



# Disturbing data

Big Tech is on the brink of a labour movement with far-reaching commercial implications

BY MIRJAM GUESGEN



PHOTO : MATHIEU DUNBERRY

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# If 30% of people went on a data strike it would effectively remove 20 years of AI innovation.

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– BRENT HECHT ■ ASSISTANT PROFESSOR AT NORTHWESTERN UNIVERSITY

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## Every day, you work for Big Tech

When making your way to a morning coffee meeting, you're working for Apple. When browsing for new headphones over lunch, you're working for Amazon. And when rating that film you watched before bed, you're working for Netflix.

But unlike the computer scientists or software engineers who write code or create apps, this kind of work is harder to quantify and harder to monetize. Nonetheless, we are data labourers. And if we're working for these companies, we should be paid.

## Your data has value? You should be paid? Check and cheque

Every time we click, search, rate or view, we generate data that feeds artificial intelligence algorithms ever-hungry for new input. These algorithms are the technology that makes our lives more convenient, from relaying traffic congestion information, to finding the right search results, to recommending a television series or household product we might like. Those conveniences are what companies rely on to keep us coming back or spending more.

This reliance on — and profit from — our data has some technology experts calling for a fairer system. This is the idea behind “data labour.” Getting to the point where a cheque shows up in the mail would completely change the landscape of data sharing and use as we know it.

Our data is valuable. Companies that use personal data for tailored advertising (the Facebooks and Amazons of the world) together generated \$178 billion in profits from those ads, according to professional service network PricewaterhouseCoopers. Include data brokers, companies whose sole purpose is to actively collect data to sell, and add another \$21 billion.

Brent Hecht, an Assistant Professor at Northwestern University who explores the intersection of human/computer interaction, geography and big data, is proposing a new data labour economy. He thinks we should be getting a slice of the pie and his research tries to

make people aware of just how valuable their data labour is.

“We use the third person when we talk about artificial intelligence,” says Brent. “Amazon did this, Facebook did this, Google did this. It doesn't happen without the very impressive engineers and scientists at those places, but it also doesn't happen without the data labour from the general public.”

For example, his research group found that information from Wikipedia, which is created by users, improves Google's search success by 80%. That is, someone is more likely to click on a result Google generates if its algorithm can draw on Wikipedia data. They presented their findings at a meeting of the Association for the Advancement of Artificial Intelligence in 2017.

The opposite is also true. Withholding or deleting data, also known as going on a data strike, could set artificial intelligence back decades, according to their 2019 paper “Data Strikes: Evaluating the Effectiveness of a New Form of Collective Action Against Technology Companies.” If 30% of the population stopped rating movies and deleted their previous ratings, for example, an algorithm like one that Netflix uses to recommend what to watch next would shrivel to resemble primitive systems from 1999. And this is a conservative estimate, Brent and colleagues write in their paper.

“The broader AI ecosystem would grind to a halt if this stream of free [data] labour stopped.”

## How big is your piece of the pie?

The least complicated way to get money out of our data is to simply divvy up the profits a company makes from that data, like dividing revenue from personalized advertising. Private economics firm Sonecon argues that 50% of revenues should be shared among data labourers, since companies will pay 52% more for ads that are personalized using data than unpersonalized ads. That would see Americans earning \$183 in 2020 and around \$308 by 2022 if you include credit card and healthcare information.

It becomes more difficult to value, monetarily, the contributions data makes to AI algorithms. “This is really emerging and things are uncertain and there’s not any hard and fast numbers yet,” says Nick Vincent, one of Brent’s PhD students.

Services like Streamr, Datum and Facebook’s own Study are popping up and offering payment for the ability to peek in on your phone or browser’s activity. Some are touting compensation upwards of \$2,000, however most pay out in cryptocurrencies. Paying in cryptocurrency is a way for these services to get rid of overhead, explains Ethan Lou, author of the upcoming book *Once a Bitcoin Miner*. “The cynical view, however, would be that it is a gimmick,” he says. There is no need to pay in cryptocurrency, but “it’s good for publicity and fundraising,” he says.

There’s still a ways to go before a data labour economy exists. Competition between companies vying for public acceptance, data unions and government support are all needed for a data economy to become reality, as researchers from Stanford and Columbia University wrote in the 2017 paper “Should We Treat Data as Labor? Moving Beyond ‘Free.’” Computer scientists, social scientists, economists and the public will be the ones to drive this change, they add.

## Making Big Tech pay

Aside from monetary reimbursement, Brent and Nick argue that the real power of our data labour is the ability to exert pressure on Big Tech. Individuals could band together to form “data unions” that would act much the same as traditional labour unions, Nick explains. “In the collective, the value of data is very nontrivial and people acting collectively could exert large leverage,” he says. They could lobby, for example, for changes in privacy policies or who the company shares their data with.

The advantage of a data strike, over boycotting the service or company altogether, is that people can continue to use the product while still bargaining for what they want.

“Not only do you have a low barrier of entry way to exert your opinion, but you also have one that’s robust against monopoly power,” says Brent. “Even if Amazon is the only place you shop, you still have the ability to have your opinion known.”

Local organizations, like the Dutch group The Data Union, or international ones, like the Data Workers Union, bring technology users together to advocate for their data rights. Many want users to control their data and receive a Data Basic Income (a fixed payment for generating data). Union members speak at conferences and to the media, or lobby governments to create regulations that support their principles.

Through government support such as the European Union’s General Data Protection Regulations, which allow people to ask a company to delete all their data, the ability to influence how Big Tech operates is becoming more feasible. Canada’s Standing Committee on Access to Information, Privacy and Ethics is now calling on the Canadian government to follow suit.

“Technology gets its power through control of data,” said Jim Balsillie, chair of the Centre for International Governance Innovation, in a June 2019 standing committee report.

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## steps in transitioning to a data-as-labour economy

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**Corporate mindset change.** Tech companies come to realize they stand to benefit from paying people for their data, fuelling growth and usership as well as promoting the long-term stability of data generation.

2

**Competition.** Leading tech companies win public acceptance and increase usage of their platform by offering reimbursement for user data. This would push other Big Tech to follow suit. Startups take on the data labour model from their company’s inception.

3

**Data labour unions.** Tech users, otherwise known as data labourers, can collectively bargain for reimbursement or rights by striking [withholding or deleting their data] or boycotting a company altogether.

4

**New regulatory frameworks.** Their development helps shift data ownership rights over to users by giving them the ability to delete data that companies collect from them or transfer their data to competitors.

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**Data is not the new oil.  
It's the new plutonium – amazingly  
powerful, dangerous when it spreads,  
difficult to clean up and with  
serious consequences when  
improperly used.**

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– JIM BALSILLIE ■ CHAIR OF THE CENTRE FOR INTERNATIONAL GOVERNANCE INNOVATION

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## People power for data dignity

Recognizing online or digital activity as work or a contribution to an evolving society, rather than a source of distraction, ultimately dignifies it, says Nick.

Data dignity is the idea of valuing people who create data and, according to behavioural economist Julia Puauschunder, dignity is inherently tied to data labour. Someone who has dignity is someone who is treated fairly, has privacy and choice. Data dignity means extending those principles to data creators, giving them autonomy and the ability to voice what data is taken and how it's used.

“Unpaid labourers should not only be compensated for their opportunity costs of time but should enjoy the workers' privilege of right to privacy, prevention of misuse of the information they share and have the right of access to accurate information,” she wrote in a [2018 paper](#) for the *International Journal of Commerce and Management Research*.

A retort by some members of the public to such ideas is “I don't care what's done with my data, I've got nothing to hide.” But Brent says more can be inferred from our data than we may realize, like our religion, politics or who we know. Whether we want to conceal that information is simply a matter of what society at the time dictates is acceptable or not.

“My general assumption is that everyone has something to hide, not because they did something bad but because society changes a lot,” says Brent. “Information is power. And it can be used well and it can be used badly. Well and badly depends on social context.”

“Even if you really believe you have nothing to hide, your data is still supporting the company that is being used to target other people,” adds Nick.

In the end, it comes down to empowerment. As legendary punk poet Patti Smith sings, people have the power. More than we realize, and definitely more than we currently exert.

“Right now we're on an unsustainable path,” says Brent. “In a world where a lot of our work has been automated away, valuing our [data] work is an important solution.” [P2](#)

