The digital future of work: Policy implications of automation

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The adoption of new technology and new work practices poses particular challenges to both business and policy makers. What are the key priorities they should look to address?

While automation has the potential to increase the productivity of the global economy and supercharge the performance of companies which successfully adopt the technologies, the policy implications are complex. Foremost among them: How will economies and companies be able to leverage the new technologies and help workers adapt to the changing workplace? What about those who are most affected by automation?

In this video, one in a four-part series, experts from academia and industry join McKinsey partners in a discussion of key issues about the policy implications of automation. The interviews were filmed in April at the Digital Future of Work Summit in New York, which was hosted by the McKinsey Global Institute (MGI) and New York University's Stern School of Business.

Interviewees include Tom Siebel, founder, chairman, and CEO of C3 IoT; Anne-Marie Slaughter, president and CEO of New America; Jeff Wald, cofounder and president of WorkMarket; Saadia Zahidi, head of education, gender, and work at the World Economic Forum; Diana Farrell, founding president and CEO of the JP Morgan Chase Institute; McKinsey senior partner Katy George; MGI chairman and director James Manyika, and MGI partner Michael Chui.

Interview transcript

Katy George: The two areas that are critical for policy makers, but also that business leaders and academics should be worrying about are, number one, how do we actually accelerate technology adoption in commercialization? The problem is not that we're automating so quickly that we're going to put people out of jobs. The problem is that we need to automate more quickly to get the kind of benefits and productivity and in our standard of living that we would like to enjoy. So the first issue is how we unblock that so that companies are making the right investments in technology, building out new capabilities in their supply chains, et cetera? The second thing, which I think is an even bigger concern, is how do we really help the workforce transition? That's people who are in existing jobs that will be dramatically changed, or people who are in locations that need to change.

James Manyika: As people move from one sector to another, or from one occupation to another, or from one skill set to another, how do we help with that? It's one of the things, quite frankly, we got wrong with globalization. Globalization, on the one hand, I think was spectacularly good for economies in terms of driving economic growth and also good for people as consumers, in the sense of more choice and cheaper products. But what we didn't think through properly is the implications for workers, and particularly those caught in the dislocations and transitions that happened as those jobs went away or got automated or got taken to other parts of the world or country. We didn't do enough there. In this case, again with automation and technology, we're going to need to think through those transition challenges for individuals as they move from one place to another.

Anne-Marie Slaughter: I'm optimistic about job growth, if both employers and the government do the right things. There is a scenario that you can well imagine where there are fewer jobs and they are all tasks. So you can put together a day's worth of different tasks. Imagine you're driving for a ride-sharing service, and then maybe you do Task Rabbit, and then you do a few little projects. And you can imagine big data platforms that let you find those tasks. But how are you going to build a middle class life?

Tom Siebel: There most certainly is a role for policy makers to facilitate the transition. But in my experience, policy makers tend to deal with problems after they reach crisis levels, not anticipate the problem and head it off. The social implications of what's happening in information technology, communication technology, artificial intelligence, robotics, while many of them are very positive, many of them are highly deleterious. We're going to create a class of people who are unemployed, permanently unemployed, and unemployable. And we need to figure out how to deal with that.

What are some of the policy options?

Anne-Marie Slaughter: How are you going to afford a house or a car or school for your children? We need to do things around benefits. We need to make benefits portable, for instance. We also really need a different concept of a safety net—and a tremendous infusion into education and training to help people adapt as jobs change.

Jeff Wald: There are a lot of very interesting conversations around universal basic income. But that is the kind of thing that is going to be debated and discussed over the next 20, 30 years as this evolution takes place. What concerns me is that when you look at the evolutions that have occurred from a hunter gatherer society to an agrarian society, from an agrarian society to an industrial society, and from an industrial society to a service economy, those changes have not come without social disruption. The first wave of hunter gatherers as an agrarian society was formed got completely wiped out.

Saadia Zahidi: The reason this transition is challenging in the short term is not so much the pace of change, but it's actually the pace of the reaction. Those that need to react are still quite far behind in figuring out what the right policies are. That said, there are a lot of best practices around the world. If you look at the type of education system that exists in Finland, if you

look at the type of adult retraining and reskilling that's been put in place in Singapore, if you look at some of the new forecasting models that have emerged, we can use the very same technologies that are causing some of the disruptions to solve some of these problems, to give people the right kinds of skill sets, to predict what will be needed. We can get much better at all of that. I put a lot of faith in individuals taking action, new businesses around education and reskilling being created, and then a lot smarter regulation being put in place. Without any of that, we are looking at a more bleak future.

How do we help people most affected by automation?

Diana Farrell: I would argue that in the discussion of the future of work, we try to focus too much on what are the new things that we see, and think that they will happen perhaps faster than they will. The thing that I want to bring attention to is something that is already true today, expense volatility. We can document that most American families are dealing with very high levels of income and consumption volatility month to month. And those don't co-vary. It is not necessarily the case that those months when you have lower income result in months where you have fewer expenses. In fact, they don't co-vary, which means from a vulnerability point of view, Americans are often subject to a month where they might have a dip in income and an unexpected rise in expenses. That causes a lot of financial vulnerability and a lot of stress and anxiety for a lot of people, even if the economy's generally doing okay. We need to pay a lot more attention to this, to help people build the financial buffer that will allow them to withstand the volatility that they will likely experience. And find ways to mitigate the long term impacts, particularly of some of these extraordinary expenses.

Michael Chui: There are a lot of different questions. We recognize our inability to predict what will happen in the future. There are certainly some aspects in which these automation technologies allow a lower-skilled person to have much more impact, where a much higher-skilled person was previously needed. In some ways, you can consider that to be good because suddenly, someone who was otherwise lower skilled now has "superpowers," as some people describe it. They can do more than they ever could before. But there are other effects in which the machines will take over work which was lower skilled, lower wage. That creates more opportunities that are higher skilled and have higher wages. That does require training so that people can develop the skills necessary. Whether it's being able to maintain a robot rather than do the routine tasks that the robot took over, whether it's being able to understand the output of an analytic algorithm rather than do the calculations yourself, sometimes these technologies will create work which requires more skills. ☐

For more details of the conference proceedings and videos of the full panels, please visit the Digital Future of Work Summit site.

Tom Siebel is founder, chairman, and CEO of C3 IoT; **Anne-Marie Slaughter** is president and CEO of New America; **Jeff Wald** is cofounder and president of WorkMarket; **Saadia Zahidi** is head of education, gender, and work at the World Economic Forum; **Diana Farrell** is founding president and CEO of the JP Morgan Chase Institute; **Katy George** is a senior partner based in McKinsey's New Jersey office; MGI chairman and director **James Manyika** is chairman and director of the McKinsey Global Institute, where **Michael Chui** is a partner.