

# Crowd work and the “on-demand” economy

Ten years ago, university researchers launched a website in the United States giving digital platform workers access to information on the clients of these platforms, and therefore the opportunity to denounce those least respectful of their rights. With the support of trade unions, the project was adopted in Germany in 2015.

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**Faced with “Uberisation”, researchers and IT experts are responding by developing software to evaluate the platforms’ “social performance”.**  
Image: © Belga



Digital labor platforms such as Amazon Mechanical Turk, Uber, Upwork, Deliveroo, and Ohlala let customers use software — a website or a mobile phone app — to quickly outsource many types of work. These platforms connect customers to workers offering both local and remote services, from personal transportation, restaurant delivery, domestic work, and sex work to data processing, content moderation, graphic design, engineering, and programming.

Workers on digital labor platforms must usually agree that they will be legally classified as independent contractors, not employees. They are thus not entitled to minimum wage or other benefits and protections afforded to employees such as paid vacation, sick pay, overtime pay, dismissal protection, or collective bargaining. In some cases, legal experts and worker advocates agree that this classification is appropriate. In other cases, platform operators exert a great deal of control over pay, job assignment, working times, and working methods. In these cases, workers and unions argue that workers should be classified as employees.

From a union perspective, digital labor platforms pose both opportunities and risks. On the positive side, digital labor platforms expand labor market access: they make paying work available to people who might not otherwise have access to it. For example, internet-based platforms allow workers to work from home; this is especially important to people with care giving responsibilities. Workers who previously had no access to work are often grateful for it; however, expanded labor market access can also have negative consequences. For example, the increased competition among workers in a larger labor market can produce downward pressure on wages, job security, and job quality. More generally, the growth of precarious and largely unregulated work through platforms risks eroding workers' bargaining power, which may in turn lead to increasing economic inequality. Economic inequality in turn threatens democracy, a risk that can be seen in the recent advances made by anti-democratic movements in Europe and North America.

With these stakes in view, this article offers a short history of two efforts to support and improve digital platform workers' professional networking, collective identity formation, working conditions, and bargaining power.

### **Mechanical Turk and Turkopticon, 2008–2017<sup>1</sup>**

Mechanical Turk ("MTurk") is a website operated by Amazon on which clients, called "requesters," post tasks, and workers choose

tasks to complete for pay. As on many online labor platforms, workers must agree that they are independent contractors, not employees. After workers submit their work, requesters review the work and decide whether to "approve" or "reject" it. Workers are paid for approved work, but not for rejected work. Requesters can reject — decline to pay for — work for any reason. MTurk has an "application programming interface" ("API") that allows requesters to automate the process of posting and reviewing work. That is, requesters can write software that will decide automatically whether or not a worker will be paid for work.

In 2008, in response to reports from workers describing conditions of low pay, slow pay, poor communication, and arbitrary rejections (nonpayment), Lilly Irani and Six Silberman, then graduate students at the University of California, Irvine, designed Turkopticon, a website and browser extension that workers use to review requesters.

In the original version of Turkopticon, workers give requesters numerical ratings from 1 (worst) to 5 (best) on four dimensions: pay, pay speed, fairness of evaluation, and communication. In Turkopticon's early years, this rating system allowed workers to compare experiences and share thoughts about what it meant to be a "good" requester in terms of these four dimensions (e.g., what wage constitutes "good pay" or "good communication"). But after a while, disagreements emerged about the proper use of the rating system. Some workers, for example, would give good pay ratings for tasks paying around USD 6 per hour, while others argued that

<sup>1</sup> Parts of this section are adapted from Six Silberman and Lilly Irani, "Operating an employer reputation system: lessons from Turkopticon, 2008-2015," *Comparative Labor Law and Policy Journal*, 37(3), 2016.

any task paying less than US minimum wage should be given the lowest rating.

Some workers argued that the "fairness" criterion should be used only to indicate unfair rejections, while others found it useful to use this criterion to indicate other problems with tasks (for example, problematic screening methods). These disagreements created confusion and tension among workers. When new workers joined, they unwittingly entered this complex situation.

As a result, between 2015 and 2016 Irani and Silberman worked with workers to redesign the review format. As part of the redesign, reviews were changed from reviews of requesters to reviews of tasks, necessitating an entirely new version of the website and browser extension. Kai Li, an MTurk worker, data scientist, and programmer, volunteered hundreds of hours to co-design, build, and refine the new version of the site, which launched in March 2017. In addition to being centered on task-reviews rather than requester-reviews, the new review format attempts to separate "facts" about tasks from workers' opinions about these facts.

For example, instead of asking, "On a scale of 1 to 5, how good was the pay?" the new form asks how much the task paid and how long the worker took to complete the task. Because different workers have different ideas about what an acceptable wage is, the new version does not assign any evaluation to the wage data; it simply displays it. Similar changes were made to the questions about fairness of evaluation, pay speed, and communication. By September 2017 there were a total of about 400 000 reviews of 57 000 requesters in the original version of

Turkopticon and about 10 500 reviews in the new version. There were about 85 000 registered users; about 25% of these had written at least one review.

We know from speaking with requesters and from independent research that Turkopticon changes requester behavior in ways that are favorable to workers; but from a worker perspective the system has some drawbacks and limitations. Turkopticon is complex and time consuming to learn and use. Community members spend many unpaid hours writing, reading, and moderating reviews — time they could use to earn money.

These activities can become psychologically taxing, as Turkopticon users sometimes post aggressive or profane reviews, harass or threaten requesters or each other, or engage in well-meaning but heated debates about appropriate use of the system. The new version tries to address some of the most obvious problems of the original version. But, because we did not want to force workers to switch versions, there are (at least for now) two versions of Turkopticon, adding to possible confusion.

On its own, Turkopticon does not "solve" any of the problems facing workers on MTurk. Turkopticon is part of a large and complex network of informal mutual aid practices operated mostly on a volunteer basis by MTurk workers. This network includes worker-owned forums such as Turker Nation and MTurk Crowd; sophisticated software programmed by workers; and some tools developed by researchers. These forums and tools help ameliorate some of the issues arising for workers on Mechanical Turk, but they do not change the fact that MTurk is a

challenging, high speed working environment characterized by "arms-length" and often automated management and fierce international competition.

### **FairCrowdWork.org and the Crowdsourcing Code of Conduct: 2014–2017<sup>2</sup>**

In 2013, IG Metall started to devote significant attention and resources to the topic of crowd work. As one result of these early efforts, IG Metall officials Christiane Benner and Vanessa Barth, with the researcher Florian Alexander Schmidt, published *Crowd work — zurück in die Zukunft? Perspektiven digitale Arbeit*<sup>3</sup> ("Crowd work: back to the future? Perspectives on digital work") in 2015. This volume brings together researcher and unionist perspectives on the opportunities and risks of digital labor platforms for workers and unions. In May 2015, IG Metall launched FairCrowdWork.org, a website that let workers rate working conditions on platforms.

In late 2015, IG Metall entered into dialogue with several German platforms, including the platforms behind the "Crowdsourcing Code of Conduct," a set of guidelines developed by several German platforms for "prosperous and fair cooperation" between platforms, clients, and crowdworkers. In collaboration with these platforms, Benner, Barth, Silberman, and colleague Robert Fuss surveyed hundreds of German crowd workers on six platforms in 2016.

These surveys collected information about demographics, earnings, other employment, and workers' opinions about the platform and the Crowdsourcing Code of Conduct. To find out which points in the Code of Conduct were most important to workers, Fuss and Silberman developed an online version of a topic prioritization method that is often used in union workshops. In the "offline" version, items are listed on a flipchart. Participants are given a set of 3-10 stickers which they are asked to place on the flipchart next to the topics they find most important. Topics are then ranked according to the total number of stickers received.

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2. Part of the third paragraph in this section is adapted from Six Silberman and Ellie Harmon, "Rating working conditions in digital labor platforms," in submission to Computer Supported Cooperative Work.

3. Benner C. (2015) *Crowdwork – zurück in die Zukunft? Perspektiven digitaler Arbeit*, Bund-Verlag, Frankfurt am Main.

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## In addition, the international nature of some labor platforms challenges traditional modes of regulation and organizing.

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In the 2016 online survey, Fuss and Silberman listed the ten topics in the original Code of Conduct and asked workers to distribute ten "virtual stickers" among them. Each person was limited to placing at most three "stickers" per topic. By far the most highly rated topic was "fair payment." This confirmed our hypothesis that many people work on digital labor platforms to earn money, and not simply "for fun" or "to pass time," as others have suggested.

After discussing our survey results with the platform operators who had initiated the Code of Conduct, the "fair payment" topic was revised in a second version of the Code, released in late 2016. In the first version, this text had simply stated that workers should know how much they would be paid for completing a particular task. In the second version, text was added indicating that platforms would include "local...wage standards" as a factor in setting task prices. This is one small step toward setting fair standards for platforms.

During this same time period, human-computer interaction researcher Ellie Harmon and Six Silberman were designing the second version of FairCrowdWork.org, IG Metall's website about digital labor platforms. The website was originally created in 2015 to allow crowd workers to rate the working conditions on labor platforms. However, it was impossible to verify that every user reviewing a particular platform had actually worked on that platform. Second, the first version of FairCrowdWork.org asked workers to assign

star ratings to five aspects of their work experiences (pay, tasks, communication, evaluation, and technology).

However, as discussed above with regard to Turkopticon, asking workers to assign star ratings directly is problematic because different people have different ideas about how a particular rating translates to a concrete working condition. Taking this lesson into account, Harmon and Silberman re-designed FairCrowdWork.org and its rating system in 2017. Instead of asking workers to enter ratings directly, the ratings are now calculated based on responses to a 95-question survey. The survey was posted on crowd work platforms directly to ensure that all reviews are from actual crowd workers. The star ratings are now calculated based on workers' responses to multiple concrete questions about each aspect of working conditions, making the ratings reliable and comparable with each other.

The new version of FairCrowdWork.org is another step toward creating more transparency in the world of digital labor platforms.

### What have we learned? What now?

Worker-developed projects such as the MTurk Crowd forum can be described as "bottom up" in that they are initiated independently by workers without support from platform companies, unions, or government.

In contrast, the institutional position of the unions in Germany allowed IG Metall to take a more "top down" approach in the Crowdsourcing Project, initiating contact with platform operators over specific issues such as the Code of Conduct, and reaching out to workers at scale through broad surveys. In the future, "bottom up" and "top down" initiatives will complement and reinforce each other. While "bottom up" initiatives often respond directly to felt needs of workers, they often struggle with personnel burnout, financial shortages, a lack of media access, and a dearth of legal and other specialized expertise. "Top down" efforts begun by institutions have access to media, legal expertise, political connections, and some amount of financial stability. However, individuals working in institutional settings have responsibilities to stakeholders in their own organization in addition to workers. As a result, they can face challenges responding quickly and flexibly to workers' needs.

In considering the future of organizing on digital labor platforms, it will be important to address the question: How can "bottom up" networks and "top down" initiatives best support and complement each other in efforts to build worker power in digital labor platforms?

In addition, the international nature of some labor platforms challenges traditional modes of regulation and organizing. While platforms for "in person" work (e.g., cleaning, transportation) can be regulated by workers' local governments, and their workers can be represented by local unions, it is more challenging to regulate platforms and represent workers who perform tasks remotely. What can be done legally and institutionally to support a worker working in Country A on a platform based in Country B for a customer in Country C? What rights does such a worker even have? And who should defend those rights?

As platform based work continues to grow, workers, forward-thinking platform operators and customers, unions, researchers, regulators, and other stakeholders will need to work together to develop answers to these difficult questions. ●