China's rise in artificial intelligence

Cars that drive themselves, facial recognition, detecting cancer potentially better than a doctor,

these are just some of the technologies that artificial intelligence is fueling. And with the potential to add trillions of dollars to a nation’s GDP, the race to become an AI superpower is on. In the age of AI, data is the new oil, so China is the new Saudi Arabia. That’s Kai-Fu Lee, he’s the author of the new book, AI Superpowers which explores China’s standing in the world of artificial intelligence. If you measure by research, basic research papers published, excellence of research, the U.S. is, and will be, ahead for the next decade, but if you measure by value created, how much market capitalization, how many users, how much revenue, China probably is already ahead. China’s rise in AI is relatively recent. In May 2017, China’s AI evolution reached a symbolic moment, what some even called a wake up call. Go is a game that’s been played in China for thousands of years and is said to be the world’s most complex game. 19-year-old Ke Jie is also said to be the world’s best player. He was challenged to compete against Alphabet, the parent company of Google in a three-game match. He lost. Less than two months after the defeat, the Chinese central government announced its ambitious plans to build up artificial intelligence capabilities. As part of its existing Made in China 2025 plan, it aims to create A Next Generation Artificial Intelligence Development Plan. The plan is broken up into three benchmarks. To keep pace with AI technologies by 2020. To achieve AI breakthroughs by 2025, and to actually be the world leader in AI by 2030. That same year in 2017, during a keynote address to the ruling Communist Party, Chinese President Xi Jinping said: To get there, it’s investing a lot.

In 2017, Chinese venture-capital investors poured record sums of money into AI, making up 48 percent of all AI venture funding globally. Chinese startups raised $4.9 billion, while their U.S. counterparts raised $4.4 billion. But while the U.S.’ $4.4 billion is made up of 155 investments, just 19 investments made up China’s $4.9 billion. The innovation is still coming from the U.S. and that’s thanks to obviously a huge network of universities that are fed by the world’s greatest talent, not just Chinese engineers coming to the U.S. and computer scientists, but also from India and everywhere else. So I think that advantage for the next few years at least stays with the U.S. This is Ben Harburg, a Beijing-based VC who’s invested in the likes of Uber and MoBike. I met him at East Tech West, CNBC’s tech event in China. What China has the ability to do is scale and monetize, or commercialize, these types of technologies. We have a much larger number of graduates in the STEM fields in China, that will certainly be coming back in further influencing those in the development of those companies. China will be where you monetize, and by nature of the beast, eventually they will start to innovate far beyond the U.S., but a couple of years away. China’s mobile-first market means more people are doing everyday tasks on phones. Naturally, that means more data is available. But experts tell me China’s rise in AI boils down to several main factors. Number one: Its population. At around 1.4 billion people, it’s the world’s largest country, and thus there’s a lot of possible data to be captured. It’s done a fantastic job of moving its economy to cashless. And when you can pay with everything with your phone, you amass a huge amount of data. Thomas Friedman is an economist, New York Times columnist and author of Thank You For Being Late. The second factor is that China doesn’t have the same restrictive privacy laws that the U.S. has, making it easier for companies to collect data. In fact, not only are privacy laws less of a barrier in China, but the government is buying technologies to use data in an effort to capture unprecedented amounts of information on its citizens. If you get to self-driving cars for instance, there’s a massive amount of data that those cars are going to spin off. And if you’ve got those data sets, you’re going to be able to do the improvements, see the new jobs, products and services that can be designed out of those data sets, You’re going to see better and better, more deeper insight patterns than anybody else, and I think it’s going to be a great advantage for China. PwC says that by 2030, global GDP could increase by 14 percent because of AI. Its deployment will add $15.7 trillion to global GDP, with China predicted to take $7 trillion. That’s almost half of North America’s projected gains of $3.7 trillion. Yet, China’s AI development isn’t seeing optimism across the board either, with critics saying the sector is over-invested and also skepticism around monetization for the industry.

Meanwhile, the vast amount of data being collected scares critics who question the ethics of it all. Not to mention, privacy laws in other parts of the world, that flat out make it illegal. But it’s hard to deny, the potential for AI to transform industries. And with that transformation could also come a change in the workforce. In fact, Kai-Fu Lee says AI will be able to replace a whopping 40 to 50 percent of jobsin the U.S. within 15 years. Meanwhile, Friedman thinks the race in AI could potentially come down to politics. More specifically, President Trump’s stance on immigration. What really drove our economy forward, what drives any economy, is that we had a higher percentage than any other country of high IQ risk takers. High IQ risk takers are the people who start new companies, new businesses, and create new medical breakthroughs and new engineering breakthroughs. But Trump basically has put out a sign in our front yard that says, “Get off my lawn.” I worry about that, I mean, I believe any foreigner, who gets an advanced degree in America should get a green card with the advanced degree. We want those people. And so, the idea that we’re pushing these people away is sheer madness.