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TECHNOLOGY

The Truth About How Uber's App Manages Drivers

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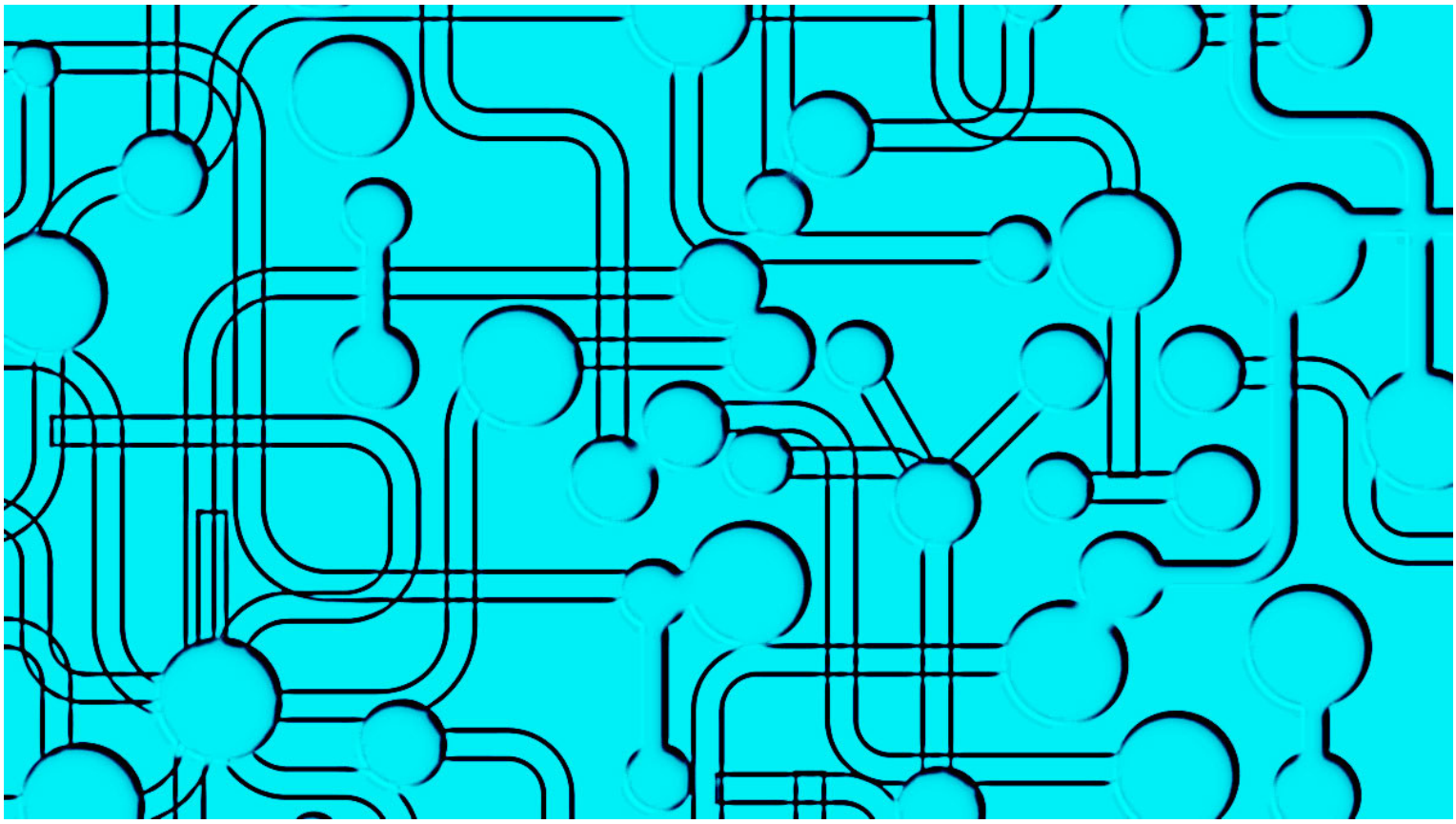

Since Uber was founded, in 2009, its workforce has continued to grow exponentially: 400,000 drivers are considered "active" on the Uber platform today, and 1.1 million drivers are active on the

The tension between trying to standardize an experience and giving drivers true independence has manifested in two lawsuits. The first is O'Connor v. Uber Technologies, a pending class-action lawsuit by Uber drivers in California, which alleges that drivers are misclassified as independent contractors. (Uber argues that its business model is premised on licensing software that acts as an intermediary between passengers and drivers.)

The second is a new lawsuit, Meyer v. Kalanick, which alleges that Uber's ability to set prices through an algorithm violates antitrust law. It is led by an Uber passenger claiming that Uber's CEO, Travis Kalanick, conspires with drivers to engage in price-fixing (such as surge pricing), when, because they are independent contractors, drivers should be competing to set their own prices. (Uber says that these claims are unwarranted.) U.S. District Judge Jed Rakoff recently denied a motion by Kalanick to have the lawsuit dismissed.

These cases clearly point to the importance of understanding how platform-employers operate, and how work is structured within semi-automated, algorithmic management systems.

Last year, my colleague Luke Stark at NYU and I spent nine months studying how U.S. Uber drivers interact with the platform. We analyzed online driver forums, where tens of thousands of drivers share advice and compares notes on their experiences and challenges with the Uber system. We also conducted in-depth interviews with seven drivers to explore worker experiences of the on-demand economy.

We found that through Uber's app design and deployment, the company produces what many reasonable observers would define as a managed labor force. Drivers have the freedom to log in or log out of work at will, but once they're online, their activities on the platform are heavily

Algorithmic management, however, can create a deal of ambiguity around what is expected of workers — and who is really in charge. Uber's neutral branding as an intermediary between supply (drivers) and demand (passengers) belies the important employment structures and hierarchies that emerge through its software platform.

Uber sets the rates. Uber has full power to unilaterally set and change the fares passengers pay, the rates that drivers are paid, and the commission Uber takes. While Uber's contract with its "partners" outlines (section 4.1) that the fare Uber sets is a "recommended" amount (drivers technically have the right to charge less, but not more, than the pre-arranged fare), there is no way for drivers to actually negotiate the fare within the Uber driver app.

Uber sets the performance targets. Uber's three main performance metrics are the driver's rating, how many rides the driver accepts, and how many times they cancel a ride. Generally, Uber requires drivers to maintain a high ride acceptance rate, such as 80% or 90%, and a low cancellation rate, such as 5% in San Francisco (as of July 2015), or they risk deactivation (temporary suspension or permanent firing) from the platform.

Uber's system enforces blind acceptance of passengers, as drivers are not shown the passenger's destination or how much they could earn on the fare. While this could deter destination-based discrimination, and Uber markets this as a feature of its system, whenever Uber drivers accept a ride, they effectively take a financial risk that the ride will only cost the "minimum fare," an amount that varies by city. In Savannah, Georgia, for example, the minimum fare is $5 for uberX, which drivers perceive as unprofitable, because Uber takes a $1.60 booking fee (formerly a "safe rides" fee) off the top, plus their commission of at least 20% on the remaining $3.40. That leaves the driver with $2.72, not accounting for any of their expenses, such as gas.

Customers act as managers. Uber's rating system serves to automate and alert the company to drivers who are under-performing. After every ride, passengers are prompted to rate drivers on a 1-

Though rating systems can build and scale trust and accountability in platforms, they have their flaws. Passengers are generally not educated on Uber's rating system; they may presume that 4 out of 5 stars is a good rating, but such a score is actually a failing grade. Discrimination may also be of concern, as consumers can directly assert their preferences and their biases in ways that companies are prohibited by law from doing.

To achieve good ratings, drivers must modify their behavior to produce a fairly homogenous Uber experience. The company encourages uniform behavior in a few ways. Uber's training video, for example, say that 5-star drivers provide phone chargers or bottled water. And the company routinely sends messages to drivers that explain how passengers rate particular behaviors. For example, one includes suggestions such as, "Go above and beyond to make the experience special, such as opening doors for riders when possible," and "Ask if the rider has a preferred route," and "Riders…prefer for drivers not to promote other businesses during the trip."

This redistribution of managerial oversight and power away from formalized management and toward a triadic relationship between employers-workers-consumers is part of a broader trend in the on-demand economy, and in the service industry more generally. "The customer is always right" takes on a new higher-stakes meaning.

Uber suggests the schedule. You're probably familiar with Uber's surge pricing model. It goes into effect when demand (passengers) outstrips supply (drivers) by a particular threshold. Visible to both riders and drivers, the creation of such surge pricing zones is billed as a means to ensure positive customer experience by enticing drivers to get on the road, although there is some evidence that it merely redistributes existing supply into high-demand areas.

Drivers are alerted to surging zones through a heat map visualization, which shows where demand and fares will temporarily rise, by a magnitude that could range from 1.5x-9.5x. Drivers are prompted by Uber's alerts to go online, or to keep driving (even as they click the "log off" button) to

Our research, however, found that the promise of higher wages from surge pricing is often unreliable. First, pricing is based on the passenger's location. Drivers traveling to surge zones in search of fares advertised at a given rate would still receive ride requests from passengers in adjacent non-surging areas and have to stop to pick them, or risk their cancellation rate go up. Drivers can also converge en masse at a surging area, only to find that supply was no longer too low and the surge premium had disappeared. On forums, various drivers advised others, "Don't chase the surge." Nevertheless, drivers develop their own estimates of when surge is worthwhile, such as if they're close by, or they plan to work at times when certain areas of town usually surge, such as closing time at bars or near concert venues.

Aside from surge messaging, Uber also nudges offline drivers to work at certain times or in certain locations through various incentives and messaging. The result can be tantamount to shift work, although drivers are encouraged rather than scheduled to work at those times.

Most conversations about the future of work and automation focus on issues of worker displacement. We're only starting to think about the labor implications in the design of platforms that automate management and coordination of workers. Tools like the rating system, performance targets and policies, algorithmic surge pricing, and insistent messaging and behavioral nudges are part of the "choice architecture" of Uber's system: it can steer drivers to work at particular places and at particular times while maintaining that its system merely reflects demand to drivers. These automated and algorithmic management tools complicate claims that drivers are independent workers whose employment opportunities are made possible through a neutral, intermediary software platform.

In many ways, automation can obscure the role of management, but as our research illustrates, algorithmic management cannot be conflated with worker autonomy. Uber's model clearly raises new challenges for companies that aim to produce scalable, standardized services for consumers through the automation of worker-employer relationships.

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Denise de la Cerda 2 years ago

I'm an Uber driver in NYC. The app says that I have an 85% acceptance rate even though I quickly accepted every ride that that came through to me. My first week the app said that I had a 64% acceptance rate even though I had accepted every fare, which disqualified me from having the first week of my car rental paid. I drove over 40 hours the first week and through

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