

[**A former IBM artificial-intelligence chief says humans figuring out AI is like 'children playing with bombs'**](#)

Charlie Wood 4h

- Manoj Saxena, the first general manager of IBM Watson Solutions. CognitiveScale Manoj Saxena was the first general manager of IBM Watson, where he was responsible for the commercialization of machine-learning products at the tech giant.
- The 54-year-old is now the chairman of AI Global, a nonprofit that encourages responsible artificial-intelligence design, and he teaches a course about the technology at the University of Texas.
- Speaking with Business Insider, he said that AI was akin to the invention of electricity and that humans were "like children playing with bombs" when it came to figuring out the technology.
- Describing himself as an AI pragmatist, he is worried that if left unchecked, AI could deepen divides between rich and poor and spark civil unrest.
- He also believes that humans are merging with AI — and that this will lead to the creation of a new species.

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Speaking with Business Insider about AI's potential to change society, Manoj Saxena — who has also built and sold two enterprise software firms — thinks AI's power is more "insidious" than many people realize.

"AI is like nuclear power at war," Saxena said. "Right now, we are like children playing with bombs. People worry about the wrong thing with AI. They worry about a Terminator machine killing them, or they worry about a Skynet. But the real thing to worry about with AI are these invisible algorithms."

Saxena, who ran what is known as IBM Watson Solutions, explained: "We will be starting to use these algorithms to make automated decisions. These algorithms are going to start defining what kind of colleges you get admitted to, what kind of loans you get to pursue an education or build a house, what type of visa and tourism opportunities you get, what kind of career promotions you get, what kind of healthcare treatments you get.

"This invisible layer of intelligence that we are building will be as [impactful] as electricity. We're in the very early stages of electricity being invented and people

applying it to streetlights. Very soon, AI is going to be everywhere — it's going to surround us."

In addition to his entrepreneurship, Saxena teaches an academic course he set up at the University of Texas on the design of ethical AI systems. He is also chairman of AI Global, a nonprofit that encourages responsible AI design.

Saxena said he was not an artificial-intelligence "utopian," a category in which he puts people like Facebook CEO Mark Zuckerberg, nor is he an "AI alarmist," like Tesla CEO Elon Musk. He sees himself sitting in the middle of these two groups, referring to himself as an "AI pragmatist."

"AI itself doesn't have anything good or bad," he said. "It's how and where you apply it and regulate it that will determine the outcome of it." Saxena believes the sheer scale of AI's future influence makes it all the more important to guard against bias.

"It's incredibly important for these algorithms to have guardrails around them, so that they are not biased in their behavior," he said. "AI is just like a child's brain — it will learn whatever you teach it. If you don't have a proper framework for teaching these [AI programs], then you're going to have a lot of Chucky-like creatures with knives in their hands going around doing a lot of damage."

Saxena is concerned that AI could increase inequality and spark civil unrest if not properly regulated. Indeed, he believes the so-called techlash against Silicon Valley is already evidence of such discontent.

"AI will accelerate the digital divide," he said. "People with access to AI know-how and computing power will make more money, and the issues we're dealing with in this country, and in the UK with Brexit, are only going to get bigger."

Yet, despite these worries, Saxena thinks humans remain masters of their own destiny when it comes to AI's ultimate impact. He said: "AI's also got the power to solve some of the fundamental problems we have in our society around resource utilization, around education access. So the policies and the decisions that we make will determine the good or the bad that AI is going to create for us."

Echoing a view held by futurists such as Google's engineering chief, Ray Kurzweil, Saxena also believes that humans are merging with AI — and that this will ultimately lead to the creation of a new species.

"I gave a TED talk on this, where I talked about the end of homo sapiens and the beginning of homo digitalis," he said. "I think this is happening already."

"Our biological intelligence, via the framework we call the human body, is getting integrated with nonbiological intelligence through things like cellphones, pacemakers,

artificial aids. All of these things are having sensors built into them. In essence, we're moving towards a world where nonbiological intelligence is the first technology we've ever built that is superior to our brains.

"Every other technology that mankind has developed so far has either been to amplify our legs or amplify our arms, but we have never built anything that has amplified or scaled beyond our brains. That's what AI, defined as nonbiological intelligence, will do.

"So we are becoming more and more digital as a species. When we start bringing biological and nonbiological intelligence together, we are creating a whole new level of capacity, as well as problems if you don't govern these systems right."