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Artificial Intelligence, real impact

Singapore Management University

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AI use in China continues to push innovation envelopes, but technology must be utilised and updated with expert advice

In a recently published report on Artificial Intelligence (AI) by MIT and Boston Consulting Group, 45 percent of business leaders interviewed expressed belief that AI posed a strategic risk to their business, up from 37 percent in 2017. In China, where President Xi Jinping has made AI an integral part of the country's economic strategy, that figure is nearly double: 71 percent of senior executives view AI as an opportunity and a risk to their enterprises.

The impact AI has on Chinese business folks should come as no surprise. Companies such as Ping An Group, China's largest insurer and ranked 29th on the Fortune Global 500 list, lead the way in the use of AI and changing the business landscape.

"At Ping An we have car insurance image recognition technology," explains **Xu Liang**, Deputy Chief Engineer, Department of AI at Ping An Group. "Previously when people engage the services of Ping An car insurance, they would have to take photos and upload them onto the internet. The staff at Ping An would then examine the photos, decide how much repairs would cost, and start the process of paying for them. It's a long process that could take weeks.

"Now with the help of image recognition technology, we can automatically recognise the type of car involved and the damage sustained, and we can also automatically calculate how much it would cost to repair the damage. With just one click, motorists could receive compensation as quickly as within half an hour."

THE AI OF THE FUTURE…AND THE FUTURE OF AI

Xu made those remarks during a panel discussion at the recent SMU Industry Leaders Dialogue in Shenzhen, "Embracing the Artificial Intelligence-driven economy". Ping An's sheer volume of data – it handles some 40,000 cases each day – gives it the depth and breadth to better utilise AI, and is one of four elements upon which successful use of the technology is predicated.

"AI is not magic – without clean and useable data, nothing can be done," Xu states matter-of-factly. "Secondly, you need to have the technology, the application scenarios, and the data scientists to make sense of all that data.

"Thirdly, you must have a scenario in which the data can solve a problem. If there are no scenarios for the data to tackle, no value can be generated. Lastly, you need to get the input of experts. You have to listen carefully to their views so you can figure out a. what is the key knowledge in this field; and b. how can you apply AI in your processes?"

David Su, Founding Managing Partner at private equity firm Matrix Partners China, has invested in numerous tech startups that have gone on to become unicorns: Didi (滴滴出行), Liepin.com (猎聘网) and Ofo (小黄车). Matrix is currently working with a company that deploys AI in the textile industry.

"You'll be surprised that for many manufacturing companies in China that supply some 40 to 50 percent of global clothing material, they rely on human eyes for pigmentation of their fabric," Su reveals. "We have a company that helps integrate the manufacturing process and provide visual inspection. By the time the human picks up on any discolouration, the process would have run a thousand yards already. It costs a lot of money to rectify that.

“However, machines have intelligent vision systems that can pick up any discolouration almost instantaneously. Some companies have started implanting such systems and have changed their whole manufacturing process.”

According to Su, one should look at a business process and ask, “Can I re-engineer it?” with AI before jumping on the bandwagon. Noting that the AI-mania started around 2014 following Google’s breakthrough in image recognition, Su told the audience that for a good three years after another Google computer beat a human Go champion in 2016 that “80 percent of the pitches we heard featured ‘deep learning’ or some form of AI”.

“I’ve been in venture investing for a long time,” Su cautions, pointing out that cloud computing was all the rage a couple of years ago. “My feeling is: don’t over-glorify AI. But in eight to 10 years, between machine learning with cow computing, internet of things etc., you’ll see a drastically different world come 2028, 2030.

“It will be the first time information will track with a physical layer. You could shut down power grids remotely. Everything will be connected. It will be a little scary but it raises questions of: ‘How will you protect systems?’ But it’s coming.”

Pradeep Reddy Varakantham, Associate Professor of Information Systems & Coordinator, BSc (IS) Artificial Intelligence Track at SMU, reiterates Xu’s point that having the right kind of data is key to effective use of AI. He also points out four tasks on which AI has delivered on its promises.

“Forecasting, acting like a crystal ball; promoting your material; optimising processes; smart interface. These are tasks where AI works but it doesn’t mean it will deliver value right now,” he says. “In terms of whether it delivers value, it depends on what the company’s context is and what kind of data is available.

“The main thing is: there are still lots of areas where AI is narrow, and it doesn’t apply across the board. I would say: Proceed with caution.”

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