

How can we address real concerns over artificial intelligence?

As the use of AI grows, we must acknowledge and tackle concerns to help build public trust in the technology

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The cashiers' demands were simple: management must remove the tracking software they had installed in the checkout terminals, or the cashiers would refuse to return to work. The technology that tracked their every movement - their speed, efficiency, etc - had been installed without their knowledge, they asserted, and was an invasion of privacy.

While this seems like something one might see today, this happened nearly 40 years ago at the biggest supermarket chain in Denmark. It is easy to see these cashiers as luddites, anti-progress and anti-technology, but like the original luddites they had valid concerns about the way that new technologies are used by employers. New technologies can not only lead to jobs lost through automation, but can also change the nature of work itself in detrimental ways.

Walter Reuther, president of the United Automobile Workers union from 1946-1970, raised similar concerns about the impact of automation and decision-making machines on jobs when he appeared before the US Congress in 1955 - 20 years before the Danish cashier walkout. "We believe that we have got to look at this problem realistically, with honesty, and with courage", Reuther told the Congressional committee: "When you say there is a problem here it doesn't mean that you are opposed to automation. It merely means that you are trying to anticipate the problem so that we can meet it in advance."

As we confront similar questions around artificial intelligence (AI), we must distinguish between fear of new technologies and concern about their implications. The latter plays an important role in cultivating the right

conversations to ensure that new technologies are deployed ethically and responsibly.

Emerging technologies like AI present us with many opportunities to improve the way we work, to provide better services and products in more efficient ways, and to do things we have never been able to do in the past. If we do not acknowledge and take on board people's valid concerns, we risk seeing the potential benefits of these technologies lost under a mountain of fear and negative press. As a result, we could lose public trust.

It is easy to see how this could happen. In the US, criminal "risk assessments" based on predictive analytics have already been shown to be biased against black people because the data used to build the system was inherently biased, and a more recent evaluation of Chicago's use of predictive policing has shown that the system doesn't help reduce homicides (as it was designed to do).

We need to have a mature, informed and inclusive conversation about the future of automation and the potential impact of new technologies. Reuther also advocated for this kind of dialogue when he appeared before Congress back in 1955. He called on industry, labour, agriculture, and government to work together to develop "broad economic, and social policies, to ensure that this new power is used responsibly in the economic and social and moral sense".

Machines have been taking over tasks from human workers for centuries, and for nearly as long, people have been discussing, debating, and arguing over how to respond. Yet these fears keep recurring. Even those generations that recognise the recurrent nature of these fears cannot resist making similar doomsday predictions about mass unemployment or the end of work.

One reason for this seems to be that each new generation believes it is confronting fundamental technological advances that far surpass those dealt with by any other generation. Each new generation manages to convince itself that they are the ones living in the age when the exception finally proves the rule. The AI story is often painted with the same brush, particularly as it increasingly able to take over cognitive and decision-making tasks. Is AI the exception to the rule? It depends who you talk to but even if AI isn't truly a fundamental advance in this sense, it doesn't mean that it won't have a profound impact on society.

In fact it already is. As AI finds its way into all sorts of areas, automating or supplementing existing jobs, it is having a fundamental impact on the way we live - from online advertising to credit scores or the collaboration between Google DeepMind and the NHS.

So, it is now that we need to have a conversation about the immediate and future implications of these new technologies, before concern and fear take over. Looking forward and making informed predictions about things like which skills might be important in the future will help us prepare the next generation, as best we can, for any disruptions ahead.

From a public policy point of view, while we don't have any proper regulation around the use of AI, some steps are being taken: the UK government and HP are developing ethical frameworks for the use of data and AI. This is a good way to start to develop regulation and public trust but to take this further it is crucial we also have the right institutions.

This is where something like a dedicated machine intelligence commission could come into play. A new public institution like this would support an informed public dialogue, help the responsible development of new generations of algorithms, machine learning tools and uses of big data, and ensure that the public interest is protected for future generations.

“We have got to anticipate the problems of tomorrow”, implored Reuther in 1955. “We want to have confidence, but we don't want to confuse it with complacency.”

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