

In 2017, humans lost to AlphaGo Master in the game go, the board game that we were so confident that without the experience as a human, A.I. will never win. More astonishingly is that not long later, AlphaGo Master was outplayed by AlphaGo Zero. While humans have met their limitations, the machines have not. Outplaying their specimen and self-developing, A.I. may one day surpasses humans, or not. They may do the works indeed, but then a human will more time to complete creative things that machines cannot.

A.I., which stands for Artificial Intelligence, is a machine that can perform tasks requiring intelligence carried by humans. The tasks should be problem-solving instead of repeating. However, a clear definition of Artificial Intelligence is sort of ambiguous based on different perspectives.

Human's life has changed dramatically ever since the invention of the first A.I. Thus, this era is called the fourth industrial revolution. The proceed three times of evolution are also known as industrialization, electrification, and digitalization. The fourth industry evolution, which is the main focus of this article, is actually occurring right now. The fourth industry evolution, broadly defined, is

*the technical integration of cyber-physical systems (CPS) into production and logistics and the use of the 'internet of things' (connection between everyday objects) and services in (industrial) processes – including the consequences for a new creation of value, business models as well as downstream services and work organization. [1]*

That is to say that human activities are into an era of automatization, which includes four elements: machine-controlled production, minimized timing, decentralization of production, and individualization of production. Production controlled entirely by machine is present in "smart factories" with few or no human employees.

A.I.s are capable of doing multiple human jobs while doing much better than humans. Still it shall be radical to infer that A.I.s are taking over human workers, for it has its advantages as well as drawbacks. The advantage is increased efficiency with fewer limitations for working conditions while the drawback is obvious, fewer jobs in the market.

And this point of view is practically supported by the following statistics.

According to the following statistic from our own questionnaire, the situation is, at some extent, eased. It is to be assumed that the reason behind is because of the developing nature of Chinese economics.

For 87 salarymen included in our investigation, 84 percent of them work in the tertiary industry. 12 percent work in the primary industry. The majority of them works eight hours a day. One fifth of the invitees work 10 hours a day. Over half of them think that they understand the concept of artificial intelligence, while 37 percent has little understanding toward this topic.

For the question “does your working place/working process affected by automation”, the answer varies. 14 percent of the sample choose NO, while 20 percent of the sample choose BARELY; 40 percent choose LIMITED; 17 percent choose PLENTY.

The answer to the previous question was pretty clear. About 60% of the candidates has only a little bit relevancy to artificial Intelligence while approximately 30% of the people who get involved with the investigation has no relationship with artificial Intelligence and only 11%. Has a close relationship with artificial Intelligence. As a result, we can conclude that since the majority of people work has little relevancy to artificial Intelligence. The result to the previous question can be properly Explained.

For the following question, 60 percent of the people don't agree this statement, while 12 percent choose to abstain. However, twenty percent from the investigation agree with that.

For the question "The relationship between your work and automation", Half of the people chooses artificial Intelligence serves me, and Half of the people choose "Assisting each other".

For the last question, most people conclude that artificial represents the innovation of technology And the Revolution of the human society. But they are also aware of the danger of artificial Intelligence since they mentioned that artificial Intelligence needs the support from human beings, and they cannot Completely represent human. It is actually good news to see that people are starting to be aware of the pros and cons of artificial Intelligence.

On the other hand, in western countries, half of these experts (48 percent) envision a future in which robots and digital agents [will] have displaced significant numbers of both blue- and white-collar workers—with many expressing concern that this will lead to vast increases in income inequality, masses of people who are effectively unemployable, and breakdowns in the social order. [2]

These fears have been echoed by detailed analyses showing anywhere from a 14 to 54 percent automation impact on jobs. For example, a Bruegel analysis found that "54% of EU jobs [are] at risk of computerization." Using European data, they argue that job losses are likely to be significant and people should prepare for large-scale disruption.[3]

Meanwhile, Oxford University researchers Carl Frey and Michael Osborne claim that technology will transform many sectors of life. They studied 702 occupational groupings and found that "47 percent of U.S. workers have a high probability of seeing their jobs automated over the next 20 years." [4]

Unfortunately, based on the statistics and analysis above, A.I. will probably take thousands of jobs away and lead to unemployment in the near future. It shall be impossible to draw the conclusion now if A.I. will lead to job lose based on the conflict statistics—and it is an epitome of the globe economics. Still, the problem westerns are facing need to find a solution.

Thus, western economists are finding apparent solutions. First, what is the problem is needed to be addressed. Economists can hardly draw a clear line and the solution is based on the nature of the problem. The reason is that cause the prevalence of A.I. and severe decline in labor needs. It is about automation—cost of labor down trend. What AI is doing is essentially automating everything around us, saving huge amount of labor in the coming future. As just mentioned, AI did better than people in many fields: Self driving car will un-employ The Shipping industry—drivers, insurance companies, car manufacturers, parking facilities, and many others and Cellphones will replace anyone making a living of observing.

Since now the reason that will lead to the fierce competition between labors and A.I.s in the future, there list some possible solutions to overcome the dilemma.

First is tax reversal—big companies do strong tax planning globally. It can be understood by simple logic: the more revenue, the more tax. The tax rule could be imposed to the AI as well—a so-called Robot Tax. If a robot has a higher working efficiency and produces more goods or provides better services, the owner should pay higher tax cost. This solution will help people to confront the dilemma since the firm will not hire a lot of A.I..

Second, governments could pay attention to the arrangement of labor during the production of A.I.. 1. A.I. needs collaboration across functions. Consider an A.I. system that helps hospital staff decide which medical procedures to authorize. It will need input not just from medical and AI specialists but also from the legal, HR, financial, cybersecurity and compliance teams. 2. For AI to be

really effective, it also has to access data from across the organization. If marketing A.I. only sees data from one of product lines, it will miss a whole set of data mining and cross-selling opportunities.

In conclusion, as a thought held by most of the candidates taking survey, artificial intelligence is an inevitable trend for a market. While China is not deeply affected, western countries are experiencing a “strike”. The difference between developing and developed countries could not be denied, and the reason for it is only plausible. What is happening now in the western world may only be a coincident or it can be the definite future of development. Still, one thing is clear, with the solutions that are present now and might be followed up in the future, if A.I. turn out to be a treat for humans, we are ready to face it together.

Credits:

1. *Artificial Intelligence and Robotics and Their Impact on the Workplace*, IBA Global Employment Institute, April 2017
2. *AI, Robotics, and the Future of Jobs*, Aaron Smith and Janna Anderson, Pew Research Center, August 6, 2014.
3. *Chart of the Week: 54% of EU Jobs at Risk of Computerisation*, blog post, Jeremy Bowles, Bruegel.org, July 24, 2014.
4. *The Future of Employment: How Susceptible Are Jobs to Computerisation?* Carl Benedict Frey and Michael Osborne, Oxford University paper, September 17, 2013.