



The United States of Data I:

The Economic Impact of Data Convergence

Speakers:

Marco Annunziata, GE

Diana Farrell, JPMorganChase Institute

Moderator:

David Kirkpatrick, Founder and CEO, Techonomy Media

(Transcription by [RA Fisher Ink](#))

Kirkpatrick: What we're going to discuss on this session is what can we do with all this data? What does it mean? We have Marco Annunziata, who is the chief economist at GE, just give us a quick career summary, Marco.

Annunziata: I studied economics and got my PhD in economy. I worked at the International Monetary Fund doing policy work in emerging markets and industrial economies for about six years, then went into investment banking, always on the research side. And six years ago, I saw the light and GE attracted me and I went into industry and technology and I've never looked back.

Kirkpatrick: Now, Diana I've known for quite some time, when she was running the McKinsey Global Institute. Did you help create the McKinsey Global Institute?

Farrell: No, its founding partner—it started before me—had focused only on the productivity question. So we expanded beyond productivity to a whole range of different things. But I was not the founder, I was the one who expanded it.

Kirkpatrick: And then you've been recently in the White House. What were you doing there exactly?

Farrell: I was the deputy director of the National Economic Council right during the transition and the first two years of the administration.

Kirkpatrick: And now you have started the JPMorgan Chase Institute. So quickly describe what that is.

Farrell: Let me tell you what it is, because it's a very exciting thing for many people in this room. If you think about the way we understand our economy today, it's based primarily on an architecture of data collection that emanated from the Great Depression, when we didn't understand what was happening then, and then subsequently was upgraded after the Second

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World War. But it's got at its heart a certain view of the economy that is very old economy and it has at its heart a survey-based approach to understanding what's happening. We were just talking on the way over here that survey-based approaches, i.e. poll-based approaches are very problematic.

So what we're doing at the JPMorgan Chase Institute is we're saying think about the window that JPMorgan Chase has on the world, through all the transactions and all the operations that it has, and if we could translate those data into what we would recognize as economic concepts, that's an incredibly strong sensor on what's happening. And so we are in fact coding these data into our own data assets and developing from that a perspective on the household sector, on consumers and individuals, the small business sector, and eventually we'll move on to the financial market sector too. So think big data technology platforms meets behavioral economics against a \$2.4 trillion dollar balance sheet of activities, which is what JPMorgan Chase is.

Kirkpatrick: Well, mentioning the problem with polling to one of the most relevant things about a data session right this minute is that data has recently failed us to a tremendous degree. Everyone. I mean, even the Trump campaign themselves thought he was going to lose. So something happened that was problematic that we have to find a way to avoid in the future, and not just in political campaigns. I think a crisis probably is descending on the field of polling right now in a major way. I would hope that it would extend even to things like the BLS and how it functions, although I doubt it.

But the other thing that I want to just put on the table—and I really can hear anything you want to say about it, either one of you—that came up in our opening session is this fact that the data shows that life is getting better by every measurable indicator, not just in the United States, but in almost literally every country except maybe Russia. Yet people feel that their lives are worse. They don't believe the data or else—I think it's not just that the data's meaningless to them, they don't have a sense of self-worth, which we've talked about in the dignity issue, which I think is real. But people literally don't believe the data, and there was a big piece in the paper just this last week about how Trump successfully got many of his followers to question the legitimacy of BLS data and about the US economy and saying that it was rigged to favor the incumbent administration, whereas in fact, it's career civil servants that do it. They've been doing it for Republicans, Democrats. They keep doing it the same way. Maybe it's wrong, but it's not because it's rigged. It's just because it's sloppy or poor methodology that's outdated. And at the same time, I think—and I want you both to talk about this—we have this opportunity to make everything work better with data. So how do we square that, whatever that metaphor is?

Annunziata: So there's so many aspects of this, which is fascinating. First of all, I feel extremely strongly about the idea that things are getting better. It's something that's been driving me crazy over the last five to six years. When you look at the performance of the US

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economy and it's been improving and yet everybody tells you constantly that we are still in a recession, things are getting worse, and it's just not true. So there are issues of inequality we have to address, but the fact that the data, but also—the data on the economy are also reflected in the perception of people. What I think is fascinating is when you look at surveys of consumer sentiment, people are optimistic if you ask them how they feel in terms of the economy.

I think we have two problems here. One is the confidence and the trust in the data, which as you pointed out is disaggregating. And I think part of the reason why this is happening is now that the data are so fashionable, everybody is taking over. Everybody is tweeting one piece of information or one impression which is then sold as data and once it's retweeted ten times, it becomes accepted science and wisdom.

The second problem I think we have is that the narrative remains more powerful than the data. We're seeing a situation where perhaps because we haven't educated people enough to look at the data, think and trust the data, if you have a story which is sufficiently catchy, it will overwhelm the evidence.

Kirkpatrick: But that's always going to be true, Marco, don't you think?

Farrell: Yes, that's why you're always going to have a job.

Kirkpatrick: Narratives are not going away. Maybe people need to figure out how to make their own narrative better.

Farrell: But I would complicate the story a little bit. I think one of the things that we're learning as we analyze what we think is happening with the economic and financial lives of Americans—because we're starting with the Chase Platform, which as you know is a US retail platform and therefore we're primarily informing what's happening in the US economy to begin with—is that even as the economy has gotten stronger, the unemployment rate has come down to pretty historic levels, we've had 70 quarters of growth. I mean, it's really extraordinary—70 months of continuous employment growth. There's a level of anxiety that is permeated and we observe that in the work that we do when we map income and consumption volatility for individuals. We find that most Americans are actually facing very high levels of income volatility and that means that even when things are looking better, what they experience is a lot of uncertainty and a lot of anxiety. And that's part of what's playing out, which I think is not just—I completely agree with your point, Marco, about the narrative taking hold independent of data. But there is something real that I think a lot of our economic models have actually wiped away in the attempt to eliminate seasonality and smooth things out. That is not the reality of what most people are experiencing. So we see, for example, payroll coming in and we're seeing take home pay month to month is actually quite volatile for most Americans. Fifty-five percent of Americans will see a swing in their income of over 30% on a month to month basis in a given year. That's extraordinary.

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Kirkpatrick: Wow. No wonder they're freaking out. You can't blame them.

Farrell: That's exactly right. And no wonder that they're having a really hard time managing their finances, because so with income, so with consumption. So consumption volatility is also quite high and when people live with a very small liquid buffer of assets—which we know they do; they don't have many savings to rely on—those things send them into a real tailspin. And this is really important to understand because people who follow low income communities, etcetera have been saying this for a long time, sort of the liquidity trap that many low income Americans face. But what we found was this is true for almost all Americans. Quintiles one, two, three, four, all of them are facing these very high levels of income and consumption volatility and they don't have the liquid buffer to withstand it. So you have to be in the top quintile not to have that be a real issue. So there is a real thing going on there.

Annunziata: Can I add just one comment. Another part of the problem is that so far the promise of the data has consistently outpaced the value that the data have actually delivered. And I'll give an example. So we at GE are very big on the industrial internet, which is essentially building the complement to what Diana is doing, which is collecting data from all industrial machines, whether it's jet engines, gas turbines. And this is something that, combined with software, gradually gives you enormous efficiency gains and it's something that we're puzzling in the US why is US productivity growth so slow. I think as you see these innovations scale through the economy, productivity will be bootstrapped and will accelerate enormously. But there has been so much hype about data and then when you look at the power that the data have acted onto the economy, so far it's small. And I think this gap has undermined the credibility of data and has made it easier for the critics to say, well, the data are not really helping, whereas what's happening is the data are laying the basis, we are laying the basis to use the data to generate value and you will see that unfold over the coming years.

Kirkpatrick: But one of the things that's implicit in what I think you're both saying, but particularly what you said a minute ago, Diana, is that there are other measures that we need to be thinking about systemically, whether it's at the national government level or the level of an institute like yours, which, as it gains more credibility, maybe will be able to have influence. So I guess I'm curious how likely you think it is that we can redefine things like income. Because in fact, you're saying if volatility is that important, it needs to be measured right alongside the amounts and promulgated in the same way. But is there any hope that we'll move toward that kind of understanding of what's really going on?

Farrell: I don't know. And there was a conversation from yesterday, I think the fellow from OMB was talking about how there's been sort of this presumption that we're moving toward more and more integrated data systems, which I think would be necessary to do that. But there are lots of forces that are moving away from that, which are fear of hacks and fear of this, that are forcing people to kind of ring fence their data and making that harder. But I do think that one of the most important ways that could ever happen, one of the most important things that

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needs to happen for that, is for data systems to be able to talk to each other in ways that give us a complete picture. So if you think about, for example, almost all of the data collection efforts that our government undertakes are narrow collections. So we have a consumer expenditure survey and they go and they survey expenditures. They have a personal income survey and they survey income. But nobody's connecting your income to your consumption in a way to really understand how these things come together. So the closest we have to that is the survey of consumer finance, which the fed does every three years for the nation as a whole. It's fewer than 5,000 households. It's done every three years and it's not even longitudinal.

Kirkpatrick: Meaning?

Farrell: Meaning you're not tracking the same people over time. So you're just taking a random sample every 5,000. So for us to understand really important questions, we need to understand how is this playing out at the integrated view of income and consumption, assets and liabilities? That's what we're trying to build at the institute. But will we get there? Only if we find ways of connecting the good data we have, the not so good data, and really bring them together, and I'm skeptical of that.

Kirkpatrick: Do you have any thoughts on that?

Annunziata: Just that a lot of it will depend on our ability to collect the data in a faster, more objective, and seamless way. Because if the solution is to have an enormous survey over three years, that's never going to work. They have to be collected automatically at the point of transaction.

Kirkpatrick: Objectivity is a weird word coming from GE and JPMorgan Chase, because we know the people generally don't trust companies like yours to begin with. I mean, GE's got great ads, but people still hate big companies. They even seem to hate capitalism in some ways, in an interesting new way. I mean, that's just an observation I'm throwing out there. But what's amazing to me as a tech journalist, and I think this is right at the heart of what you're trying to accomplish, is—we're having FitBit onstage here in a few minutes. They have unbelievable data about tens of millions of people. If it were usable by some external system, there's got to be an opportunity there. Salesforce.com, amazing data about economic transactions, sales opportunities—you know, that is a huge resource. Google, Facebook, these companies have macro data of enormous value. GE having its own sets of incredible data on the more industrial side. The opportunity clearly exists with a big bank like yours. All these institutions have this data. The opportunity is transparently obvious to be there to integrate it into a more holistic view. But frankly, it seems almost inconceivable that it could happen and that feels like a tragedy.

Farrell: It is a tragedy, because I don't—I think you're exactly right, Marco. We're not going to create the public investment to build these data assets that we need. And so that means all we have is the private sector data assets that are being built as a result of real investments that

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have commercial value, etcetera. And I believe most companies have to play a role in saying let's take that window we have on the world and start informing what's happening out there. And that's certainly what we're trying to do here. Other folks, ADP does that with their payroll.

Kirkpatrick: ADP, I should have mentioned that.

Farrell: Everyone's doing a piece of this, and I think there are some efforts. The Sloan Foundation, for example, has just funded an effort to try to say what would be that architecture, that backbone for standardizing data so that if we have, for example—and we do—a sample of 260,000 people earning income on the so-called gig economy, online platform jobs like Uber and Lyft and Airbnb, etcetera—we're beginning to understand how is that really shaping the world of work in meaningful ways. That could get connected with what the BLS is doing in contingent workforces. That's where we need to go, but it's going to be a long road.

Kirkpatrick: I want to get back to the gig economy thing in a little while, but not right this second.

Annunziata: I'm actually more optimistic than you, Diana, because I feel that there is an enormous incentive to integrate this data. So when you start looking at it from an industrial perspective, creating big data is the only way you can generate efficiency and so faster growth, more jobs, more productivity. And we're doing a lot of work with our customers, which means other companies in sensitive sectors like health care, aviation, oil and gas, and they want to be assured that the data is held correctly, it's handled correctly, it's secure. We're doing work with governments to try to dispel this risk that governments want to ring fence data because they feel that all data is a privacy concern. But the strong incentive to do it is, number one, that you want to generate value and number two, that we know that the generational value is the only way that you generate trust. Because it's true, as you were saying, that the public now seems to paint all large companies and banks with the same brush and saying, "Big business, bad." But then millions and millions of people who say they don't trust GE, they put their lives in the hands of our healthcare equipment and our jet engines when they go in the air. So it's with the performance that you demonstrate trust and I think aggregating the data takes you one step further.

Kirkpatrick: For some reason, it reminds me of a comment that was made at our health thing yesterday, which preceded this conference, about airplanes almost always are flying by wire. They're almost always being flown by essentially robotic systems, and someone said, "Yes, and we still have an actor with a hat who has to sit in the cockpit." And that's pretty much the case. And that really almost in some peculiar way reinforces this problem that people don't understand the systems that are surrounding them, they don't trust the right things, and I would say, to slightly segue to something different, the inability of government to recognize and act upon these issues, at this scale—and I want you to comment on your White House experience on this in a second—ends up reinforcing the respective power of the corporate sector over government. And for people who are concerned about income inequality and the

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rich getting richer, the companies are not afraid to look at this stuff more holistically and act accordingly. Meanwhile, government doesn't get it and as a result is falling behind. And the public sector, the public good use of data is being essentially rejected in favor of just relinquishing it to people like JPMorgan Chase, who people don't trust in the first place. But whether you like it or not, you're going to use that—whether we like it or not, you're going to use that data to your own benefit. Why not? You should. You understand it. I mean, isn't what a weird dichotomy? When you were in the White House, how would you tie that in?

Farrell: I want to pick that up, because I think one of the most frightening things—so just to paint a picture for you, go back, this is 2008. Lehman has just fallen, the world is kind of catastrophic and, you know, 700,000 jobs every month down the tube. Seven hundred thousand jobs. Just get your head around that, because it was a very, very frightening time. At that time, during transition in the early part of the Administration, we were working very hard to try and justify the Recovery Act, for one, which is the \$800 billion dollars of stimulus, and also to understand where would the marginal data be best placed, given just the fact that there was chaos everywhere. We did not have the information to answer those questions properly. As it turned out, GDP declined—GDP contraction was revised three times after the fact, so that we now know that it was way worse than we thought it was when we were trying to intervene in policy. And frankly, that was one of the inspirations for me coming to start this institute at JPMorgan Chase to say where are we going to find enough view of what's happening in the economy where we could reconstruct it so that in the future we will know what's really happening on the ground at a very granular level. The housing crisis played out very differently across the country, but we did not have real time measures of what was happening county by county, which is what we would've wanted.

Kirkpatrick: That's stunning. Do you agree that the public good would clearly be better served if government stepped up and took a much more aggressive effort to benefit from the existence of all these datasets?

Farrell: I do. And I want to correct one small thing you said, David. I think there are people in government who get this. I think the current administration, the Obama Administration actually put some real effort against this. They established a CTO under Todd Parks' leadership. When he was in that role, he really tried a very aggressive open data initiative across the government. It's just really hard because as it is in the private sector, where the real promise of this comes in is really strong integration, a lot of leadership, the boldness to make real investments. I mean, one thing JPMorgan Chase is really doing with this institute is they're putting their money where their mouth is. We're going to create this. This is for the public good. We're putting our resources into the public domain. You can check it out on our website. But you can't do it on the cheap. It's not that kind of thing. And so do we have a constituency in government today that says this matters enough that we're going to do that? Certainly not in Congress.

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So I think there's some people who get it. I think that there is a couple bills out there that are trying to push some of this. But it's just the scale of imagination that is what's lacking at the moment.

Kirkpatrick: Good. I'm glad you said that. Marco, I think no one here would be surprised that you're European. Your accent betrays you.

[LAUGHTER]

This problem in another form exists in Europe to a significant degree, it seems to me. And there's two things I want you to comment on. One, you mentioned before the need to look at datasets across borders. And in fact, the movement globally is towards quite the opposite, towards building walls—what's that term?

Farrell: Green Fencing?

Kirkpatrick: Well, there's a data-something.

Annunziata: They call it Balkanization.

Kirkpatrick: Well, requiring the servers to be in the country where the citizens' data is existing, or the corporations data. And at the same time, also in Europe, there's this obsession with privacy, which I understand, and I think in some ways has a lot of legitimacy, but is being taken to an extreme in the sense of I think potentially limiting the ability of data to serve society. Comment on both those things. Do you worry about the attitudes you see in Europe generally?

Annunziata: I worry about it enormously because—first of all, there is a misunderstanding of areas where privacy is a concern and areas where it shouldn't be. Because a lot of the industrial data, for example, data on the performance of individual jet engines, machines, they don't have any content which is privacy sensitive. And yet, there is a tendency in Europe to paint everything with the same brush and think that those data should be treated with the same care. So I think that is absolutely crazy.

The second thing I worry about is there's a mistaken impression that a lot of governments, especially in Europe, have that the priority should be to ring fence data—as if you could, as if putting them on a server within your borders made them secure. And secondly, not understanding that by doing this, by preventing companies and data centers from bringing the data together, you are negating the value of big data. Then there is no point in collecting the data in the first place. So this is something that worries me enormously because I think it comes from an enormous lack of understanding, perhaps tied to the fact that the data

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revolution actually started in the US, so Europe feels that it is lagging behind. I think this adds to a feeling of insecurity and uncertainty. But I'm enormously worried by this, because I think it's something that is a huge obstacle to the promise of value that big data is holding for industry and for the economy.

Kirkpatrick: I want to make sure we don't lose your chance to talk about the gig economy, because you have just recently achieved some insights of a very interesting type based on what you're doing, so explain that.

Farrell: Let me just start with the narrative, which we would argue was probably a little bit wrong. The narrative was, yes, we know there's income volatility, but it's all because of the gig economy and it's taken over and it's Uber and Lyft and Airbnb and Etsy and that's the future of work. And we said, okay, well, do we understand how big this is, do we understand how this fits into total income for people, do we understand who's participating, when they're participating, etcetera, etcetera, etcetera. And go to the government, they don't even track this, so they have no way in this. Folks like Alan Krueger and Harris did some really good survey-based work. MGI has done some good survey-based work on contractors at large. But we said what if we could identify across a large number of platforms—and we identified 30 platforms, labor platforms where a task is performed, so a driver, a dog walker, a shopper for you, or capital platforms where you're renting an asset or you are selling a good—and we said let's identify across those who's earning income on them and how does this fit into their total income. So the first thing we observe is that any given month about 1% of adults are earning income on these platforms. Over the last three years, about 4% of adults have at one point or another. It tells you something. People come in and out of this all the time and it's primarily young people, but you'll see people from across the spectrum. It's disproportionately low income, but people across the spectrum. But by and large, for a lot of people, this is a supplemental form of income. Most of them have traditional jobs. And for those who are unemployed, who are participating, as soon as they get a job, they often quit. So we don't see this as the future of work the way a lot of people have seen it. We've seen this as an important integration into the labor market, particularly to offset income volatility. We see that people work more in order to offset volatility in the traditional source of income. And we were able to collect a sample of 260,000 people earning income where we observed not just what they're earning, but what they're spending to have these kinds of insights.

Kirkpatrick: But also, didn't you kind of maybe identify that it may have peaked?

Farrell: Yes.

Kirkpatrick: Explain that.

Farrell: So this is important. Growth rates have been phenomenal. In the last three years, the number of earners has grown 47-fold. That's ridiculous growth rates. That's 300, 400—

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Kirkpatrick: In this gig economy?

Farrell: In these online platform economies, we observe dramatic growth. But then we tried to map the trajectory of growth and what we're finding is that growth in fact peaked in 2014. And it's still growing very fast, let's be clear, but it's no longer growing at those very high rates, and we do see that the ability of these platforms to attract people is going to get harder as the economy continues to recover, if the economy continues to recover.

Kirkpatrick: Since they used it as a fill-in mechanism.

Farrell: Exactly.

Kirkpatrick: That's interesting. Okay, we are pretty much out of time, but I would love to have at least one super-pointed question. Is that Dan Elron? If it's Dan Elron, it will be a good question.

[LAUGHTER]

Elron: I was a little surprised by the fact that we're so focusing so hard on objective data. There is the theory that people are very unhappy because they're not having as much fun as their friends on Facebook. The psychology dimension here, especially on the consumer side—and I think you touched on that in terms of variability—is huge. I know that Bhutan is trying to measure national happiness. Where are we on kind of the subjective drivers of welfare, if you will, or happiness? Because that seems to have driven a lot of the election. It wasn't the objective standard of living. It was a lot of other things.

Farrell: Two thoughts on that. One is that the best measures of that subjective thing you're trying to get at are surveys, happiness surveys. And there are surveys that go around asking people are you happy, and by happy would you want to continue—and this is not my definition. Danny Kahneman, Nobel Prize winner, who's done a lot of work in this area, sort of says the definition of happiness is would you be happy continuing to do what you're doing? That's the definition of happy, as opposed to unhappy, you want to stop what you're doing, or as opposed to neutral, meaning I'm indifferent whether I stay or go. So that creates a really big problem, because this election showed that people were not happy, i.e. they wanted change, but they had no conception of change to what, clearly. Because it wasn't I don't think an absorption of the policies that were being recommended. It was just a desire to not do what they are doing now, whatever that was.

So I don't think we've gotten very far on that subjective measure of it. I think on the GDP measurement stuff, we do have a crisis of understanding what it is that we want to measure. The biggest problem with GDP today is that it doesn't measure consumer surplus. So the fact that we all have our phones and you can now Google, you know, get on the map and immediately, you don't have to get directions from anybody, you can take a picture of your friends, you can do this. All this actually is not translating into any GDP impact at all.

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Kirkpatrick: Eric Brynjolfsson talked about that at Techonomy three years ago, one of the first times it was really identified.

Farrell: That's right. And if anything, it could be GDP destroying, because Kodak's out of the picture, all these other things that were contributing positively to GDP are not and yet people are better off. Our GDP numbers don't show that. And some people say, well, they were never meant to show that. They were meant to show commercial value, things that get commercialized. So I think we do have a crisis of saying what is it that we really do want to measure, and I would argue we have to move to a consumer surplus measurement, that at the end of the day, an economy has to serve people's well-being. That's what matters, not production in its own right. But we're a long way from that.

Kirkpatrick: We need a whole conference on this stuff. Let's go to Ken, because we're really short on time.

Washington: Ken Washington, Ford Motor Company. Before that, I worked in the government sector. So I may be one of the few people in the room that has had a security clearance with insight into the nature and the depth and the breadth of the type of information that's collected on people by the government and the pace at which a wide variety of commercial companies, like Ford, has the ability to collect data on people using probes like cars. And quite frankly, that's one of the reasons why there's so much buzz about autonomous vehicles, because when you put millions of vehicles on the road that have sensors all over them and super computers in their trunk, the ability to collect massive troves of data, of insight about people and things and businesses becomes enormous and so it's a huge economic opportunity. And you could say the same thing about a whole list of companies that David started the list but didn't complete it.

I guess my comment is that it seems to me that the issue of the value of the horizontal integration and the stitching together of data so that people can have insight that will either drive new business and economics or create value for them as a person, that seems to be missing because there are few horizontal integrators that cut across federal government and commercial sectors. In fact, there's none. And David said it, it's a travesty that that seems to be incredibly difficult, to harness and leverage the data about me as a person that the government has on me and that these dozens and dozens of companies have about me. And so what are we going to do as a society to enable that to make the quality of life of everyday citizens better? And that's why people feel like life isn't getting better, because they kind of know that this data is out there and they don't have access to it because the standards aren't in place or they're not educated enough or the tools aren't available for them to get it. And so it seems to me that that's the opportunity of some entrepreneur or business or government sponsored agency would be tasked, or tapped to create this capability so that David and Ken and Joe and Fred and Mark and Mary could actually open up a laptop or a computer and get information about them, about their health, about their experiences, insight about their kids, and so on and forth.

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Annunziata: So first of all, I think this will happen in the future. I'm convinced we will be able to leverage the data horizontally to create value. We need to be very clear in showing that we are creating value so that the data that is collected is easy to use to improve the experience in the life of people. In the case of data collected by the government, for example, my point has always been that I don't mind the government knowing everything about me, but then for God's sake, don't treat me as a complete stranger every single week when I show up at the airport.

The other point I would make on the first question, I completely agree with you to move toward consumer surplus and have a better measurement of actual economic activity, as it creates value for all of us. I think in terms of subjective measures of how people feel, I think we need better surveys. We need perhaps to tap into healthcare data, environmental data that can give us something more tangible on how the mood of people can be measured in a physiological way. And I would just add to finish that that is going to be extremely important as we move towards a world where the connection and cooperation of machines and humans becomes more and more important. So we need to understand the machines, but also how the human feels and reacts.

Kirkpatrick: One thing I would say to you, Ken, is that I think that if there's anybody trying to do that—I think there are at least three companies that can easily be named that are trying to do that and that's Facebook, Google and Amazon. And they are moving quite quickly and doing it relatively effectively. They're creating consumer surplus in doing so. But they have enormous opportunities. That's one reason they are so powerful, why people use them, even if they have a lot of ambivalence about their power.

So thank you, all. Very meaty conversation. Thank you so much.