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Kai-Fu Lee's perspectives on two global leaders in artificial intelligence: China and the United States

McKinsey Global Institute June 2018

Kai-Fu Lee shares his perspectives on developing and adopting artificial intelligence in China and the United States with McKinsey Global Institute partner Michael Chui.

Artificial intelligence (AI) is advancing at a breakneck speed, with two major players emerging: China and the United States. Each country has very different strategies, backgrounds, advantages, and disadvantages.

Kai-Fu Lee has a unique view of Al development in China, in his present roles as chairman and CEO of Sinovation Ventures and president of Sinovation Venture's Artificial Intelligence Institute and from his extensive background in the topic in former leadership roles at Microsoft Research China and Google Greater China. Michael Chui, a partner of the McKinsey Global Institute (MGI), spoke with Kai-Fu Lee to understand his perspectives on Al in two of the leading global markets.

Interview transcript

Michael Chui: What are China's advantages in developing and adopting artificial intelligence?

Kai-Fu Lee: China has several things going for it. It has a large amount of data, not only in mobile users but also the amount of mobile payments, the amount of transactions, the amount of data that's being captured. The fact that most users are willing to trade off some degree of privacy for convenience makes the data acquisition even easier. And on top of that, it's a bigger market.

Second, the Chinese entrepreneurial system is an advantage for China. Al companies are moving very quickly into new spaces.

A third big factor is the government support. At a local level, cities give subsidies to Al companies that move there, they have venture capitalists that invest in Al, and they have smart people move to these cities, including overseas-returning experts. Another aspect is that the Chinese government has always been techno-utilitarian, which means when it comes to new

technology, it thinks, "Let's get the technology out there. And of course, there will be issues that come up, and let's course correct as they come up."

As opposed to the Western countries, which tend to want to debate and resolve issues that may relate to privacy, security, bias, and explainable Al. When there are jobs being affected, the truckers' union will appeal to the president, asking to slow down the adoption. Whereas, in China, it's full speed ahead with Al.

Michael Chui: What advantages does the US have in developing and adopting Al?

Kai-Fu Lee: The US advantage is quite significant around research leadership, particularly around the education system. The US education system draws talent from throughout the world, and, especially in graduate levels, it's incomparable anywhere and way ahead of China and other countries.

As long as American universities continue to be supported and attract talent, and to the extent that American visas are granted to graduates rather than having them go back to their countries, including China, that's an advantage that's very hard for any country to replicate in less than 30 or 40 years.

Michael Chui: How do you see the Al field developing in these two markets?

Kai-Fu Lee: All has multiple types of applications. Clearly in internet Al, the US has a leadership position. But the Chinese companies with more data are catching up.

With business AI, using data at banks, insurance companies, hospitals and so on, there are certain cases where Chinese companies may be moving forward due to accessibility of data, such as in healthcare. But in most spaces, the data in China is not yet fully digitized, structured, or warehoused. The US has substantial leadership overall, probably for five years or longer.

Then there's perception AI, which involves using cameras and sensors everywhere to capture faces, motion, people, and objects to derive value. For example, recognizing returning customers at a shop or counting attendance at a school. These are things that affect privacy. And I think Americans will tend to be cautious about widely adopting it, but Chinese citizens would tend to be more willing to trade some privacy in return for convenience, and certainly for security. I think China will lead there.

"I envision the autonomous vehicle to eventually make everything affordable."

Last, there's autonomous AI, which is AI that moves: industrial robots, commercial robots, home robots, and autonomous vehicles. This is a particularly impactful area, because I envision the autonomous vehicle to eventually make everything affordable. It will reduce the costs of chips, semiconductors, and sensors, and that will have a domino effect in making

industrial commercial robots more viable and less expensive—essentially becoming the operating system of the future.

Who will win this biggest one? I think it's 50-50. This is very technology-rich area. The US clearly leads in technology. But Chinese policies are accelerating the launch adoption of things like autonomous trucks and will not be slowed down by a trucker-union appeal or lobby. And with AI, the faster you launch, the faster you collect data, and the faster you use the data to improve your algorithm, the more you'll catch up. It's a game where the US clearly leads China, but China is moving at a faster trajectory. And I place it at a 50-50 for that area. □

Michael Chui is a partner of the McKinsey Global Institute.