

# The Constant Boss

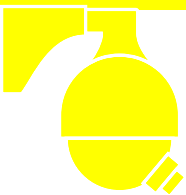
Work Under  
Digital Surveillance

**DATA &  
SOCIETY**

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Aiha Nguyen





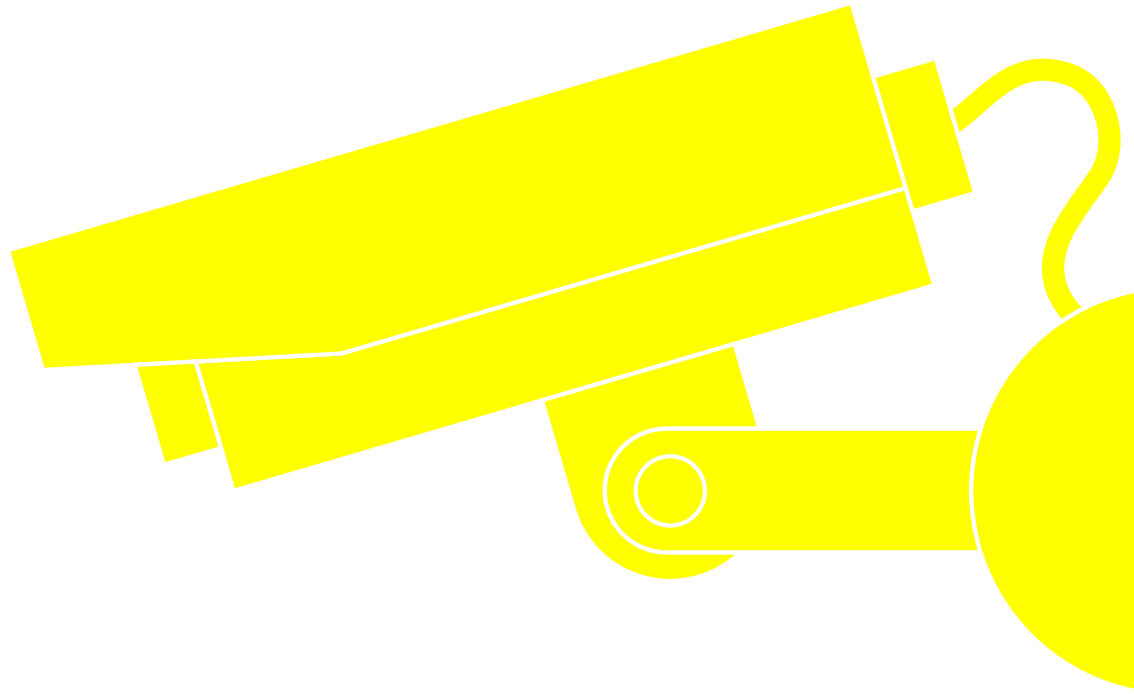
# Executive Summary

In warehouses, retail stores, and even at home, workers are tracked, and data is collected, about nearly every aspect of their jobs. Workplace surveillance systems collect data about worker activities through handheld devices, point-of-sale systems, mobile phones, fingerprint scanners, fitness apps, wellness apps, smart cameras, microphones, and body sensors. This data drives algorithmic management systems that have become a standard part of employment in almost all sectors of the U.S. economy, not just in gig work where they are most visible. These tools serve multiple purposes for employers, including reducing labor costs, protecting assets, and controlling workflows.

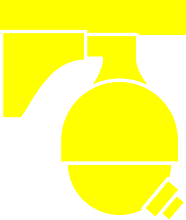
However, these technologies generate new challenges for workers. Work speedups, employment insecurity, a shifting of risks of and costs from employers to workers, and an exacerbation of racial profiling and bias have all been brought about by data collection and the algorithmic management it enables. Workers have been left with little recourse; the current public discourse about data privacy assumes that the responsibility lies with the individuals themselves, without recognizing the ways that informed consent is difficult to achieve. Surveillance itself is hard for workers to discern, meaning that they may not have the ability to challenge the surveillance itself nor algorithmically derived employment decisions, like discipline or firing.

Workers' perspectives are missing from the public discussion about data protection and privacy, which limits how we conceive of the harm of rampant data collection and surveillance, and further disempowers workers from contesting it. Workers need new protections and rights for the digital age of work. Without effective privacy protections, employees face an even greater obstacle advocating for other rights in the workplace, including protection against exploitation, wage theft, arbitrary and aggressive disciplinary action, retaliation, and discriminatory and biased practices. Regulators and labor advocates should address the harms that ensue from algorithmic management, guarantee the ability of workers to protect their data, and place limits on employers' ability to monitor the workforce.

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# Introduction

In spring 2020, at the outset of the COVID-19 pandemic, businesses sought to minimize the spread of the virus by implementing technologies capable of measuring, monitoring, and collecting data about their workers' health and behavior. Grocery stores and restaurants began taking workers' temperatures, nursing home staff were tested regularly for the virus, and some employers asked workers to answer questions about their activities as part of daily screenings. Employers of white-collar workers, anxious about work-from-home rules, began requiring employees to download software that tracked and measured their productivity and kept computer cameras and microphones on during the work day. Although COVID-19 has given surveillance technologies new prominence, they predate the pandemic: surveillance is deeply ingrained in many workplaces and has been shaping the conditions of people's jobs. In many workplaces, workers are tracked, and data is collected, about nearly every aspect of work.

Data-gathering technologies generate new challenges for workers, including increased surveillance and control, bias and discrimination, and a loss of privacy, transparency, and accountability. The systems through which data are collected about worker activities include handheld devices, point-of-sale systems, mobile phones, fingerprint scanners, fitness apps, wellness apps, smart cameras, microphones, and body sensors. While workers may sign consent forms allowing employers to collect data, they have effectively relinquished control over what data is collected and how it is being used. The data drives algorithmic management systems that have become a standard part of employment in almost all sectors of the U.S. economy. These systems, and data, now drive management decisions—which previously were made by human managers—about workers' schedules, discipline and promotion, the pace of work, and health and safety. Essentially, these tools serve multiple purposes for employers, including reducing labor costs, protecting assets, and controlling workflows.

Employers have free rein to surveil workers because there are few clear guidelines from regulators or workplace health and safety agencies around how monitoring should be handled. Questions about what data is collected, where it goes, who it

“Questions about what data is collected, where it goes, who it can be shared with, and how it is stored are all decisions that are made through the design of technology rather than through well-reasoned policy.”

can be shared with, and how it is stored are all decisions that are made through technological design rather than through well-reasoned policy.<sup>1</sup> Employees, who fear losing their jobs, largely do not have a choice, or a voice, about whether they can opt in or out of being monitored.

This report primarily discusses the experience of low-wage and hourly workers, because these occupations are subject to intense surveillance and algorithmic management. Low-wage and hourly work—including in restaurant, retail, logistics, warehousing, agriculture, hospitality, domestic work, and healthcare—is more susceptible to datafication because these jobs’ tasks are easily measured.<sup>2</sup> These workers are also often immigrants, women, and people of color, populations historically facing higher scrutiny and levels of surveillance and monitoring.<sup>3</sup> Even though jobs like professional sports, teaching, care work, and journalism are not easily quantified, employers are nevertheless trying to manage these occupations according to data-driven metrics.<sup>4</sup>

1 Ifeoma Ajunwa, “Algorithms at Work: Productivity Monitoring Applications and Wearable Technology as the New Data-Centric Research Agenda for Employment and Labor Law,” *Saint Louis University Law Journal* 63 (2019):21, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3247286](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3247286); Zara Rahman, “Black Lives Matter Protesters Aren’t Being Tracked by Covid-19 Surveillance Tech. Not Yet,” *The Correspondent*, June 3, 2020, <https://thecorrespondent.com/507/black-lives-matter-protesters-arent-being-tracked-with-covid-19-surveillance-tech-not-yet/569187644025-767f5154>.

2 Michael Chui, James Manyika, and Mehdi Miremadi, “Where Machines Could Replace Humans and Where They Can’t – Yet,” McKinsey Report, July 8, 2016, <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/where-machines-could-replace-humans-and-where-they-cant-yet>.

3 Simone Browne, *Dark Matters: On the Surveillance of Blackness* (Durham: Duke University Press, 2015).

4 Sam Adler-Bell and Michelle Miller, “Datafication of Employment,” Report, Century Foundation, 2019, <https://production-tcf.imgix.net/app/uploads/2018/12/03160631/the-datafication-of-employment.pdf>.

To understand the challenges of this new paradigm of employment, we spoke with dozens of workers, labor unions, worker rights organizations, privacy scholars, and privacy rights organizations about workplace surveillance. Through this research we have found that workers' perspectives are missing from the public discussion about data protection and privacy, which limits how we conceive of the harm of rampant data collection and surveillance. In spite of the growing prevalence and even dependence on monitoring and surveillance in workplaces and our daily lives, policy debates about constant surveillance and unfettered data collection have primarily focused on consumers and the potential consequences for them, rather than on workers. In response, labor advocates are working to document and enforce workplace standards such as preventing the unfair discipline and discriminatory decisions that can result from algorithmically managed work, and are beginning to challenge the rights of employers to institute surveillance-fueled productivity measures that may be creating harmful work conditions.<sup>5</sup>

Workers currently don't have power over the technology that directs their jobs, nor do they retain rights over their data in the workplace. This creates a tremendous and invisible power imbalance between workers and companies. This report will detail the harms that have accrued to workers as they are surveilled at work, contextualizing current surveillance regimes within a longer history of employers having wide latitude to surveil workers as a means for creating labor discipline. Work speedups, employment precarity, a shift of risks of and costs from employers to workers, and an exacerbation of racial profiling and bias are being brought about by data collection and the algorithmic management it enables. Workers have been left with little recourse because surveillance itself is hard for workers to discern, meaning that they may not have the ability to challenge the surveillance itself nor the employment decisions that can stem from being constantly watched.

5 Lauren Kaori Gurley, "California Bill Aims to Regulate Amazon's Relentless Warehouse Worker Quotas," *Vice*, February 16, 2021, <https://www.vice.com/en/article/g5bn99/california-bill-aims-to-regulate-amazons-relentless-warehouse-worker-quotas>.

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# Surveillance from the Cotton Fields to Factories and Warehouses

Rina has been working at an Amazon warehouse in New York City for almost two years. At her job she is responsible for inspecting packages at a rate of 1,800 packages an hour. Packages come down a conveyor belt on the right. She inspects each package then moves it to the left where it is scanned to be shipped out. This final scan is used to determine her speed. She does this for 10 hours a day. She says the pay is decent but she feels what she has to go through is a problem. There is constant pressure from managers and computers that monitor her every action to make sure she's working as fast as possible, creating a work pace that can be grueling. Tracking and automated decisions of work activities is changing the quality of jobs, and Rina's experience is typical for many working in warehousing and other service sector industries. Rina says she is grateful for the work because for many years she faced challenges finding employment due to a disability. Rina is originally from Liberia but has since become a U.S. citizen. She's been able to make a living for her and her son working at the Amazon facility. As the warehouse is massive, she can feel very isolated; but at the same time, she feels very exposed because the company watches her every move from the minute she steps on the property.

Rina's experience is not unusual for many low-wage workers in logistics, retail, hospitality, and healthcare. The current entrenchment of worker surveillance is a consequence of cheaper and more available surveillance technology, a steep decline in worker power, and weak and outdated labor regulations, all of which has allowed employers considerable leeway to institute systems that minutely control workers' behavior and can result in work speedups, overwork, and injury.<sup>6</sup>

6 Phoebe V. Moore, "Watching the Watchers: Surveillance at Work and Notes for Trade Unionists," *International Journal of Labour Research* 9, no. 1-2 (2019): 21.

The history of worker surveillance is linked to the history of capitalism itself, through surveillance's role in helping managers to extract more labor from workers. The Industrial Revolution began in the textile mills of England in the late eighteenth century, which were fed by the raw cotton produced by enslaved Black laborers in the U.S. South, demonstrating the deep interconnection between the institution of slavery and the global rise of industrial capitalism. Plantation owners and managers developed a "pushing system" for monitoring the pace of work, which involved a strict accounting of how much cotton each slave picked per day and violent punishment for slaves who did not meet their production quotas.<sup>7</sup> Slave owners kept detailed productivity records, which included monitoring cotton picking rates of each slave to develop a standard rate, and using metrics related to health, age, and gender in order to appreciate or depreciate the value of each slave.<sup>8</sup> At the same time, policies and practices meant to police Black bodies through branding, lantern laws, and runaway slave notices reified racial difference.<sup>9</sup> These innovations were global in character; similar methods were used across the sugar, spice, tea, and indigo plantations of Asia and the Caribbean, resulting in racialized labor systems and innovations in worker exploitation through surveillance, such as barrack systems or "lines" for keeping workers separate from each other, and, for free laborers, just in-time-wage calculations to keep wages low.<sup>10</sup>

Of course, wage labor in factories—with productivity enforced through the threat of job loss and subsequent impoverishment—is categorically distinct from labor

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7 Edward E. Baptist, "Toward a Political Economy of Slave Labor: Hands, Whipping-Machines, and Modern Power," in *Slavery's Capitalism, A New History of American Economic Development*, ed. Sven Beckert and Seth Rockman, (University of Pennsylvania Press, 2016), 31–61, <https://www.jstor.org/stable/j.ctt1dfnrs7.4>.

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8 Baptist, "Toward a Political Economy,"; Katie Johnston, "The Messy Link Between Slave Owners and Modern Management," Harvard Business School: Working Knowledge, January 16, 2013.

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9 Browne, *Dark Matters: On the Surveillance of Blackness*.

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10 Michael Craton, *Searching for the Invisible Man: Slaves and Plantation Life in Jamaica* (Cambridge: Harvard University Press, 1978); Piya Chatterjee, "'Secure This Excellent Class of Labour': Gender and Race in Labor Recruitment for British Indian Tea Plantations," *Bulletin of Concerned Asian Scholars* 27, no. 3 (September 1, 1995): 43–56, <https://doi.org/10.1080/14672715.1995.10413049>; Lisa Lowe, *The Intimacies of Four Continents* (Durham NC: Duke University Press, 2015); Sareeta Amrute, "Bored Techies Being Casually Racist: Race as Algorithm," *Science, Technology, & Human Values*, March 30, 2020, <https://doi.org/10.1177/0162243920912824>.



in bondage, where productivity was enforced through violence.<sup>11</sup> Labor discipline through surveillance was replicated throughout the Industrial Revolution in cities in the United States and England when laborers moved to factories, where managers oversaw large numbers of workers.

A consequential innovation in factory surveillance happened in the early twentieth century, when Frederick Winslow Taylor, a mechanical engineer, sought to map out work tasks and implemented “performance monitoring” to reach higher production demands. Taylorism, or “scientific management” of labor, occurred hand in hand with Fordism, which pioneered mass production of goods leading to the breakdown of workers' jobs into discrete tasks in an increasingly measurable way. At the core of Taylorism is the belief that the “unobserved worker is an inefficient one,” thus surveillance and observation of the worker was paramount in much of scientific management.<sup>12</sup> As such, as employee monitoring became more commonplace, work became less discrete, more standardized and deskilled, and employees lost more autonomy in their work.

Rapid industrialization and growth at this scale also meant employees worked long, grueling hours. Worker exhaustion and injury increased owing to machine accidents and lack of safety measures.<sup>13</sup> Mounting pressure on corporations by workers and unions, through direct worker action, documentation of workplace injuries, legal challenges, and political pressure, led to the passage of the first federal workers' compensation legislation in 1908. Workers could now hold employers directly responsible for injuries and obtain relief without having to appeal to an employer's sense of goodwill or to the courts. Prior to the passage of this legislation, workers who filed lawsuits against employers usually lost their claims due to the accepted opinion that workplace injuries were a result of worker negli-

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11 Caitlin Rosenthal, “Slavery's Scientific Management: Masters and Managers,” in *Slavery's Capitalism*, ed. Sven Beckert and Seth Rockman (University of Pennsylvania Press, 2016), 62–86, <https://www.jstor.org/stable/j.ctt1dfns7.5>; Marcel van der Linden, “Re-Constructing the Origins of Modern Labor Management,” *Labor History* 51, no. 4 (November 1, 2010): 509–22, <https://doi.org/10.1080/0023656X.2010.528973>.

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12 Alex Rosenblat, Tamara Kneese, and danah boyd, *Workplace Surveillance*, Data & Society Research Institute, <https://datasociety.net/wp-content/uploads/2014/10/WorkplaceSurveillance.pdf>.

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13 John Fabian Witt, “The Transformation of Work and the Law of Workplace Accidents, 1842-1910.” *The Yale Law Journal* 107 (1998): 36.

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gence.<sup>14</sup> The first few decades of the twentieth century marked the beginning of an era of labor activism resulting in advances in labor protections such as the first minimum wage (1933), passage of the Fair Labor Standards Act (1938), overtime pay (1939), establishment of a cabinet level U.S. Department of Labor (1913) and passage of the National Labor Relations Act (1935) which codified the right to collective bargaining.<sup>15</sup> It was through the establishment of these new protections and rights that the American labor movement grew during the following decades, representing millions of industrial workers, but excluding agricultural and domestic workers, who were largely people of color.

Labor advocates in the first half of the twentieth century pushed for the right to organize, for better wages, and for greater workplace safety standards but were not able to push back against greater employer control in the workplace—control that was increasingly predicated on monitoring workers, resulting in a loss of their privacy. The creation of worker injury laws is a good example of this. Initially, worker injury laws were not supported by workers and labor unions because the system hinged on a paternalistic logic that rationalized greater employer control by holding employers liable for injuries; improved safety was pursued by employers through greater monitoring of work activities.<sup>16</sup>

In the latter half of the twentieth century, the loss of manufacturing due to globalization and the rise of information technologies shifted the U.S. economy to service sectors.<sup>17</sup> Open trade agreements like the North American Free Trade Agreement led to the moving of many manufacturing jobs overseas, and shifted the American workforce to service sector industries. As the scholar David Weil has argued, beginning in the 1980s the workplace “fissured,” as firms contracted

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14 Witt, “The Transformation of Work.”

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15 U.S. Department of Labor History, <https://www.dol.gov/general/aboutdol/history/hs75menu>.

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16 Witt, “The Transformation of Work and the Law of Workplace Accidents.” Evelyn Atkinson, “Out of the Household: Master-Servant Relations and Employer Liability Law,” *Yale Journal of Law and the Humanities* 25, no. 2 (January 2013): 32, [https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1411&context=yjlh\\_page32](https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1411&context=yjlh_page32).

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17 The surveillance practices of the factory were further developed outside of the U.S. in institutions like export-processing zone plants, a development that was facilitated by international trade treaties like the North American Free Trade Agreement (NAFTA). See, e.g., Aihwa Ong, *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia* (Albany: State University of New York Press, 1987); Leslie Salzinger, *Genders in Production: Making Workers in Mexico’s Global Factories* (Berkeley: University of California Press, 2003).

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**“Data-centric systems have allowed employers to exert control over workers while claiming workers enjoy greater autonomy.”**

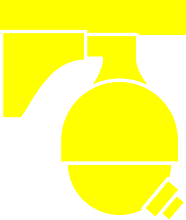
out non-core competencies such as janitorial and security, shedding responsibility for these employees while still maintaining control through legal relationships.<sup>18</sup> Outsourced, temporary, and contracted work was often deskilled and poorly paid and had fewer benefits.

Even as they moved out of factories into service sector employment, workers could still be perpetually monitored. Data-centric systems have allowed employers to exert control over workers while claiming workers enjoy greater autonomy, monitoring them through GPS, email, and just-in-time scheduling tools. More directly, labor platforms like Uber, Mechanical Turk, and Instacart can assign tasks, confirm whether work is acceptable, set pay rates, incentives, and penalties, discipline or expel workers from their platform, and mediate interactions with customers through their platforms, yet maintain that workers are independent contractors.

Ever more powerful data-centric systems extend employers' power often in ways that are imperceptible to those being watched. Legal regimes have not kept pace; current U.S. law affords employers wide discretion to institute workplace surveillance and management systems even as we begin to see harmful impacts on workers and workplace conditions, which are sometimes reminiscent of the Industrial Revolution.

18 David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge: Harvard University Press, 2014). Fissuring in the U.S. was an extension of the logics of transnational outsourcing and occurred over the same period; Cynthia Estlund, “What Should We Do After Work? Automation and Employment Law,” *Yale Law Journal*, November 2018, vol. 128:2, <https://www.yalelawjournal.org/article/what-should-we-do-after-work>.

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# The Hidden Face of Surveillance

On a typical work day, Rina encounters systems that track her movement, time, and body. At the first entrance to the fulfillment center her health is assessed. At the second entrance, she swipes her ID badge to enter the building. Rina says that her ID is her “passport”; it allows her to access different parts of the facility, log in for work, and tracks her as she moves about the building. After she enters the warehouse, Rina makes a strategic decision about where to keep her lunch. For workers at a huge Amazon distribution center, minutes and seconds can be crucial. She seeks out the break room that’s only a three or four minute walk from her station. Picking the wrong breakroom, like one that’s seven minutes away, can eat up half her allotted thirty-minute break time.

At her workstation, Rina begins work by logging into a computer system that generates a productivity rate she must meet. She knows that she’s being tracked because the monitor in front of her tells her how fast she’s working. Managers are also continually scanning monitors to make sure employees are in line. Rina isn’t sure, but she believes that the cameras around the facility—either AI-enabled or watched by human eyes—provide a second check. Once inside, she’s also watched by human monitors, people assigned to make sure staff are doing their work and keeping at least 6 feet apart. Rina says in newer facilities Amazon uses machines to tell workers if they are getting too close to one another.

Employers have wide latitude to implement surveillance technology under the guise of promoting productivity; but these measures serve multiple purposes that stretch beyond productivity. If, under Taylorism, the unobserved worker is an inefficient one, current surveillance technologies make it possible for workers to be observed continuously without the visible watching eye of a manager.

**“Surveillance is often hidden, multifaceted and continuous; workers in low-wage industries do not always know the extent to which they are being surveilled.”**

Surveillance is often hidden, multifaceted and continuous; workers in low-wage industries do not always know the extent to which they are being surveilled. A multitude of data sources drive automated decision-making systems, and such systems are designed to take choices out of workers’ hands.

Just as consumers are assumed to voluntarily allow a company access to their data when they buy a particular product, workers are assumed to choose to use technologies that monitor them by virtue of the fact they have decided to take a particular job. While this presumption of choice may not have changed since laborers entered the modern factory, the hidden face of surveillance makes this agreement appear welcomed by workers. Technology is often presented as benign or even beneficial, making it difficult for workers to question the implementation of new tools. In addition, there is often the perception that data mined from workers leads to innovation and efficiency.<sup>19</sup> Sometimes a new technology can make workers' jobs easier, but refusing to participate can carry heavy consequences, making consent seem almost meaningless.

While workers may expect certain forms of surveillance, for example, security cameras, covert surveillance systems can give an impression that no one is watching, when in fact workers are being monitored in every detail. Workers may not be aware that monitoring is occurring, as employers don’t always inform them. According to the retail worker advocacy organization United for Respect, Walmart managers have asked workers to download an app onto their personal devices that check inventory and scan mis-shelved items. Managers tell workers that the app will make their lives easier, but skip over the fact that the app requires access to cameras and location services to function, and is on constantly unless the employee turns it off.<sup>20</sup>

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19 Ifeoma Ajunwa, Kate Crawford, and Jason Schultz, “Limitless Worker Surveillance,” *California Law Review* 105, no. 3 (2017): 735, <https://www.californialawreview.org/print/3-limitless-worker-surveillance/>.

20 Naima Savage, United for Respect, conversation with author, September 16, 2019.

Data can be collected in nearly all aspects of work and human embodiment, including quantification of activities, biometric details, and even facial expressions and tone of voice (as a proxy for emotion), through a myriad of devices. In addition, surveillance can be almost completely automated and continuous, allowing it to occur nearly non-stop and across remote locations, creating massive challenges for any employee to fully comprehend the scale of the data collected about them. These extensive trails of data make it difficult for someone to reasonably know how and when data is collected.<sup>21</sup>

It is not just machines doing the watching. Workers are surveilled from multiple directions by multiple actors, including employers, customers, agencies, and other workers.<sup>22</sup> For example, in food service, customers can become surveillance agents through tablets that solicit customer reviews. These reviews become the basis for determining an employee's hours and shifts and can even result in discipline and termination.<sup>23</sup> Reviews can ask questions that servers have no control over, such as the quality of the food and condition of the restaurant, while customers may have their own biases and opinions.<sup>24</sup> Workers cannot always control information that is attributed to them yet they suffer the consequences.

The current public discourse about data privacy assumes that the responsibility lies with the individual to protect themselves, without recognizing the ways in which informed consent is difficult to achieve for workers. Moreover, that consent is seen as a blanket agreement to surveillance and data collection at the employer's will so long as a worker is employed. In the rare cases when consent is required in the workplace, it is often little more than a formality. In the few states

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21 Kirstie Ball, "Workplace Surveillance: An Overview," *Labor History* 51, no. 1 (February 1, 2010): 87-106, <https://doi.org/10.1080/00236561003654776>.

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22 Winifred R. Poster, "Emotion Detectors, Answering Machines, and E-Unions: Multi-Surveillances in the Global Interactive Service Industry," *American Behavioral Scientist*, June 17, 2011, <https://doi.org/10.1177/0002764211407833>.

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23 Karen Levy and Solon Barocas, "Refractive Surveillance: Monitoring Customers to Manage Workers," *International Journal of Communication* (2018), 1166-88.

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24 Caroline O'Donovan, "An Invisible Rating System at Your Favorite Chain Restaurant Is Costing Your Server," *BuzzFeed News*, June 21, 2018, <https://www.buzzfeednews.com/article/carolineodonovan/ziosk-presto-tabletop-tablet-restaurant-rating-servers>.

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where consent must be obtained, usually in the form of a written release, there is little space for negotiating the terms.<sup>25</sup> Similarly, user agreements and notices, a common document accompanying app downloads, suggest that participation is voluntary. Even legal precedent has found that employees are assumed to understand the releases they sign, even if this is not the case. As a result, it is nearly impossible for employees to fully understand if, when, how, and for what purpose they are being surveilled, much less whether important decisions affecting their work, safety, or compensation are based on that surveillance.

The unequal power dynamic between employers and the people whose data is being extracted further complicates this scenario; low-wage workers rarely have the luxury of walking away from invasive surveillance. In many low-wage jobs, the absence of strong social safety-net programs and employer-provided benefits like paid time off and health insurance, precludes even a decision about opting in or opting out because of the potential loss of income or livelihood of not participating. Regulators in Europe have acknowledged this; the European General Data Protection Regulation (GDPR) states that companies cannot rely on informed consent in workplaces due to this power asymmetry.<sup>26</sup>

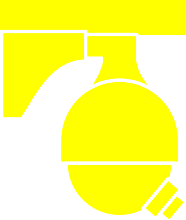
The hidden face of surveillance takes choice out of employees' hands and sets them up to suffer harms unique to them, separate from those of consumers. These harms go unacknowledged, because of the assumption that employees are willingly participating in unfettered surveillance.

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25 JacksonLewis, "Illinois Biometric Information Privacy Act FAQs," <https://www.jacksonlewis.com/sites/default/files/docs/IllinoisBiometricsFAQs2017.pdf>; Connecticut Department of Labor, Delaware Title 19, <https://www.ctdol.state.ct.us/wgwkstnd/laws-regs/statute31-48d.htm>.

26 European Parliament, "Article 28, Working Party Guidelines on Consent under Regulation 2016/679," April 10, 2018, [https://ec.europa.eu/newsroom/document.cfm?doc\\_id=45631](https://ec.europa.eu/newsroom/document.cfm?doc_id=45631); European Parliament, "Opinion 2/2017 on data processing at work" June 8, 2017, [https://ec.europa.eu/newsroom/article29/document.cfm?action=display&doc\\_id=51030](https://ec.europa.eu/newsroom/article29/document.cfm?action=display&doc_id=51030).

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# Data Collection and What it Enables

Outside of her mandated breaks, “time off task” (TOT) kicks in any time Rina steps away from her workstation, even to use the bathroom or because there isn’t enough work. It is another way that Rina is aware she’s being measured. She says she doesn’t get to see her TOT score but knows that managers look at these numbers for every employee and can use them to discipline or fire employees. When she doesn’t have enough work, she can’t log out. She needs to contact her manager and get reassigned. According to Rina, that’s the hustle Amazon workers must demonstrate to remain employed.

In our conversations with workers in low-wage industries, interviewees expressed a range of opinions about what information should be protected, and what harms might befall them for having such information collected and controlled by their employers. The chief concern about extensive data collection is not the collection of the data itself, but what it augurs for changes in workplace conditions and work standards. According to one participant at a Data & Society workshop on worker surveillance and privacy, “the problem happens not when the data is collected, but after.”

Algorithmic management systems greatly enhance employers’ capacities to direct, evaluate and discipline employees, beyond what could be accomplished through other, less invasive, forms of control.<sup>27</sup> This allows for new levels of employer overreach, as decisions arrived at via an algorithm have become ones that determine the terms of workers’ employment. As this section will show, work speedups, employment insecurity and instability, a shift of risks of and costs from employers to workers, and an intensification of racial profiling and bias have all been brought about by data collection and the algorithmic management it enables.

27 Katherine C. Kellogg, Melissa A. Valentine, and Angéle Christin, “Algorithms at Work: The New Contested Terrain of Control,” *Academy of Management Annals* 14, no. 1 (January 2020): 366–410, <https://doi.org/10.5465/annals.2018.0174>.



As Rina's experience underscores, it is common to find handheld devices and scanners that record the speed at which workers perform tasks in warehouses. A similar practice occurs in greenhouses where automation and surveillance are pushing workers to conform to a specific pace of work and production level.<sup>28</sup> These devices provide managers with detailed information about each work task, and real-time feedback to workers, which can push them to work faster. The shuttering or limiting sales at brick and mortar retail locations due to COVID-19 has accelerated e-commerce, which has allowed companies like Amazon to experiment with new technologies. Amazon has been leading the pack toward technologically driven speedups. For example, the company implemented a video game called Mission Racer that makes workers compete against one another to fulfill orders.<sup>29</sup> Coupled with the time-off-task (TOT) measurement mentioned earlier, which tracks how long an employee is off-task, worker actions are even more constrained and they are subtly pressured to get back to work even though Mission Racer figures do not theoretically count towards their productivity metric or rate.<sup>30</sup> Making work into a race contrasts with other standard and accepted principles of engineering that set rates based on the ability of an average worker or the overall workforce, not an algorithm.<sup>31</sup> As a consequence, the injury rate for warehouse workers is increasing, to the extent that it is twice as high as other private industries.<sup>32</sup>

Algorithmic management, and the employment insecurity it can create, shows up in many other sectors of work. In retail, cashiers are scored on their performance via monitoring technologies that are built into their registers or handheld devices. These systems log numerous metrics, including number of sales, the time it

28 Chris Ramsaroop, "Reality Check 101: Rethinking the Impact of Automation and Surveillance on Farm Workers," Points, Data & Society Research Institute, September 6, 2019, <https://points.datasociety.net/reality-check-101-c6e501c3b9a3>.

29 Beth Gutelius and Nik Theodore, *The Future of Warehouse Work: Technological Change in the U.S. Logistics Industry*, (UC Berkeley Center for Labor Research and Education and Working Partnerships USA, October 2019), <https://laborcenter.berkeley.edu/pdf/2019/Future-of-Warehouse-Work.pdf>.

30 Rina Cummings and Juan Goris, Make the Road NY, conversation with author, October 2020.

31 Larry Simmons, *Industrial Engineering Principles for Facility Management* (IFMA, 2010), [http://community.ifma.org/knowledge\\_library/m/members\\_only\\_content/1057241](http://community.ifma.org/knowledge_library/m/members_only_content/1057241).

32 Gutelius and Theodore, *The Future of Warehouse Work*.



## Unboxing a Cashier Algorithm



### Employment Related Decisions

#### Staffing Decisions

Reducing or increasing certain employees' hours, changing shifts

#### Discipline

Warning, demotion, termination, reducing hours, and other decisions

#### Productivity Benchmarks

Speeding up the pace of work, adding new responsibilities, creating new metrics by which to measure workers

takes for an employee to complete a single order, canceled scans, and alcohol purchases. In addition, cameras—some capable of identifying products—serve as a double check to make sure that the work was done correctly and to prevent theft.<sup>33</sup> At the end of their shift, workers get a performance score. Proponents of these technologies claim that this type of surveillance and tracking can improve efficiency and work outputs.<sup>34</sup> However, workers may only see an aggregate score, with no room to understand how a score was determined, or what they could do in order to improve their metrics. Employment decisions like dismissal can be made based on these opaque metrics, creating insecurity for employees who are scored using these types of systems.

Low-wage workers are also subject to automated scheduling systems, which generate schedules by predicting how much labor will be required and maintaining staffing at a minimum level. Influenced by several factors—including historical and predicted weather patterns, foot traffic, and customer reviews—scheduling algorithms can result in shortened shifts and illogical schedules that are unresponsive to workers' and even managers' needs. In this instance, refractive surveillance is at work wherein the surveillance is aimed at consumers but the impact falls on workers.<sup>35</sup> In some cases, a worker may complete full-time hours despite being classified as a part-time employee; consequently this person is paid less and is ineligible for benefits.<sup>36</sup> The consequences for workers are erratic and precarious schedules, which can mean that workers cannot plan for other aspects of their lives, like childcare or continuing education. On a broader level, it is a way in which employers shift the costs of operations onto employees, as having a shift cancelled or being sent home early forces employees to bear the brunt of a slow day.

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33 Gabriela Barkho, "Walmart Confirms Use of AI-Powered Cameras to Detect Stealing," *The Observer*, June 27, 2019, <https://observer.com/2019/06/walmart-ai-cameras-detect-stealing/>.

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34 Alexandra Mateescu and Madeleine Claire Elish, "AI in Context: The Labor of Integrating New Technologies" Data & Society Research Institute, <https://datasociety.net/library/ai-in-context/>.

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35 Solon Barocas and Karen Levy, "Refractive Surveillance."

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36 Kiese Hansen, "Why Workers and Their Families Need Predictable Scheduling," Center for Law and Social Policy, September 2019; Stephanie Luce, Sasha Hammad and Darrah Sipe, "Short Shifted," Retail Action Project, 2014 [http://retailactionproject.org/wp-content/uploads/2014/09/ShortShifted\\_report\\_FINAL.pdf](http://retailactionproject.org/wp-content/uploads/2014/09/ShortShifted_report_FINAL.pdf); Rosenblat, boyd, and Kneese, "Workplace Surveillance."

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**“Employers can invoke health and safety claims to demand a host of health monitors: fitness apps, safety belts, and even mattress sensors to track sleep, even when the relationship between health and performance are tenuous.”**

While the COVID-19 pandemic has signalled a decisive shift toward the implementation of health monitoring technologies in workplaces, this move is just the most recent instance of a larger trend. Employers can invoke health and safety claims to demand a host of health monitors. This precedent was set as employers assumed responsibility for workplace injuries, establishing a rationale for employers to institute workplace controls such as requiring workers to wear safety goggles

and gloves.<sup>37</sup> Data-centric technologies are also used in the name of safety in the form of fitness apps, safety belts, and even mattress sensors to track sleep, even when the relationship between health and performance are tenuous. This blurs the line between work and home, and in extreme cases, invites an employer’s surveillance tech *literally* into bed with a monitored worker. In theory, wearable tech could help improve worker health and safety. By monitoring workers as they work, surveillance technologies rely on shaping employee behavior to minimize a workplace hazard, effectively shifting accountability to workers.

Beyond protecting workers, technologies introduced into workplaces after COVID-19 may also be providing a form of liability protection for employers.<sup>38</sup> For example, AI-enabled systems are being installed in workplaces to help employees achieve social distancing and hygiene goals. These tools use cameras and GPS to identify individuals who could potentially be violating the requisite 6-foot distance. Ford Motor Company has developed a watch that can be worn by workers

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37 Witt, “The Transformation of Work and the Law of Workplace Accidents”.

38 Anna Swanson and Alan Rappeport, “Businesses Want Virus Legal Protection. Workers Are Worried,” *New York Times*, June 12, 2020, <https://www.nytimes.com/2020/06/12/business/economy/coronavirus-liability-shield.html>.

to help them keep a 6-foot distance from others.<sup>39</sup> In logistics, Amazon has developed a Distance Assistant, software that applies machine learning to cameras positioned in warehouses to identify high-traffic areas and encourage social distancing.<sup>40</sup>

The National Football League (NFL) has introduced sweat vests to capture perspiration, which is one indicator of exertion. It is unclear if these metrics are collected to track health or to monitor performance, and how much discretion employers have to collect such information and how it will be used. The National Football League Players Association's most recent contract with the NFL includes provisions meant to provide greater control for workers over the monitoring and collection of player biometric data.<sup>41</sup> All the same, biometric data is already transforming player performance, career trajectories, and long-term earnings potential. The body statistics of individual players has become a commodity, making its way into video games, endorsements, and sports gambling.<sup>42</sup> By contrast, migrant farm laborers routinely working in extreme heat must fight an uphill battle to get basic accommodations from heat stress and stroke.<sup>43</sup> The U.S. Occupational Safety and Health Administration (OSHA) provides guidelines to ensure that employers are protecting workers, but farm owners have fought these provisions. Farm workers are not benefitting from technologies like sweat vests, which could act as an early warning system for heatstroke.<sup>44</sup>

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39 Keith Naughton, "Ford Tests Buzzing Wristbands to Keep Workers at Safe Distances," *Bloomberg*, April 15, 2020, <https://www.bloomberg.com/news/articles/2020-04-15/ford-tests-buzzing-distancing-wristbands-to-keep-workers-apart>.

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40 "Amazon Introduces Distance Assistant," *The Amazon Blog*, June 16, 2020, <https://blog.aboutamazon.com/operations/amazon-introduces-distance-assistant?ots=1&tag=curbedcom06-20&linkCode=w50>.

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41 Collective Bargaining Agreement, National Football League Players Association, 2020, [https://nflpaweb.blob.core.windows.net/media/Default/NFLPA/CBA2020/NFL-NFLPA\\_CBA\\_March\\_5\\_2020.pdf](https://nflpaweb.blob.core.windows.net/media/Default/NFLPA/CBA2020/NFL-NFLPA_CBA_March_5_2020.pdf).

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42 David Kravets, "How the NFL—Not the NSA—Is Impacting Data Gathering Well beyond the Gridiron," *Ars Technica*, September 1, 2019, <https://arstechnica.com/tech-policy/2019/09/the-nfl-is-reshaping-the-surveillance-society-xbox-one-experience-and-gambling/>.

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43 Andre Gallant, "Beat the Heat: How Workers Survive Brutal Farm Summers," *Modern Farmer*, August 3, 2015, <https://modernfarmer.com/2015/08/farmworkers-survive-heat-stress/>. *Conversation with Chris Ramsaroop, August 2, 2019.*

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44 Nathalie Baptiste, "Farmworkers Are Dying from Extreme Heat," *Mother Jones*, August 24, 2018, <https://www.motherjones.com/food/2018/08/farmworkers-are-dying-from-extreme-heat/>.

As more aspects of work become digital, the use of metrics can hide the racist nature of decisions made about individuals or groups behind a veneer of impartiality. The increasing use of technical systems that parse minute pieces of information garnered from digital activity in order to determine one's worthiness, termed the "scored society" by legal scholars Danielle Keats Citron and Frank Pasquale, serves to further this profiling.<sup>45</sup> The use of surveillance and data collection of performance data (as well as other forms of data) also works in a similar way. Moreover, poor and immigrant communities that make up a larger portion of the low-wage workforce have historically faced higher levels of scrutiny by the state and employers actualized through surveillance, and predicated on stereotypes about trustworthiness, honesty, and work ethic.<sup>46</sup>

Sociologist argues that the technical codes that created the carceral system, which labeled people as "high-" or "low-" risk criminals, are also used in employment, thus importing a digital caste system in these spaces as well.<sup>47</sup> What this looks like in a workplace can have many faces. Bias and discrimination can result in the singling out of individuals for differential treatment through the ability of technical systems to monitor individuals for abnormal behavior, but it can also scale this type of profiling and apply it along racial or ethnic lines. Presumption of bad behavior can harm workers' ability to obtain future jobs. For example, retailers maintain databases that contain the names of workers accused, but not convicted, of stealing; this database prevents workers from obtaining future jobs in the industry, as well as casts a pall of potential criminality over the workforce as a whole.<sup>48</sup> One company, HireRight, is now selling post-hiring monitoring tools

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45 Danielle Keats Citron and Frank A Pasquale. "The Scored Society: Due Process for Automated Predictions." *Washington Law Review* 89 (2014): 1-33, <https://digitalcommons.law.uw.edu/cgi/viewcontent.cgi?article=4796&context=wlr>.

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46 Virginia Eubanks, "Want to Predict the Future of Surveillance? Ask Poor Communities," *The American Prospect*, January 15, 2014, <https://prospect.org/power/want-predict-future-surveillance-ask-poor-communities/>.

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47 Ruha Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Cambridge, UK: Polity, 2019).

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48 Stephanie Clifford and Jessica Silver-Greenberg, "Retailers Track Employee Thefts in Vast Databases," *The New York Times*, April 3, 2013, <https://www.nytimes.com/2013/04/03/business/retailers-use-databases-to-track-worker-thefts.html>.

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**“The systemic racism that pervades the criminal justice systems is leaching into employment as well. People who have been locked up are also locked out of employment opportunities.”**

that notify an employer if an employee has been arrested.<sup>49</sup> Criminal background checks are a common practice in hiring (as well as in housing, public benefits, and college admissions) and are particularly problematic because of the disproportionate rates at which people of color are arrested because of racial profiling. Thus, the systemic racism that pervades the criminal justice systems is leaching into employment as well. People who have been locked up are also locked out of employment opportunities.

Surveillance and data collection can amplify these problems, particularly in service-sector industries which employ a high percentage of marginalized workers and tend to use more systems of monitoring. In warehousing alone, workers of color account for a full two-thirds of the frontline workforce while 95% of domestic workers are women, foreign-born, or people of color.<sup>50</sup> Algorithmic decisions and predictions can affect workers’ lives and career chances, from treatment on the job to exclusion from employment entirely.

Finally, there are growing concerns that surveillance can chill efforts by workers to exercise their protected right to engage in collective action and organize for purposes of joining a union or take actions to change workplace conditions, including many of the harms addressed here. Certain activities, like discussing one's terms of employment with other workers and raising work related complaints, are

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49 “HireRight Debuts Suite of Advanced Post-Hire Employee Monitoring Solutions,” *Businesswire*, May 18, 2020, <https://www.businesswire.com/news/home/20200518005121/en/HireRight-Debuts-Suite-of-Advanced-Post-Hire-Employee-Monitoring-Solutions>.

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50 Gutelius and Theodore, *The Future of Warehouse Work*; Kyle Boyd, “The Color of Help,” Center for American Progress, June 17, 2011, <https://www.americanprogress.org/issues/race/news/2011/06/17/9783/the-color-of-help/>.

protected under the National Labor Relations Act (NLRA).<sup>51</sup> Surveillance can infringe on this right on multiple levels. Recently, Amazon faced internal criticism when employees discovered an unfamiliar email subscribed to over 70 employee listservs. Amazon contended that the account, which was affiliated with the Amazon Human Resources team, had been created to solicit employee feedback on corporate culture. Employees remained skeptical because the account only followed a small subset of the thousands of Amazon listservs, specifically ones created to discuss issues that were the topic of organizing efforts or were for certain ethnic or religious groups.<sup>52</sup> Amazon-owned grocery retailer Whole Foods uses data about location of nearby unions, union membership size, and poverty and unemployment levels in the local population to create a “heat map” to track potential unionization at its stores.<sup>53</sup>

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51 Employee Rights Under the National Labor Relations Act, [https://www.dol.gov/sites/dolgov/files/olms/regs/compliance/eo\\_posters/employeeightsposter11x17\\_2019final.pdf](https://www.dol.gov/sites/dolgov/files/olms/regs/compliance/eo_posters/employeeightsposter11x17_2019final.pdf).

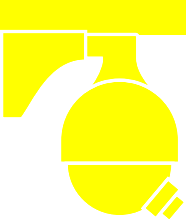
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52 Shirin Ghaffary, “Amazon Employees Fear HR Is Targeting Minority and Activism Groups in Email Monitoring Program,” Vox, September 24, 2020, <https://www.vox.com/recode/2020/9/24/21455196/amazon-employees-listservs-minorities-underrepresented-groups-worker-dissent-unionization>.

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53 Jay Peters, “Whole Foods Is Reportedly Using a Heat Map to Track Stores at Risk of Unionization,” *The Verge*, April 20, 2020, <https://www.theverge.com/2020/4/20/21228324/amazon-whole-foods-unionization-heat-map-union>.





# The Need for Privacy Rights and Protections

At 5:30 p.m., if she hasn't been assigned overtime, Rina can start the process of heading home. Since the beginning of the pandemic, Amazon has suspended many of its anti-theft security measures. Now, the process can take as little as 5 minutes if she times it right, but prior to COVID-19, a Loss Prevention team would oversee a process that included a security check, bag scan and sometimes full body scans with a metal detector wand, before she could exit the building and head home.

As surveillance becomes normalized, and data collection becomes easier, employers are demanding more information from employees. Among workers and worker advocates, there is a strong sense that employers are overreaching, and breaching acceptable boundaries of privacy. Workers can be left with an unclear understanding of the purpose of a particular surveillance-enabled technology, and are disempowered from contesting the surveillance, data collection, and subsequent employment-related decisions made from this information. Responses from regulators and worker advocates need to address each part of this: the harms that ensue from algorithmic management, the ability of workers to protect their data, and the consequences of employers' unconstrained ability to monitor the workforce.

## **Reduce the Harms of Surveillance at Work**

Much like during the Industrial Revolution, documenting the harms that result from intensive surveillance and algorithmic management is key to addressing the affects of these practices. Labor advocates have begun to document and name the impacts of surveillance on workers, from misclassification in ride hailing, to automated wage and tip theft in food delivery, to increases in workplace injuries at warehouses and food production facilities.

**“The manager may be an invisible algorithm, but the impacts are real and tangible. ”**

For example, Rina and her coworkers at warehouses across the country have documented the workplace injuries that have resulted from automation and strict adherence to quotas derived from surveillance. The manager may be an invisible algorithm, but the impacts are real and tangible. Some unions have begun to negotiate for protections for workers in light of these problems. The Teamsters, the union representing drivers at UPS and other logistics companies, have bargained to protect workers from firings based solely on information garnered from electronic monitoring systems.<sup>54</sup> Holding employers accountable for the conditions in workplaces, regardless of the system of control that created the conditions, is critical to protecting workers and maintaining basic workplace standards.

Only addressing the harms that result from surveillance doesn't address the data trail that employees generate and employers exploit. Collected data can be repurposed or combined with other information, and could have other impacts that are not immediately evident, including data that may follow workers after they have left a job. Workers suspect that employers are hoarding data that has no immediate purpose but that could affect them in the future. In fact, the perpetual surveillance and optimization of worker performance seems to be the direction in which the future of work is headed. This makes employers one of the largest collectors of data, and one with nearly unchecked authority.

54 National Master UPS Freight Agreement, August 1, 2018 – July 31, 2023, <https://teamster.org/wp-content/uploads/2018/12/upsf18freightnationalmaster.pdf>.

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## Data Privacy Rights

Workplace surveillance has become all-encompassing, because employers have few legal limits on their rights to surveil, and workers have no or limited privacy rights. This has set up a power imbalance heavily weighted toward employers. This speaks to the need for worker privacy rights at work to correct for this imbalance; otherwise all aspects of workers' lives are visible to their employer through the extraction of data. Scholars have suggested various forms of legal protections for workers, such as audits for algorithms used in employment, calls for transparency in their use, close scrutiny of their effects to address discrimination and bias, and other harms. Some legal scholars have also called for outright bans on the collection of some forms of data or the classification of certain types of data as protected health data.<sup>55</sup> Labor advocates and policy makers need to consider privacy rights in the workplace as part of the debate about the future of work, because the lack of data rights is what enables technologies to restructure work.

Privacy is an amorphous concept in the law, and scholars have been divided on what it is, and whom it protects. Samuel Warren and Louis Brandeis's 1890 Harvard Law Review article, often cited as the first discussion of a right to privacy, argues that privacy means the right to be left alone. Legal scholars have expanded on this definition since then; for example, Jerry Kang suggests that we consider privacy interests through three clusters: spatial, decisional, and informational.<sup>56</sup> There are already laws in place that protect spatial and decisional privacy; for example, the fourth amendment to the U.S. Constitution protects against unwarranted invasion of one's home and body, and *Roe v. Wade* protects decisional privacy. Informational privacy largely occupies a blank space in cur-

55 See, e.g., Matthew T. Bodie et al., "The Law and Policy of People Analytics," *University of Colorado Law Review* 88, no. 4 (2017), <https://papers.ssrn.com/abstract=2769980>; Pauline Kim, "Auditing Algorithms for Discrimination," *University of Pennsylvania Law Review Online* 166 (December 17, 2017), <https://papers.ssrn.com/abstract=3093982>; Pauline Kim, "Data-Driven Discrimination at Work," *William & Mary Law Review* 48 (April 19, 2017): 857-936; Ifeoma Ajunwa, "The Auditing Imperative for Automated Hiring," *Harvard Journal of Law and Technology*, forthcoming 2021, <https://doi.org/10.2139/ssrn.3437631>; Christina Colclough, "Workers' Rights: Negotiating and Co-Governing Digital Systems at Work," *Social Europe*, September 3, 2020, <https://www.socialeurope.eu/workers-rights-negotiating-and-co-governing-digital-systems-at-work>.

56 Jerry Kang, "Information Privacy in Cyberspace Transactions" *Stanford Law Review*, vol 50:1193, April 1998.

“Workers need new rights  
for the digital age of work.”

rent legal regimes. There is no comprehensive federal data privacy law although some states, such as California, are considering or have acted to establish such a right for consumers that could potentially cover workers.<sup>57</sup>

Workers need new rights for the digital age of work. The risks of having no data privacy at work are clear: Human managers are being replaced by algorithmic managers, but unlike working with a human, it is nearly impossible to argue with an algorithm. Data and algorithms act as corporate policy but are opaque and can change all while evoking an air of infallibility, making it impossible for workers to contest unfair or harmful decisions. An ability to see one's own data provides workers with an understanding of how their actions contributed to a particular decision or outcome; it preserves their ability to advocate for themselves.

Even still, data privacy cannot be just about individual rights. Surveillance can affect workers as individuals and collectively as a workforce because individual information is rarely used in isolation. For example, point of sale systems often record how many returns a sales clerk processes, a figure that is benchmarked against an average of all sales clerks' returns. An individual's pace of work might be the basis for disciplinary action, but the pace is increasingly being determined by the pace of all workers in the shop or even across multiple locations. Aggregate data allows employers to measure activities against a standard, find correlations between actions, and make predictions about future actions.<sup>58</sup> Data privacy is a collective issue but continues to be treated as an individual responsibility.

The information asymmetries between workers and employers are tipped further in favor of employers because privacy laws fail to protect employees from the

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57 The California Consumer Privacy Act, as originally introduced, provided data privacy rights for employees, independent contractors, and job applicants but these categories will be exempted from the final legislation until 2022; see <https://oag.ca.gov/privacy/ccpa>.

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58 Christina Colclough, “It’s Not Just About You,” *The Why Not Lab*, <https://www.thewhynotlab.com/post/its-not-just-about-you>.

extraction and use of productivity, health, and other data. Key cards can inform managers of all interactions between coworkers and even record minute details of these interactions including with whom, where, how long, and—if equipped with microphones or cameras—the subject of discussions. In the case of health data, privacy experts fear data can be used for non-public health purposes, combined with other identifying information, or stored for extended periods of time. The situation is further complicated by the fact that the privacy interests of workers and privacy rights for consumers can conflict; restrictions on government access to private data collected by companies can limit the ability of democratic institutions to protect workers from surveillance and algorithmic exploitation. For example, the American Civil Liberties Union opposed efforts by cities like Los Angeles to compel rideshare companies to share the data needed to regulate them, on grounds that this would expose rideshare users to state surveillance.<sup>59</sup> Without effective privacy protections, employees face an even greater obstacle advocating for other rights in the workplace, including protections against exploitation, wage theft, arbitrary decisions, severe and aggressive disciplinary action, retaliation, and discriminatory and biased practices.

Rina's experiences at the Amazon warehouse bring home this point. Rina mentioned that time-off-task (TOT) is an important metric in her job. This metric can determine whether a worker keeps her job or not. At the same time, workers are not given clear direction on how to respond to TOT. According to Rina, one coworker was fired because he didn't take it upon himself to find more work when operations were slow. Thus TOT serves not as a productivity measure, but as a means of creating insecurity so workers hustle or face the threat of termination. This example also serves to demonstrate that data collection at work affects individuals, but is not limited to individual concerns; instead continuous surveillance has become a systemic problem that harms the collective. If Rina knew which factors determined her TOT score, she would be able to challenge decisions made by the algorithm or build collective action around TOT decisions.

59 Jason Henry, "Expansion of LA Tracking System to Taxis, Ride-Hailing Services Stirs Privacy Concerns," *Pasadena Star-News*, February 28, 2021, <https://www.pasadenastarnews.com/2021/02/28/expansion-of-la-tracking-system-to-taxis-ride-hailing-services-stirs-privacy-concerns/>.

## Limits on Surveillance

Even as governments develop comprehensive data protection rights for individuals, these laws do not directly prevent the collection of data or the surveillance that enables data collection, with few exceptions.<sup>60</sup> Monitoring is becoming normalized in our society, and is integrated into work. Courts have found that employers can institute monitoring when the equipment or technology is employer-owned, the employer has a legitimate business interest, or when it occurs during normal working hours. Employers enjoy very wide discretion, effectively acting as the “government,” and therefore management can be just another word for governance.<sup>61</sup> The hidden face of surveillance makes it difficult for workers to distinguish between their employers watching their productivity, or simply policing their actions.

Privacy protections in current law and regulation are mainly aimed at state intrusion. Only limited restrictions exist in the workplace, such as a ban on surveillance in break rooms and bathrooms, limitations on access to private emails, and some privacy protections for state and federal employees. Regulations and norms about privacy have not kept pace with surveillance, such that privacy effectively ends at the shop floor or office door, but may also extend further into employees’ lives, as technologies meant to track fitness and health allow surveillance anywhere a worker goes, and activities on social media are visible to employers. With a large percentage of the workforce newly working from home, even the home is no longer private. Particularly for lower income and minoritized workers, the public health tech introduced during the pandemic threatens to add a new layer of surveillance onto historically over-surveilled populations, further deepening systemic inequalities.

While data privacy protections will certainly level the playing field for workers, the fact of the matter is that workers also have limited or no real expectations of

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60 The Illinois Biometric Information Privacy Act, like the CCPA and the GDPR, does not restrict the collection of data, but does provide parameters for its use. JacksonLewis, “Illinois Biometric Information Privacy Act FAQs,” <https://www.jacksonlewis.com/sites/default/files/docs/IllinoisBiometricsFAQs2017.pdf>.

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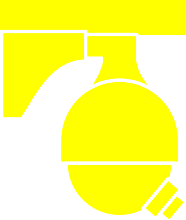
61 Elizabeth Anderson, *Private Government: How Employers Rule Our Lives (and Why We Don't Talk about It)* (Princeton: Princeton University Press, 2017).

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privacy in the workplace. The United States has legally granted companies nearly unchecked authority to control the level of surveillance in their workplaces and the right to set productivity quotas, but this is not a natural market outcome. Rather, these rights are shaped through law and social values as much as by the market. We need to think about what limits can be placed in surveillance in the workplace.

For decades, bread and butter issues like wages and benefits have dominated discussions of worker rights. Only recently have fears of the automation of employment taken on new prominence, leading worker advocates to begin to question surveillance tools. However, such tools have been in place since the Industrial Revolution, scaffolded on the ability to “see” the worker. Surveillance coupled with data collection has made every aspect of the worker observable and optimizable by employers. At the same time, data-centric technologies hide, obscure, and validate employer behaviors behind an impartial, neutral algorithm.

Advocates—including labor and privacy advocates—workers, and policymakers can no longer leave the right to surveil entirely in the hands of employers. As we’ve seen, surveillance tools have many purposes, and the data they produce is open to interpretation and use by the people and businesses who control that information. Civil society needs to interrogate, limit, and challenge how and when surveillance is necessary. Surveillance undertaken in the name of “safety” and “efficiency” can lead to overreach and worker exploitation. Surveillance and control by algorithm is the future of work, and it is currently tipping the balance of power further away from workers.



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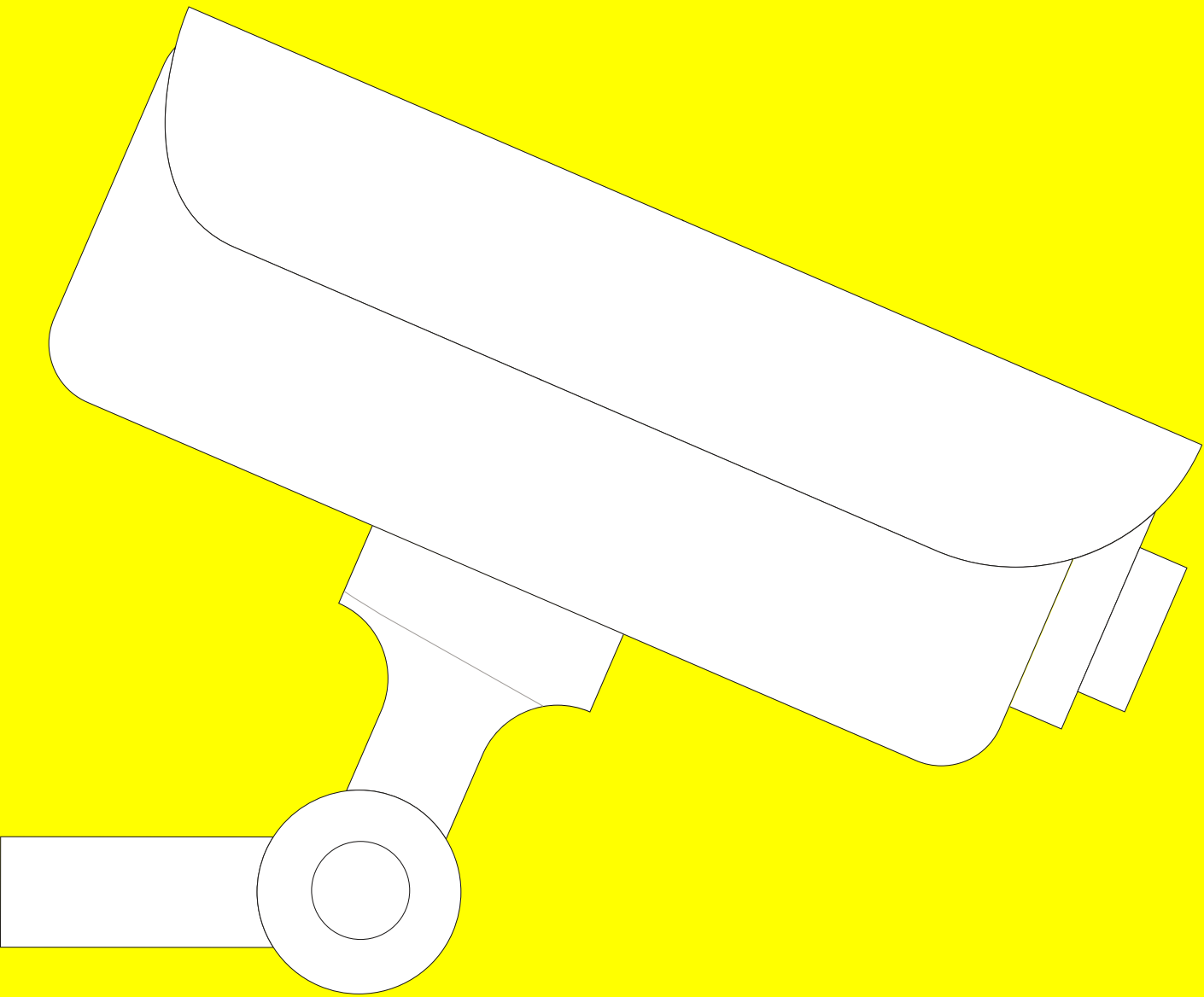
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