Hed: They need us more than we need them

Dek: Internet giants are using us for our private information. Let's start acting like it.

The internal combustion engine has been dominant for over a hundred years—not because it's the best possible engine, but because through historical accident it gained an initial advantage. The QWERTY keyboard layout was designed to be deliberately inefficient because the mechanical keys of the typewriter would jam less frequently. That feature is no longer relevant but it doesn't matter—we're still typing on QWERTY keyboards because that's what people are used to.

The same principle is what makes Google or Facebook or Amazon so massive. We use them because we're used to using them. Google's not just a search engine, it's an email address (Gmail), a conference-call maker (Hangouts), a document creator and editor (Docs)—all of which are designed to maximize the advantages of sticking with Google: if you don't have a Gmail address, you can't use Google Hangouts. And so on.

Why is this a problem? Well, maybe because these giants are making huge profits from a technology (the internet) that was originally developed by the military with taxpayer money. Indeed, Google's algorithm came from NSF funding, and the internet came from DARPA funding. The same is true for touch screen display, GPS and SIRI. From this patient finance provided by Uncle Sam rather than venture capital, the tech giants created de facto monopolies while evading the type of regulations that would rein in monopolies in any other industry. And their business model is built on taking advantage of the habits and private information of the very taxpayers whose funds were used to create the internet in the first place.

Apologists like to portray the internet giants as forces for good. They praise the sharing economy in which digital platforms empower people via free access to everything from social networking to GPS positioning to health monitoring.

But Google doesn't give us services for free. It's really the other way around—we're handing over to Google exactly what it needs. When you use Google's services it might feel like you're getting something for nothing, but you're not even the customer—you're the product. The bulk of Google's profits come from selling advertising space and users' data to firms. Facebook's and Google's business models are built on the commodification of personal data, transforming our friendships, interests, beliefs, and preferences into sellable propositions.

The so-called sharing economy is based on the same idea. It's not about altruism; it's about allowing the market to reach into areas of our lives—our homes, our vehicles—previously beyond its scope.

This new way in which we get goods and services is often referred to as "platform capitalism." Instead of interacting with some kind of institution (like a travel agency), customers interact with each other. The role of a company, then, is not to provide the service but to connect sellers (like someone who owns a car and is willing to drive it) with buyers (someone who needs a ride). These "platforms" are presented as a radical transformation in the way that goods and services are produced, shared, and delivered. But they're also an easy way for companies to avoid responsibility. When disabled users complain to Uber about their drivers refusing to put wheelchairs in the trunk, Uber says, well, we're not a taxi company, we're just a platform. Airbnb is similarly reluctant to take responsibility for the safety of the premises offered on its site, or for racial discrimination against renters by property owners. After all, Airbnb didn't build the apartments and doesn't own them—it's just a platform.

And because of network effects, the new gig economy doesn't spread the wealth so much as concentrate it even more in the hands of a few firms (see TK, page TK). Like the internal combustion engine or the QWERTY keyboard, once a company establishes itself as the leader in a market, its dominance becomes self-perpetuating almost automatically.

Google accounts for 70 percent of online searches in the US, and 90 percent in Europe. Facebook has more than 1.5 billion users, a quarter of the planet's population. Amazon now accounts for around half of the US books market, not to mention e-books. Six firms (Facebook, Google, Yahoo, AOL, Twitter, and Amazon) account for around 53 percent of the digital advertising market (with just Google and Facebook making up 39 percent). Such dominance means online giants can impose their conditions on users and customer firms. Book publishers, for example, might be unhappy with the conditions Amazon imposes but they have no leverage—there are no other Amazons to turn to. By the same token, you might not be happy about Facebook appropriating, storing, analyzing, and selling your personal data to third parties, but as long as all your friends are on Facebook, there is no equivalent competitor you can turn to.

Historically, industries naturally prone to being monopolies—like railways and water—have been heavily regulated to protect the public against abuses of corporate power such as price-gouging. But monopolistic online platforms remain largely unregulated, which means the firms that are first to establish market control can reap extraordinary rewards. The low tax rates that technology companies are typically paying on these large rewards are also paradoxical, given that their success was built on technologies funded and developed by high-risk public investments: if anything, companies which owe their fortunes to taxpayer-funded investment should be repaying the taxpayer, not seeking tax breaks.

The other question we should ask is how the value of these companies has been created, how that value has been measured, and who benefits from it. If we go by national accounts, the contribution of internet platforms to national income (as measured for example by GDP) is represented by the advertisement-related services they sell. But does that make sense? It's not clear why ads should contribute to the national product, let alone social well-being—which should be the aim of economic activity. Measuring the value of a company like Google or Facebook by the number of ads it sells is consistent with standard neoclassical economics, which interprets any market-based transaction as signaling the production of some kind of output—in other words, no matter what the thing is, as long as a price is received, it must be valuable. But in the case of these internet giants, it's misleading: if online giants contribute to social well-being, they do it through the services they provide to users, not through the accompanying advertisements.

This way we have of ascribing value to what the internet giants produce is completely confusing, and it's generating a paradoxical result: their advertising activities are counted as a net contribution to national income, while the more valuable services they provide to users are not. And the discussions about the value they are producing misses the collective contributions that make it happen.

Let's not forget that a large part of the technology and necessary data was created by all of us, and should thus belong to all of us. The underlying infrastructure that all these companies rely on was created collectively (largely financed via the tax dollars that built the internet), and it also feeds off network effects that are collectively produced. There is indeed no reason why the public data should not be owned by a public repository that sells the data to the tech giants, rather than vice versa. But the key issue here is not just getting a part of the pie of profits from data back to the citizens, but also allowing them to better shape the evolution of the digital economy so that it satisfies public needs. Using big data and AI for improving the services provided by the welfare state—from health care to social housing—is just one example.

Only by thinking about digital platforms as having been created collectively can we construct a new model that creates something of real value, driven by public purpose. We seem never far from a media story that stirs up debate about new regulation for tech companies—creating this sense of a war between the interests of those companies and national governments. We have to move beyond this narrative. The digital economy must be co-shaped; it is a partnership of equals where regulators should have the confidence to be market shapers and value creators.

Mariana Mazzucato is a professor in innovation and public value at University College London, where she directs the Institute for Innovation and Public Purpose. This article is an edited excerpt from her new book The Value of Everything: Making and taking in the global economy.