Artificial intelligence (AI) is no longer limited to the creative minds of Hollywood, but has become a day-to-day reality. Today, AI is changing the way we live and work. Search predictions, weather forecasts, self-driving cars and voice recognition applications are a few examples of the presence of AI in our daily lives.

AI is described as the simulation of human intelligence processes created by machines or computers. In AI, machines learn through the collection of information and reason by applying rules and a process for self-correction to reach desired outcomes. Some well-known areas of AI include: programming computers to play games with human opponents, to assist doctors with disease diagnoses, or to react to sensory stimuli such as sound or sight (commonly known as robotics).

AI is impacting the various aspects of business, from workflow management to advertising strategy. It has the capability to change knowledge management in the workplace with the deployment of more sensitive virtual learning environments. It can also assist with complex problem solving on a real-time basis to produce better business results. Apart from enhancing efficiency in business processes, AI can also reduce errors and complete difficult human tasks. AI can also work in hazardous situations that include fire, mining or the diffusion of bombs.

The concept of AI is more than half a century old, but recently has gained momentum due to certain breakthroughs in technology, including:

- The use of big data is fueling the growth of AI as massive amounts of data can be collected and analyzed to make better predictions.
- The availability of cheap parallel computations by graphics-processing units has unlocked new possibilities for neural networks.
- Better algorithms such as “deep learning” have accelerated the speed of complex logical thinking.

After more than two decades struggling with insufficient research funding, the field of AI has now started to receive attention from the VC community and large enterprises. Technology innovation and investment interest has stimulated the growth of AI start-ups in the past couple of years.

However, while the interest and investment are exploding in the field of AI, scientists, futurists and even some entrepreneurs have expressed concerns about the rise of super-intelligent machines that could pose an existential threat to the human race.

The growing reliance on AI systems is expected to expose the following risks:

- Cyber attacks on AI systems
- Programming and coding errors in AI software
- “Sorcerer’s apprentice” scenarios, in which AI systems respond to human instructions in unexpected ways

These risks can have serious implications for our society and it is important to have robust regulatory systems in place on national and international levels.

Though AI is evolving rapidly, its impact on the future remains unclear. While some believe that it will be some time before AI affects our lives significantly, others expect AI to either substantially kill or create jobs by the next decade. By 2025, the use of AI in business can lead to increased efficiencies and cheaper goods. Futuristic technologies such as self-driving cars and robotic labor could become a part of our lives contributing to unemployment and income gaps.

To ponder: looking forward, will the positives of AI outweigh the negatives, and should we be excited about this upcoming field that can produce human-like machines?
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EYG no. 00266-164GBL
BMC Agency
GA 0000_04467
ED None

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