

Contract Worker Disparity Project

Inside Tech's Shadow Workforce

RESEARCH UPDATE 2024

TECHEQUITY COLLABORATIVE



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Contract Work and the Rise of AI

In the past few years, AI has made waves in tech, in the press, and in our everyday lives. The explosion of generative AI, the increasing news of AI-fueled layoffs, and an open letter on potential risks from AI experts, academics, and executives alike have driven concerns and uncertainty for workers in tech and beyond.[1][2][3] Many of them worry that the next layoff will come for them. The sector of the workforce arguably most impacted by AI also happens to be one of the most vulnerable—the contract workforce.

Contract workers have been performing essential functions for tech companies for years, often on short-term contracts with little job security. Because these workers are hired through third-party contracting agencies, they're often not considered part of the company's workforce; this keeps these workers and their working conditions under the radar. But as AI has come to dominate headlines, the roles that these workers play—and the conditions under which they do it—have become more visible. They sit in the middle of two counteracting forces driving the future of work.

First, AI seems to already be displacing many workers within the tech sector, including contract workers whose jobs are much more precarious than directly employed workers. Second, at the same time that it is displacing high-quality jobs at tech companies, AI is creating many more lower-quality jobs in fields like content moderation and data training that are often outsourced to third-party agencies. This dual dynamic means that—at least in the short term—the labor force within tech is shifting away from the well-compensated, highly-sought jobs at cushy tech campuses to underpaid and under-protected roles that are often offshored to countries with fewer labor protections.

Here we highlight some key dynamics in that shift and hear from contract workers who have been affected by it. We hope this update to our original research on contract working conditions can demonstrate a path forward to ensuring all tech jobs in the future provide high-quality, stable employment for the workers who power the industry.

Tech is adopting AI to augment work and lower headcount

Over the last two years, tech companies have laid off more than 448,000 workers—and that number continues to grow.[4] While tech is not the only industry to be roiled by layoffs in recent months, this speaks to the degradation of job quality in a sector that has long been lauded for its comfortable, secure employment.

Increasingly, we're seeing tech companies cut jobs in favor of adopting AI. The tech industry, always willing to swing big on emerging technologies that "create efficiencies," is full of early adopters ready to embrace AI with open arms. According to the US Census Bureau, only 3.8% of businesses are using AI for their main operations—but that percentage more than triples when you look at tech.[5] And that's just in 2023; more than one in five tech companies report that they will adopt AI by mid-2024.[6] In an industry driven by venture capitalists keen on lean production and massive profit margins, tech companies are facing unique pressures to replace some workers with AI—a trend we are already starting to see play out.[7] What is happening in tech could spread to other industries soon: one survey conducted at Davos in 2024 reported that 25% of CEOs expect their adoption of AI to result in a lowered headcount.[8] Another recent study posits that tech workers will be one of the workforces most impacted by AI.[9]

Both directly hired employees and contract workers are on the chopping block. When Duolingo laid off 10% of their contract workers at the top of 2024, they explicitly cited AI as one of the main factors in eliminating those roles.[10]

Contract workers are powering tech's biggest innovations

AI isn't just responsible for eliminating jobs. It is also responsible for creating many more mission-critical roles that are hired through third-party contracting agencies—often at much lower quality than the ones that were lost through layoffs. Pick nearly any high-profile technological advancement in the press and you'll find contract workers behind it. Generative AI models like ChatGPT and Bard have hidden armies of contract workers training algorithms and moderating content—sometimes for less than $2 per hour.[11] [12] Self-driving cars are test driven by contract workers—who are laid off, often with no warning and no protections—when the projects hit a speed bump.[13] Ghost workers in the US and worldwide do the invisible labor of cleaning up data with little pay and much uncertainty about future work opportunities.[14] Contract workers who were training Google's new AI chatbot spoke out about low pay and unfair conditions—and were fired as a result.[15]

Across the industry, automation and algorithms are powered by contract workers.[16] They are routinely underpaid, subjected to traumatizing conditions, and lack the basic security and protections that directly employed workers receive. Without active intervention, AI and other innovations could continue to worsen conditions for contract workers in the US and around the world.

On October 30, 2023, President Biden issued the first executive order on Safe, Secure, and Trustworthy AI.[17] The order establishes new standards for AI and will hopefully begin to address the working conditions of the people impacted by AI. What it misses, however, are protections for the people working within the AI supply chain—in the US and globally—who develop, train, and moderate the tools and products that are rapidly becoming a critical element of our economy and society.

Contract work is a growing proportion of the American workforce—and is more precarious than ever

In 2018, an NPR/Marist poll found that 1 in 5 jobs in America was held by a worker under contract and predicted that within a decade, contract workers and freelancers could make up half of the American workforce.[18] Currently, the American Staffing Association estimates that nearly three million temporary and contract employees work for US staffing agencies during an average week and that these companies hire over 14.5 million workers during an average year.[19]

In 2018, Google hit a milestone in which contract workers outnumbered direct employees for the first time in the company's 20-year history.[20] In the years since then, the demand for contract work has only grown. Recent technological innovations like generative AI have called for more roles like content moderation and model training—roles that are both critical to the technology's safety and success and are increasingly outsourced to contract workers. According to LinkedIn, the number of open contract roles in tech more than tripled from 2021 to 2022.[21] Conversely, direct hire roles during that same period grew by only 6%. Tech in particular saw a larger increase in contract roles relative to the rest of the labor market.[22]

While we don't know for certain how many of the 448,000 workers laid off in the last two years were contract workers—we know the layoffs had a significant impact on the contract workforce.[23] While tech companies have given directly employed workers notice, severance payouts, and more to make ends meet, contract workers have often been left unprotected in the wake of layoffs. At the end of 2022, Twitter laid off thousands of contract workers with zero notice.[24] It was clear that current layoff protections do not meet the needs of workers today.

We also know from anecdotal evidence that the tech layoffs and the rise of contract work are linked. Some workers who were laid off from companies like Microsoft and Amazon immediately received inquiries from recruiters who offered them contract roles at the very same companies that let them go.[25]

A NOTE ON LANGUAGE

For brevity, we've chosen some keywords to refer to the contracting world. When we say **contract workers** *we are referring to any worker who is hired through a third party (vendor, staffing agency, or payroll company) but who performs their day-to-day work for a tech company. This group of workers runs the gamut from service workers (like janitors and security officers) to technical workers (like software engineers, data analysts, and content moderators). When we say* **contracting agencies** *we are including hiring agencies, staffing agencies, payroll agencies, and vendors. When discussing the roles they play, we will specify what type of agency, but on the whole we are including all companies and agencies that act as a third party to bring contingent workers to the client employer. When we say* **client employer** *we are referring to the company that has hired a contracting agency to supply them with labor for a business need; in our area of work that is often a tech company, but it can refer to a company in any industry using contract workers.*



Shining a Light on Tech's Shadow Workforce

With industry-wide pressure to cut costs and maintain growth, tech has created a perfect storm for the boom of contract work. The problem is, our country's data reporting and labor laws that protect direct employees often don't extend to contract workers. That makes the hundreds of thousands of workers joining the contract workforce both more vulnerable and less visible than before.

To understand how AI is shaping the nature of contract work, we need to learn directly from the people who are most impacted—the contract workers.

Workers' voices have been missing from the conversations that impact them the most; regulations around working conditions, design of the AI tools themselves, and more. To truly know how we can support this growing workforce, we need to listen to contract workers, understand their working conditions, and partner with them to address the gaps.

In 2022, TechEquity Collaborative released its Contract Worker Disparity Project report to illuminate and address the disparities that contract workers face, in tech and beyond.[26]

The report focused on third-party contract workers who work side-by-side with direct employees but also included independent contractors and gig workers within its analysis. Through a first-of-its-kind survey, first-person interviews, and an in-depth literary and data review, this report uncovered several key themes that typified the contract worker experience:

1. **A dual management structure that prevents opportunity for advancement.** Contingent workers have a fragmented reporting structure: their day-to-day work is overseen by a manager at the tech company while the operational aspects of their employment—pay, benefits, and legal protections—are the purview of the contracting agency that hired them. Although this practice is set up to protect tech companies from liability, it often leads to disempowerment of and confusion for the worker.

2. **Job precarity.** Contracting roles typically start as a three- to six-month engagement and are extended or terminated based on the whims of the tech company. At any moment their role can be cut or they can be let go without warning, leaving them without income or protection.

3. **A lack of voice in the workplace.** Because of this opacity and lack of transparency, workers are often hesitant to assert their rights or speak up against harassment or workplace problems for fear that it may impact their contract renewal.

4. **Unequal pay for equal work.** Contract workers often perform the same functions as their directly employed peers but get paid less for the same work. The original report found that on average, contract workers make 75 cents on the direct employees' dollar, while frequently lacking paid time off, health insurance, and other benefits.

5. **An overrepresentation of certain racial and gender groups in job classifications—otherwise known as occupational segregation—with little power and comparatively low pay.** In every dataset that we examined, one fact was glaringly obvious—contract work in tech is disproportionately done by people from under-represented racial, ethnic, and gender groups.

These themes show heightened power differentials between contract and direct workers; contract workers and contracting agencies; and contract workers and tech companies.



The Stories of Contract Workers Today

At the end of 2023, TechEquity conducted in-depth interviews with contract workers to understand how this era of tech is shaping their working conditions.

We spoke to 48 people who are currently working or have previously worked as contract workers—content moderators, data aggregators, search analysts, programmers, graphic designers, service workers, and more shared their experiences on the job via confidential interviews. More than half of these workers have been engaged as contract workers for two years or more. We learned that for the overwhelming majority of the workers we spoke with, contract work has left them unsupported, isolated, and with no clear future.

Much of what we heard echoed what we heard in 2022, and reflected that working conditions are becoming more precarious with the rise of AI.

A NOTE ON WORKER STORIES

All interviews were conducted under a confidentiality agreement; all workers' names have been changed and company names have been redacted to ensure their privacy.

The rise of outsourcing contract work internationally

In this round of research, interviewees shared the rising impact of outsourcing on their roles. Platforms like UpWork have made it easy for employers to contract out across borders, often to people overseas where the wage rates and working conditions are often much lower than the legal standards in the states. The atomization of tasks and work through platforms like Amazon's Mechanical Turk, allows for workers to take pieces of a project and offer a price to complete them. The client employer then can accept any bid, often the lowest, to complete the task that would have otherwise been a part of a set of tasks and responsibilities for employees. This method creates a global race to the bottom for low wages—where employers exploit economic desperation in the global labor market to lower their costs.[27] Stanford economist Nicholas Bloom estimates that about 10% to 20% of US support jobs like software developers, human resources professionals, and payroll administrators could move overseas in the next decade.[28] The remote work boom spurred on by the pandemic stands to accelerate that.[29]

Many interviewees feel like both direct and contract opportunities are threatened by the prospect of cheaper remote work done overseas. One worker attested that their contracting agency moved some of their processes outside the US for cheaper labor. Another shared that at one point they made $70 an hour, while a worker in Argentina made $36 an hour for the same role. Another worker who started working at an outsourcing company in Mexico discovered that the starting pay was only $4.50 an hour.

Workers would not recommend contract work to a friend

Of the workers interviewed in 2023, 48% of interviewees indicated that their experience as a contract worker was negative or very negative. Only 20% reported having a positive or very positive experience with contract work. 75% of interviewees were quite certain they would not recommend contract work to someone else unless there was no other option. Those who would recommend contract work—albeit with reservations and acknowledgment of relative privilege—were often highly sought after because they had specified technical knowledge or worked in a creative field where the independence provided by contract work allowed for a greater degree of artistic freedom. Those who would possibly recommend contract work were also most likely to have a working partner and receive valuable benefits, like healthcare, as a result.

> “[Companies are] looking for some sort of cost advantage. They’re not paying market rate, and so it is sort of like a race to the bottom so you get noticed and get the work.”
>
> Anonymous contract worker



The workers in the original 2022 research gave their recommendations with caveats. Many wish they had understood that these are dead-end roles when they signed up. Others expressed that potential contract workers needed to understand how undervalued they would be. This shift from qualified endorsement to outright warnings is reflective of the current conditions of the work—simply put, contract jobs are getting worse.

Initial pay might look promising, but the lack of benefits takes its toll

At face value, contract work in tech looks more attractive than roles outside the tech sector. Even though contract workers make 75 cents on the direct employees' dollar on average, the overall higher wages in tech make contract work seem alluring to prospective workers from outside the industry.[30] However, contract workers often get a fraction of the benefits that direct employees receive: 33% of 2022 survey respondents received no benefits, while only 11% of directly employed tech workers didn't receive PTO and only 13% of directly employed tech workers didn't receive health insurance in the same year.[31]

The Bureau of Labor Statistics shows private-sector employers spend about 29.4% of total compensation costs on an employee's benefits.[32] Put another way, direct employees earn about 30% more than their base pay in benefits. Tech workers also tend to be compensated with stock options in addition to salary, a perk that is not available to contract workers. The total value of higher wages and better benefits make the pay disparities between direct tech employees and contract workers even more severe.

> "Most often [contract work] did not meet my needs. I accrued a lot of debt over five years and... I had to file for Chapter 7 [bankruptcy] because I was unable to sustain myself fully as a contract-based worker."
>
> Anonymous contract worker



Many of the people coming into contract work confirmed that their wages are higher than the roles they had been in previously. However, those higher wages are often still not enough to live in major tech hubs like San Francisco and Austin.[33] Combined with the lack of benefits, many contract workers find it hard to make ends meet.

Inadequate benefits are especially challenging for workers with medical issues, children, or those who want to start a family. Interviewees said that they would most like to have health insurance, PTO, and paid holidays—benefits routinely not offered to them.

IMANI'S STORY

Imani works at a high-profile tech company as a contract engineer after completing a coding bootcamp. After multiple years with the company, she makes less than her directly employed coworkers, with no benefits. Imani says that as a contract worker, she felt that neither her agency nor the company would give her the compensation they would give to someone at her level with more formal tech experience or training. Imani also experiences isolation, reporting that she has to define her role herself without much oversight or guidance. As one of the few Black women on her team, she often feels excluded and alienated, having to tread lightly when discussing racist mistreatment to avoid putting a target on her back and the backs of other Black workers coming into the company. Outside of a single DEI training program centered on increasing diversity numbers, she says her team has received no formal programming to support an inclusive workplace.

Great uncertainty, lack of stability, and no clear path to direct employment

Many contract workers take temporary jobs because they view them as a way to gain a foothold that may lead to a full-time opportunity. However, in our 2022 research, more than 77% of contract workers we spoke to did not convert to direct employment. Though the contracts cover a specific period, employers (and workers) can end the contracts without advanced notice or explanation. The contract workers we spoke to then reported receiving little to no information about why their contracts ended early.

The uncertainty in contract roles is ever-present. Workers feel the need to constantly be looking for work. And, whether it be the possibility of a contract renewal or conversion, workers often feel they cannot turn down projects because they worry they'll be let go without explanation, won't be converted, or won't have their contract renewed. One interviewee in the most recent round of research described the anxiety around contract work as "ambient" and "ominous" because they felt the need to "always have a backup plan."

Workers expressed difficulty in finding direct employee roles in tech. Major functions are either being outsourced internationally or positions that used to be core to the company are being filled through contracting. One interviewee who was tasked with hiring for contract roles discussed being instructed to hire contract workers who "deal well with ambiguity," building uncertainty into the role from the beginning.

One interviewee referred to the ever-increasing precarity in the tech field as an "unsettling devolution." Another described taking on contract roles specifically because of "the need to stay relevant in the field" as direct employment roles feel increasingly unattainable.

Challenges with contracting agencies

The dual management structure of contract work often leaves workers in the lurch. The contracting agency frequently delivers performance reviews (provided by the tech company to the contracting agency, then to the contract worker), time off requests, payroll, and HR functions. The tech manager, most often a direct employee of the tech company, oversees their day-to-day work and determines whether their contracts are extended—and differing levels of client employer involvement make it hard for workers to advocate for themselves or receive the support they need.

While contracting agencies are generally expected to be responsible for HR functions, workers reported them to be overwhelmingly unhelpful in resolving workplace issues. One interviewee we spoke with in 2023 referred to the contracting agency that placed them in their role as "a ghost in the machine" that simply processes payroll while adding little to no other support.

The alienation of workers from their contracting agencies goes beyond simple neglect. For example, some workers experienced deceptive practices that felt like wage theft to them. One interviewee shared that when moving from a subcontracted role to a permanent contract role at the same agency, "I reported I was making $25 an hour, but the company said their records indicated I was making $30 an hour. I had to show them my paystubs." This worker was eventually paid $7,000 in back pay.

MARIANNE'S STORY

Marianne was a senior writer overseeing other content writers at a major tech company. Suddenly and without warning, all of the writers on her team were pulled out and moved to work on the company's generative AI tool. This doubled the work for her and the other senior writers, who were only given a 50% time extension to fill in the gaps. When she reached out to her contracting agency for support, she and her coworkers were told to do "whatever [the client company] says and make them happy."

> "We [contract workers] are being pitted against each other in an invisible colosseum for a really, really small carrot. And we're undercutting each other. Again, what would have been a $50 or $60 an hour role was being shrunk down to $25 or $30 through the [contracting agencies]."
>
> Anonymous contract worker



This discrepancy between what the client company pays and what the contract workers receive is common. Contracting agencies often take upward of 30% of the money they receive from their client companies in recruiting and contracting fees. Across the contracting industry, markups can be as high as 100% of a contract worker's wages—often without the hiring manager knowing.[34]

We spoke with a hiring manager at a large tech company who was under the impression, based on her knowledge of her company's contract with the staffing agency, that the contract workers on her team made more than her direct employees. She assumed the rate they agreed upon was the rate that would be paid to the worker—but didn't realize that embedded in that rate was the contracting agency's cut. Not only was she unaware of the markup, but she also didn't realize that benefits were not a guarantee for her contract workers. Tech companies often pay contracting agencies enough for the agencies to offer family-supporting wages and benefits, but these benefits are often not provided to the workers.

Contract work creates a two-tiered workforce at tech companies

The practices that companies use to keep contract workers legally distinct from full-time employees (and shield themselves from the legal responsibilities of direct employment) promote a two-tiered worker hierarchy in which contract workers experience second-class treatment. The separation of workers affects everything from cafeteria access, shuttle service, and company-wide meeting privileges to critical needs to successfully perform their roles like contract workers' access to internal intranet systems, team meetings, and critical communications.

This lack of access can result in workers not being able to do their jobs successfully, not being notified when there are health and safety issues (like COVID-19 exposures and on-site shootings), and not being included in team meetings, even amidst emergencies.[35][36] Contract workers may have to wear differently-colored employee ID badges than directly employed staff, may be prohibited from attending work events with other staff, and are often, crucially, prohibited from even citing their work for tech companies on their resumes.

Interviewees thought prospective contract workers today needed to understand how separated they would feel from their directly employed colleagues. For those who were allowed to work from home, some enjoyed the flexibility, but others found the experience very isolating. Those who come into the office describe being physically separated from direct employees, told not to interact with them, and were not welcome to participate in organization-wide events (such as offsites, parties, and more). One final interviewee noted that the way they were treated in a contract role left them feeling "so disposable" to the point they felt as if "they were not even human."



Where We Go From Here

Given the growing role of automated systems and artificial intelligence in determining economic opportunity and the scale of the potential impact of generative AI, we need to ensure that workers have adequate protections and stability to withstand its impacts. Without intentional choices to ensure AI develops in a way that supports rather than undermines human flourishing, AI stands to make contract jobs more precarious and more vulnerable. AI-fueled layoffs from directly hired roles combined with a surging need for contract work to power AI makes for a future of work that is contracted, outsourced, and under-protected.

Throughout the Contract Worker Disparity Project, workers have been consistent about what needs to change: equal pay for equal work, greater stability, and better working conditions. Here's how we get there.

1. Enact industry-wide regulation

Our research points to initial indications that the impact of AI is starting to be felt in white-collar office jobs. As these workers are displaced, and as companies seem to be trying to shift capacity to outsourced roles to replace them, the need for robust protections for contract workers is urgent.

In our previous report, we released a Responsible Contracting Standard for values-aligned companies to adopt high-road contracting practices.[37] We were hopeful that tech companies would see the risks in continuing to operate in a way that undermined contract workers, but after conducting outreach to hundreds of companies, only one has voluntarily instituted changes in line with the standard. That indicates that there is still work to be done to change the calculus for companies who decide to contract out. We also have learned that for change to be sustainable and have a meaningful impact, it must be adopted across the industry. To achieve industry change, we need to implement effective guardrails that move the entire industry to action.

In 2023, New Jersey and Illinois both passed their own Temp Worker Bill of Rights, with protections such as equal pay for equal work, predictable scheduling, safety on the job, and more.[38] These laws dramatically improve the quality of jobs for temp and contract workers in each state, and provide a blueprint for other states to follow. As a historically strong labor state, California can and should follow their lead to ensure an equal playing field for all workers and close the loopholes in labor law that allow contract workers to fall through the cracks.

2. Expand our understanding of contract work beyond our borders

The news about AI and the workers powering it has exposed the interconnected nature of contract work around the world. While our initial research focused on contract workers within the US—often in jobs working side by side with directly employed workers on tech campuses—the trend towards offshoring these roles requires us to expand our conception of this phenomenon and its harms. We need to deepen our understanding of contract worker experiences around the world, how they relate to each other, and what we can do collaboratively with our partners outside of the US to improve conditions for workers across the global labor force.

3. Strengthen worker organizing efforts throughout tech

The very nature of contract work puts workers in siloes. It has been challenging (nearly impossible) for contract workers to coalesce and collectively bargain given how the workforce is divided. We need to build a large tent to help workers connect with each other, share their experiences, and organize for better conditions. We need unions like the Alphabet Workers Union that include direct employees, temporary workers, vendors, and contract workers alike to build solidarity with one another.[39] We need worker-driven platforms like Coworker.org that support organizing efforts in the tech industry.[40] We need organizations like Turkopticon that organize mutual aid, resources, and advocacy to improve conditions for ghost workers.[41] We need coalitions like the Athena Coalition that advocate for economic and political independence from Amazon and other monopolies.[42]



Centering Contract Workers

Ultimately, contract workers are the experts on this issue, and are the best equipped to lead the movement towards equity. The Contract Worker Disparity Project's research and analysis are the result of workers' willingness to share their ideas and experiences. Though AI claims to replicate and replace humans, we know that it can only exist through the humans that power it; let's ensure that these humans can live healthy and stable lives.

We offer our research, recommendations for responsible contracting and public policy solutions, and tech worker education as a set of tools for change. We hope that with these tools, contract workers, policymakers, advocates, and industry leaders can put an end to these harmful practices and ensure that everyone working in tech has a sustainable, healthy, and equitable workplace.

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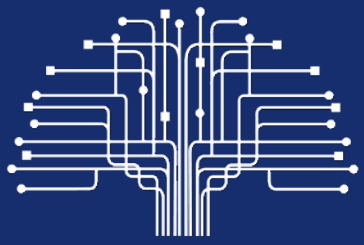
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