a "gentle shift in corporate control from the CEO to the board." *See* Michael W. Peregrine & Charles W. Elson, *The Important Legacy of the Sarbanes-Oxley Act*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Aug. 30, 2022), https://corpgov.law.harvard.edu/2022/08/30/the-important-legacy-of-the-sarbanes-oxley-act/ [https://perma.cc/P3D6-K6NQ].

350.   § 802(a) of the Sarbanes-Oxley Act creates new criminal offenses for altering document, while § 807 increases penalties for defrauding shareholders. *See* Sarbanes-Oxley Act §§ 802(a), 807(a). In practice, courts still generally review personal liability for directors under the historical standard of willful violations. McGrane, *supra* note 349, at 607.

351.   *See* Bridget Neill, Shauna Steele & Steven Jacobs, *Twenty Years Later, SOX Continues to Drive Trust in the Capital Markets*, EY (July 27, 2022), https://www.ey.com/en_us/insights/public-policy/sox-continues-to-drive-confidence-and-trust-in-the-capital-markets [https://perma.cc/J47H-JPJM].

352.   *See* Michael W. Peregrine, *The Lasting, Positive Impact of Sarbanes-Oxley*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Dec. 20, 2021), https://corpgov.law.harvard.edu/2021/12/20/the-lasting-positive-impact-of-sarbanes-oxley/ [https://perma.cc/SY7Z-Z56Z].

353.   *See* Olukunle Oladipupo Amoo, Akoh Atadoga, Femi Osasona, Temitayo Oluwaseun Abrahams, Benjamin Samson Ayinla & Oluwatoyin Ajoke Farayola, *GDPR's Impact on Cybersecurity: A Review Focusing on USA and European Practices*, 11 INT'L J. SCI. & RSCH. ARCHIVE 1338, 1339 (2024).

Cambridge Analytica scandal.[354] In 2018, news broke out that political consulting firm Cambridge Analytica improperly acquired personal data from up to eighty-seven million Facebook users.[355] This data was reportedly used to create targeted political advertising during the 2016 US presidential election.[356] This news resulted in large-scale backlash and government investigations,[357] most notably bringing the dangers of poor data privacy practices and data misuse into the public's forefront.[358] The GDPR was on the verge of implementation at the time of the Cambridge Analytical scandal,[359] but the scandal reinforced the importance of laws protecting personal data. Similarly, the scandal catalyzed the passage of the California Consumer Privacy Act (CCPA).[360] The United States currently does not have a federal data protection law, and instead consumers rely on state protection laws for data protection regulation.[361] This regulatory vacuum at the federal level underscores the important role the CCPA plays in protecting consumers' data.[362] Further, given the size of the California population and its economic importance, companies (including platforms) that collect data from consumers within California must also comply with the CCPA's provisions.[363] Data protection laws like the GDPR and

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354.   *See* Peregrine, *supra* note 352; Issie Lapowsky, *How Cambridge Analytica Sparked the Great Privacy Awakening*, WIRED (Mar. 17, 2019, 7:00 AM), https://www.wired.com/story/cambridge-analytica-facebook-privacy-awakening/ [https://perma.cc/CUL8-GXLH].

355.   *See* Shiona McCallum, *Meta Settles Cambridge Analytica Scandal Case for $725m*, BBC (Dec. 23, 2022), https://www.bbc.com/news/technology-64075067 [https://perma.cc/A8FM-EN8A].

356.   *See* Joanne Hinds, Emma J. Williams & Adam N. Joinson, *"It Wouldn't Happen to Me": Privacy Concerns and Perspectives Following the Cambridge Analytica Scandal*, 143 INT'L J. HUM.-COMPUT. STUD., no. 102498, 2020, at 1, 2–3.

357.   *See* McCallum, *supra* note 355.

358.   *See id.*; Julia Carrie Wong, *The Cambridge Analytica Scandal Changed the World - But It Didn't Change Facebook*, GUARDIAN (Mar. 18, 2019, 1:00 AM), https://www.theguardian.com/technology/2019/mar/17/the-cambridge-analytica-scandal-changed-the-world-but-it-didnt-change-facebook [https://perma.cc/RR4B-8RDH].

359.   *See Cambridge Analytica, GDPR – 1 Year On – A Lot of Words and Some Action*, PI (Apr. 30, 2019), https://privacyinternational.org/news-analysis/2857/cambridge-analytica-gdpr-1-year-lot-words-and-some-action [https://perma.cc/XUE3-HNZR].

360.   *See* Dipayan Ghosh, *What You Need to Know About California's New Data Privacy Law*, HARV. BUS. REV. (July 11, 2018), https://hbr.org/2018/07/what-you-need-to-know-about-californias-new-data-privacy-law [https://perma.cc/U4P7-2D5Y].

361.   *See* F. PAUL PITTMAN, ABDUL HAFIZ & ANDREW HAMM, DATA PROTECTION LAWS AND REGULATIONS USA 2024-2025 (2024), https://iclg.com/practice-areas/data-protection-laws-and-regulations/usa [https://perma.cc/3WC7-PWVK].

362.   *See id.*

363.   *See* Ivan Guzenko, *How CCPA Will Impact the World's Digital Economy*, FORBES (Oct. 31, 2019, 9:00 AM), https://www.forbes.com/councils/forbestechcouncil/2019/10/31/how-ccpa-will-impact-the-worlds-digital-economy/ [https://perma.cc/7CJK-8ZWT]; Joseph Lynyak, *Developments*

CCPA contain provisions that give consumers greater control over how their data is used,[364] with extremely hefty penalties associated with noncompliance.[365] In fact, compliance with the GDPR and CCPA have prompted platforms to integrate privacy and data protection into their business models and product development (a concept that is also widely known as "privacy by design"), highlighting the long-lasting impact that regulations with teeth can potentially have on corporations.[366]

Aside from their direct impact on corporations, the SOX Act and data protection laws have profoundly shaped expectations regarding corporate conduct in areas that were previously unregulated.[367] The SOX Act has led to a shift in corporate culture towards ethical conduct and transparency in financial reporting.[368] Within the span of a few years, data protection laws have already transformed how the public

from California: AG Estimates Costs of CCPA Compliance as CCPA Authors Contemplate Round II, DORSEY (Dec. 2, 2019), https://www.dorsey.com/newsresources/publications/client-alerts/2019/12/ccpa-update [https://perma.cc/PCL6-CQYW].

364.   *The General Data Protection Regulation*, EUR. COUNCIL, https://www.consilium.europa.eu/en/policies/data-protection/data-protection-regulation/#individuals [https://perma.cc/H5FT-ZUUN] (last visited Feb. 27, 2025); *California Consumer Privacy Act (CCPA)*, STATE OF CAL. DEP'T OF JUST., https://oag.ca.gov/privacy/ccpa [https://perma.cc/HDA4-8HP4] (Mar. 13, 2024).

365.   *The General Data Protection Regulation*, *supra* note 364; *see also Privacy Enforcement Actions*, STATE OF CAL. DEP'T OF JUST., https://oag.ca.gov/privacy/privacy-enforcement-actions [https://perma.cc/SMF3-BBB7] (last visited Feb. 27, 2025) The page lists enforcement actions the California Attorney General has brought against companies for violating California's consumer protection and privacy laws. *Id.* For example, Sephora, Inc. reached a settlement with the California Attorney General and agreed to pay $1.2 million to resolve allegations the company violated the CCPA. *Id.*

366.   *See, e.g.*, Alejo Grigera Sutro, *A Federated Approach to Providing User Privacy Rights*, MEDIUM (Sept. 7, 2022), https://eng.lyft.com/a-federated-approach-to-providing-user-privacy-rights-3d9ab73441d9 [https://perma.cc/P74J-UQ3M].

367.   *See generally* Peregrine & Elson, *supra* note 349; Riotto, *supra* note 347; Keith Johnson, *The Impact of Data Privacy on Your Business*, FORBES (Sept. 14, 2018, 8:00 AM), https://www.forbes.com/councils/forbestechcouncil/2018/09/14/the-impact-of-data-privacy-on-your-business/ [https://perma.cc/5M6S-JGHL]; *Data Privacy Laws: Global Implications for PR & Communication*s, FORBES: COUNCILS BLOG (May 29, 2024), https://councils.forbes.com/blog/data-privacy-laws-for-pr-communications [https://perma.cc/PX8N-A3LE].

368.   *See* Stephen Wagner & Lee Dittmar, *The Unexpected Benefits of Sarbanes-Oxley*, HARV. BUS. REV., Apr. 2006, at 133, 134; Michael W. Peregrine, *Sarbanes-Oxley Changed Corporate America*, N.Y. TIMES, https://www.nytimes.com/roomfordebate/2012/07/24/has-sarbanes-oxley-failed/sarbanes-oxley-changed-corporate-america [https://perma.cc/QE3X-EBZC] (July 25, 2012, 6:15 PM); John King, *Teaming to Fight Fraud and Build Healthy Capital Markets*, EY (Aug. 19, 2021), https://www.ey.com/en_us/insights/assurance/sarbanes-oxley-20-years-of-improved-audit-oversight [https://perma.cc/6KL4-C8Y4]. In fact, the SEC has used the Sarbanes-Oxley Act, to charge the former CEO and CFO of WageWorks Inc. in relation to making "false and misleading statements and omissions," and the former senior management were ordered to pay penalties and reimburse incentive-based compensation to the company. *See* Press Release, U.S. Sec. & Exch. Comm'n, SEC Charges Former Executives of San Francisco Bay Area Company with Accounting Violations (Feb. 2, 2021), https://www.sec.gov/newsroom/press-releases/2021-23 [https://perma.cc/N7C7-R6Z3].

and corporations view personal data protection, both in the United States and globally, and corporations have integrated compliance with data protection laws into their business models.[369] Emerging laws relating to algorithms and platforms—especially when they include enforcement mechanisms—will likely also incentivize platforms to examine their algorithmic management of gig workers. A cultural shift may then occur where directors and officers, instead of deflecting responsibility onto the black box nature of AI,[370] will become more actively engaged in overseeing and monitoring the algorithms that manage gig workers.

V. ORGANIZATIONAL ADJUSTMENTS

Generally, laws are created and implemented only after an incident has occurred or a new technology developed. This sentiment is captured in Plato's comment that "no man ever makes laws, but chances and accidents of all kinds, occurring in all sorts of ways, make all our laws for us."[371] For example, consider drunk driving laws. As Jacobs writes, "The drunk driving story is also a transportation story . . . ." and further reiterates, "There would be no drunk driving without automobiles . . . ."[372] Drunk driving laws only came into existence following the growth of car ownership and the accidents that inebriated car drivers caused.[373]

How laws are created in responses to technological advancements can also be examined through the concept of cultural lag. Cultural lag explains that technology develops at a pace that is more rapid than society's ability to adjust and adapt to those changes.[374] For instance, a new technology is developed, people begin using the technology in a widespread way, unintended outcomes occur, and then rules or laws are put into place to address negative outcomes like in the

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369. *See* Mohsin Ali Farhad, *Consumer Data Protection Laws and Their Impact on Business Models in the Tech Industry*, 48 TELECOMMS. POL'Y, no. 102836, 2024, at 1, 2.

370. *See, e.g.*, Dana Calacci, *Shipt's Algorithm Squeezed Gig Workers. They Fought Back*, IEEE SPECTRUM (July 1, 2024), https://spectrum.ieee.org/shipt [https://perma.cc/M76W-RMKQ] ("Companies whose business models rely on gig workers have an interest in keeping their algorithms opaque. This 'information asymmetry' helps companies better control their workforces—they set the terms without divulging details, and workers' only choice is whether or not to accept those terms . . . . There's no technical reason why these algorithms need to be black boxes; the real reason is to maintain the power structure.").

371. *Plato, Laws*, TOPOSTEXT, https://topostext.org/work/484 [https://perma.cc/42M5-RMRH] (last visited Feb. 28, 2025).

372. JAMES B. JACOBS, DRUNK DRIVING: AN AMERICAN DILEMMA xiv (1989).

373. *Id.*

374. Joseph Schneider, *Cultural Lag: What Is It?*, 10 AM. SOCIOL. REV. 786, 786–91 (1945).

drunk driving example. Cultural lag theorizes that societal institutions, with law being a key pillar in that structure, often respond reactively instead of proactively to technological advancement, which is what is typically observed when new laws are introduced to regulate a new technology.[375]

The regulation of AI, however, seems to offer a different pattern, as regulators and lawmakers strive to incorporate new laws and regulations before the reach and development of AI is fully mature. This is largely driven by the potential risk factors that observers see in the widespread use and rapid adaptation of AI.[376] Given that regulators and lawmakers are approaching AI laws and regulation more proactively, this reality requires leaders and organizations to augment their conventional approaches. Companies will need to adapt to navigate this regulatory complexity, and this Article lays out a targeted number of suggestions that a company can take from both operational and strategic levels to better manage AI risks and specifically address the challenges faced by gig workers.

A. Operational Changes

Similar to previous forms of expansive laws and regulations like the SOX Act and GDPR, proposed AI laws and regulations will likely create increased compliance costs for firms.[377] KPMG reported that in a survey of business leaders, 54 percent felt that AI regulations would increase compliance costs.[378] Legislation like the European Union's AI Act and Directive will likely have far-reaching implications, comparable

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375. *See* Grace Ramsey, *Cultural Lag: 10 Examples & Easy Definition*, SIMPLY PSYCHOLOGY, https://www.simplypsychology.org/cultural-lag-examples.html [https://perma .cc/25RG-CNXP] (Feb. 14, 2024).

376. *See generally* Peter Slattery Alexander K. Saeri, Emily A. C. Grundy, Jess Graham, Michael Noetel, Risto Uuk, James Dao, Soroush Pour, Stephen Casper & Neil Thompson, The AI Risk Repository: A Comprehensive Meta-Review, Database, and Taxonomy of Risks from Artificial Intelligence (August 2024) (unpublished manuscript), https://arxiv.org/pdf/2408.12622 [https://www.alphaxiv.org/abs/2408.12622]; NICK BOSTROM, SUPERINTELLIGENCE: PATHS, DANGERS, STRATEGIES (rev. ed. 2017); MICHAEL KEARNS & AARON ROTH, THE ETHICAL ALGORITHM: THE SCIENCE OF SOCIALLY AWARE ALGORITHM DESIGN (2019); O'NEIL, *supra* note 58; U.S. DEP'T OF STATE, RISK MANAGEMENT PROFILE FOR ARTIFICIAL INTELLIGENCE AND HUMAN RIGHT (2024), https://2021-2025.state.gov/risk-management-profile-for-ai-and-human-rights/ [https://perma.cc/H23T-MWPX].

377. *See* John Villasenor & Joshua Turner, Commentary, *AI Policy Directions in the New Trump Administration*, BROOKINGS (Nov. 14, 2024) https://www.brookings.edu/articles/ai-policy-directions-in-the-new-trump-administration/ [https://perma.cc/ASM5-5TK3].

378. KPMG, GENAI SURVEY - 2024 12 (2024), https://kpmg.com/kpmg-us/content/dam/kpmg/corporate-communications/pdf/2024/kpmg-genai-survey-august-2024.pdf [https://perma.cc/RUK3-KRF7].

to the impact of the GDPR.[379] The legal and regulatory landscape will only grow more complex as other jurisdictions, including the United States, implement their own respective regulations. Consequently, companies that are systemic technology providers in the AI space can expect enhanced scrutiny.[380]

As this Article has outlined, the black box nature of many AI systems makes it difficult to hold firms accountable or adjust models as needed. Consequently, different methods like AI audits will need to be introduced.[381] As AI becomes increasingly embedded in platforms, AI audits should also consider how algorithms make management decisions and the impact of algorithmic management on gig workers. Akin to financial audits that companies already conduct, "the design and use of AI systems can be audited with respect to not only their technical performance but also their alignment with organisational policies and hard regulations."[382] As Oxford Internet Institute's Jakob Mökander explains, AI auditing represents its own form of both AI and corporate governance:

> Functionally, AI auditing is a governance mechanism that can be wielded by different actors in pursuit of different objectives. For example, AI auditing can be used (i) by regulators to assess whether a specific system meets legal standards, (ii) by technology providers looking to mitigate technology-related risks and (iii) by other stakeholders wishing to make informed decisions about how they engage with specific companies.[383]

Companies may institute these policies because of legislative requirements. However, even when not legally mandated, it behooves companies to be proactive given the potential risks of AI's impact as well as to generate trust in the market amongst users.

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379.   *See* Siegmann & Anderljung, *supra* note 240.

380.   *See generally* Bhaskar Chakravorti, *Big Tech's Stranglehold on Artificial Intelligence Must Be Regulated*, FP (Aug. 11, 2021, 6:49 AM), https://foreignpolicy.com/2021/08/11/artificial-intelligence-big-tech-regulation-monopoly-antitrust-google-apple-amazon-facebook/ [https://perma.cc/52W6-YWAX]; Bryan Comis, Brian Hughes, Djon Kleine, Jeanne Kwong Bickford, Brian O'Malley & Michael Zombek, *Big Reg Comes for Big Tech. Here's How to Respond*, BCG (Jan. 17, 2024), https://www.bcg.com/publications/2024/how-tech-firms-can-respond-to-increased-regulation [https://perma.cc/QQB3-5PGZ]; Matthew Hutson, *Rules to Keep AI in Check: Nations Carve Different Paths for Tech Regulation*, NATURE (Aug. 8, 2023), https://www.nature.com/articles/d41586-023-02491-y [https://perma.cc/4SBL-58NZ]; ANGELA HUYUE ZHANG, HIGH WIRE: HOW CHINA REGULATES BIG TECH AND GOVERNS ITS ECONOMY 89–120 (2024).

381.   *See* GEMMA GALDON CLAVELL, EUR. DATA PROT. BD., AI AUDITING: CHECKLIST FOR AI AUDITING 1, 4 (2023), https://www.edpb.europa.eu/system/files/2024-06/ai-auditing_checklist-for-ai-auditing-scores_edpb-spe-programme_en.pdf [https://perma.cc/3LQJ-XC7S].

382.   Jakob Mökander, *Auditing of AI: Legal, Ethical and Technical Approaches*, 2 DIG. SOC'Y no. 49, 2023, at 1, 2.

383.   *Id.*

Besides AI audits, companies can also introduce other operational changes. For example, the AI Act requires platforms with high-risk AI systems to implement risk management systems through an AI system's entire life cycle.[384] Accordingly, companies must develop fit-for-purpose AI risk management systems. Such risk management systems will generally need to be tailored to the specific AI use case employed by a platform.

There is also a growing demand for technology platforms to use so-called red teams in their AI deployment.[385] The concept of red teams originally came from the cybersecurity world, where red teams were used to test the technological vulnerabilities of a company's IT security.[386] In the context of AI, red teams are employees designated within a firm to test AI models for security as well as for accuracy and preventing the production of harmful information.[387] Microsoft describes the use of red teams to defend against the following: "With LLMs [large language models], both benign and adversarial usage can produce potentially harmful outputs, which can take many forms, including harmful content such as hate speech, incitement or glorification of violence, or sexual content."[388] Companies should incorporate red teams as a preemptive measure to identify and mitigate risks in their models, as this can help platforms protect gig workers and protect users.

Another area of concern that the rise of AI creates is the risk of AI washing. Similar to green washing, where companies overstate or falsely claim environmentally friendly initiatives, companies have already begun exaggerating the AI capabilities of their services or products. In June 2024, the US Securities and Exchange Commission (SEC) brought litigation against Ilit Raz, CEO and founder of the now defunct AI startup, Joonko, for essentially AI washing.[389] The SEC alleged that the defendant overstated the capability of her company's

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384.   *EU AI Act*, *supra* note 188, art. 9.

385.   *See* Andrew Burt, *How to Red Team a Gen AI Model*, HARV. BUS. REV. (Jan. 4, 2024), https://hbr.org/2024/01/how-to-red-team-a-gen-ai-model [https://perma.cc/7P66-T4PK].

386.   *See* Evan Anderson, Jim Holdsworth & Matthew Kosinski, *What Is Red Teaming?*, IBM (Nov. 7, 2024), https://www.ibm.com/think/topics/red-teaming [https://perma.cc/639D-ECTJ].

387.   *See Planning Red Teaming for Large Language Models (LLMs) and Their Applications*, MICROSOFT: LEARN (Nov. 30, 2024), https://learn.microsoft.com/en-us/azure/ai-services/openai/concepts/red-teaming?toc=%2Fsecurity%2Fai-red-team%2Ftoc.json&bc=%2Fsecurity%2Fai-red-team%2Fbreadcrumb%2Ftoc.json [https://perma.cc/V8W9-J487].

388.   *See id.*

389.   *See* Press Release, U.S. Sec. & Exch. Comm'n, SEC Charges Founder of AI Hiring Startup Joonko with Fraud (June 11, 2024), https://www.sec.gov/newsroom/press-releases/2024-70 [https://perma.cc/AQB4-HUZL].

AI capabilities in the context of marketing to raise capital for Joonko, contributing to the defrauding of her company's investors.[390] Gurbir S. Grewal, Director of the SEC's Division of Enforcement stated after bringing their case against Raz,

> [a]s more and more people seek out AI-related investment opportunities, we will continue to police the markets against AI-washing and the type of misconduct alleged in today's complaint. But at the same time, it is critical for investors to beware of companies exploiting the fanfare around artificial intelligence to raise funds.[391]

Given the broad definition of AI and varying levels of the capability and accuracy of different AI methods, models, and their underlying data, there is a real risk that AI-based litigation from both regulators and consumers will increase. Though litigation risk cannot be entirely mitigated, another area of operational risk that will need to be enhanced is how a company's AI capabilities are marketed, especially towards investors and the general public in order to prevent allegations of AI washing.

Enhanced AI regulation also creates heightened deal execution risk. Companies that rely heavily on AI, are systemic technology providers, or have access to potentially sensitive data all confront increased deal execution risk, especially in a cross-border context.[392] Companies looking to make an overseas acquisition, enter a joint venture, or even take a significant minority stake face greater regulatory scrutiny in receiving deal approval.[393] AI regulations, issues around data sovereignty, and strategic competition amongst nation-states create great sensitivity around cross-border transactions; these potential intersections with national security lead to more uncertainty around whether deals can get done when they involve AI and its underlying technologies. This is another risk that companies

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390. *See id.*

391. *See id.*

392. *See generally* Qian Zhou, *What Regulatory Trends Are Impacting China Mergers and Acquisitions?*, CHINA BRIEFING (Aug. 15, 2022), https://www.china-briefing.com/news/what-regulatory-trends-are-impacting-china-mergers-and-acquisitions/ [https://perma.cc/AN5W-WRTD]; Richard Fitzgerald, Ben Stretch, Mieke Van Oostende & David Vernon, *Leading Through Uncertainty: Navigating Delays in M&A Deals*, MCKINSEY & CO. (Feb. 29, 2024), https://www.mckinsey.com/capabilities/m-and-a/our-insights/leading-through-uncertainty-navigating-delays-in-m-and-a-deals [https://perma.cc/8WMN-XC8D]; Ben Siegal & Brooke Houston, *Generative AI in M&A:*
Where Hope Meets Hype, *in* GLOBAL M&A REPORT 2024 19, 21–22 (2024).

393. *See generally* Florian Kästle, Succeed in M&A in Times of Heightened Regulatory Scrutiny (May 2024) (unpublished manuscript), https://www.bakermckenzie.com/-/media/files/insight/publications/2024/05/succeed-in-ma-in-times-of-hightened-regulatory-scrutiny.pdf [https://perma.cc/BX4Y-D5SB].

must account for when viewing the AI regulatory landscape considering that, "[m]ost of the AI-based platforms are produced in developed countries and are used internationally. Working with the same platforms but in different countries and contexts may cause different working experiences, and challenges for workers."[394]

B. Board and Strategic Level Changes

Besides operational changes, there are board-level strategic changes that companies should consider, especially if they are a systemic technology provider or their business relies heavily on AI and black box models.

Structurally, boards globally are usually composed of the following committees: audit, nomination and governance, and compensation.[395] On an as needed basis, boards may create additional committees, though they are typically not required to by law. For example, global financial firms like Goldman Sachs and HSBC each have a board level risk committee.[396] Similarly, those companies that rely heavily on AI and its models, should each form an AI risk committee or a broader technology risk committee that can address issues related to AI and cybersecurity.

Beneath the board level, companies should also create AI ethics committees. AI ethics committees allow for discussion and accountability of potential ethical issues related to new technological products at an operational level.[397] Companies have attempted this to varying degrees against the black box nature of the technology and the competitive pressure to release innovation as quickly as possible, captured in the words of Meta CEO Mark Zuckerberg to, "[m]ove fast

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394.   *See* Mustafa F. Özbilgin, Nur Gundogdu, & Jan Akalin, *Artificial Intelligence, Gig Economy, and Precarity, in* DIVERSITY AND PRECARIOUS WORK DURING SOCIO-ECONOMIC UPHEAVAL 284 (Elina Meliou et al. eds., 2024).

395.   *See* Natalie Cooper, Robert Lamm & Randi Val Morrison, *Back to Basics: Board Committees*, HARVARD L. SCH. F. ON CORP. GOVERNANCE (Aug. 6, 2022), https://corpgov.law.harvard.edu/2022/08/06/back-to-basics-board-committees/ [https://perma.cc/W5DX-5T8Z].

396.   *See Board Committees*, GOLDMAN SACHS, https://www.goldmansachs.com/investor-relations/corporate-governance/board-and-governance/board-committees [https://perma.cc/HS7R-3QS5] (last visited Feb. 28, 2025); *Board Committees*, HSBC, https://www.hsbc.com/who-we-are/leadership-and-governance/board-committees [https://perma.cc/W6EQ-MQYR] (last visited Feb. 28, 2025).

397.   *Board Committees*, GOLDMAN SACHS, *supra* note 396; *Board Committees*, HSBC, *supra* note 396.

and break things."[398] Though still a work in progress for many organizations, these structural mechanisms must be implemented at multiple layers of an organization to provide sufficient oversight and guidance.

As the role of the board evolves to oversee AI and other advanced technologies, there is an even greater need for diverse knowledge and perspectives at the board level. First, board members who understand, or at the very least regularly use and are familiar with such technologies, are needed to ask the right questions and raise relevant issues. Additionally, given the risk of black box algorithm driven discrimination, the voices and stories of minority directors will also be relevant, so organizations remain aware of the potential algorithmic impact of seemingly well-intended innovations and their possible impact on gig workers.

Third, part of accomplishing the above tasks may require a turn to what is commonly referred to as responsible innovation. There are stakeholders in the technology ecosystem advocating that technology firms, in their rush to develop new technologies, often overlook the ethical implications of the work they are doing.[399] In the past, a programmer or entrepreneur may have felt that it was not their job to worry about regulation or social impact, as their focus was to make the best product possible. In the age of AI, however, many are advocating for a different perspective. For example, the Responsible Innovation Labs has partnered with a network of technology companies and venture investors to focus on how companies can innovate in a way that minimizes many of the negative externalities that have been associated with the rise of social media and the Internet.[400] Given the requirements of recent regulations discussed in Part IV, platforms will increasingly need to consider aspects of responsible innovation in the context of their governance responsibilities and in their treatment of gig workers.

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398. *See* Giunta & Suvanto, *supra* note 336; *Mark Zuckerberg's Letter to Investors: 'The Hacker Way'*, WIRED (Feb. 1, 2012, 6:35 PM), https://www.wired.com/2012/02/zuck-letter/ [https://perma.cc/4HRV-AG3F] ("Moving fast enables us to build more things and learn faster. However, as most companies grow, they slow down too much because they're more afraid of making mistakes than they are of losing opportunities by moving too slowly. We have a saying: 'Move fast and break things.' The idea is that if you never break anything, you're probably not moving fast enough.").

399. Max Wessel & Nicole Helmer, *A Crisis of Ethics in Technology Innovation*, MIT SLOAN MGMT. REV. (Mar. 10, 2020), https://sloanreview.mit.edu/article/a-crisis-of-ethics-in-technology-innovation/ [https://perma.cc/7GV3-6TSH].

400. *About Us*, RESPONSIBLE INNOVATION LABS, https://www.rilabs.org/about-us#our-people [https://perma.cc/Q8NS-452U] (last visited Mar. 12, 2025).

Lastly, a shift towards responsible innovation also requires leaders and organizations to consider the broader, more fundamental question of business purpose. A commitment to responsible innovation seems to conflict with the traditional shareholder value maximization perspective espoused by economists like Milton Friedman and enshrined within corporate governance principles within the United States.[401] In many ways, responsible innovation can often require companies to postpone some profits to a future date, which is challenging in a structural context where large, publicly listed technology companies provide quarterly guidance to investors and are often in fierce competition with one another. A beyond profit maximization mentality, often referred to as stakeholder capitalism,[402] can also include consideration of gig workers, but may require more patient profits and rolling out innovation in a more careful, controlled manner, which may often not be palatable for companies facing pressure from investors.

VI. CONCLUSION

Returning to the original story that framed this Article, how should gig workers like Iim, the Indonesian ride-share driver, be treated and protected when their manager is an algorithm that enables discrimination? If gig workers are integral to the platforms that are central to the expanding sharing economy, then even if gig workers are not entitled to the same benefits as employees, perhaps they should at least receive comparable protection against the algorithmic discrimination that these platforms can perpetuate. This would also seem to be an important aspect of responsible innovation.

More broadly, in the nascent era of AI, platforms will continue playing an increasingly important role in society. These platforms will develop and deploy AI in various ways, including de facto AI managers for gig workers. The potential harm caused by algorithmic discrimination, ultimately borne by gig workers, presents legal, regulatory, and reputational risks that require enhanced oversight, accountability, and governance from executives, boards, and regulators. Given the potential stakes, it is paramount that we do not leave the

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401.   Milton Friedman, *A Friedman Doctrine–The Social Responsibility of Business Is to Increase Its Profits*, N.Y. TIMES (Sept. 13, 1970), https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html [https://perma.cc/V6VA-QL92]; *see, e.g.*, Tong, *supra* note 122.

402.   Klaus Schwab & Peter Vanham, *What Is Stakeholder Capitalism?*, WORLD ECON. F. (Jan. 22 2021), https://www.weforum.org/stories/2021/01/klaus-schwab-on-what-is-stakeholder-capitalism-history-relevance/ [https://perma.cc/DP5Y-FXNJ].

governance of platforms to "chances and accidents of all kinds" in the age of AI.[403] Ultimately, it is imperative that companies, regulators, and legislators collectively strive to get platform governance, and by extension AI governance, right the first time.

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403.   *Plato, Laws, supra* note 371.