



CONCOURS INTERNATIONAL D'ÉTUDE DE CAS MBA
JOHN & MOLSON
MBA INTERNATIONAL CASE COMPETITION

CASE 3:

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Sentient AI: A boon or a bane?

Artificial Intelligence is the capability given to machines to think like humans in certain areas. It is an umbrella term for multiple technologies and programs that make software smarter and gives the perception to others that the output is human-generated. It is the latest in a series of revolutions and technological breakthroughs that have allowed instantaneous communication and the sharing of information.

AI can do what is impossible for humans to achieve and, as a result, has impacted society, business and culture on a very large scale. It has gained momentum at a rapid pace and has created significant business and societal opportunities in healthcare, education, service industries, and government, among others. It is being integrated into most aspects of life, producing new efficiencies and enhancing human capacities. Its decision-making process is based on facts rather than emotions. With an accumulation of data, knowledge of user behaviour, and the help of algorithms and pattern recognition technologies, AI has developed intuitive thinking. As this decision-making is backed by volumes of historical data, there is little scope for error and it can work without breaks or decreases in efficiency. Accurate knowledge transfer is possible between two AI machines, unlike humans where there is a dependency on communication and perception.

AI has become a multi-billion dollar industry. Tech giants like Google, Microsoft, Apple, and Amazon are investing heavily in AI products and services. The industry continues to attract entrepreneurs and their startups. Governments, most notably in their defence departments, are focused on developing AI capabilities as well.

The next frontier for AI and its most potentially far-reaching is artificial sentience, which is the ability for a machine to be self-aware, possess emotions and have the capacity to express them. AI could evolve from serving specific human needs and attain the power to self-develop.

In 2021, an engineer at Google was tasked with testing the company's chatbox LaMDA and concluded that the robot was sentient. It could converse, read, and display emotion. Others disagreed and concluded that LaMDA only imitated, impersonated, and responded to prompts; they argued that there was no sentience, no self-contemplation, no self-awareness, and no consciousness. Because there is no clear definition of what constitutes sentience or how it should be measured or tested, it is difficult to estimate how close we actually are to sentience. It is nevertheless important to prepare for a world where machine sentience evolves from fiction to fact.

Some believe that, as with all technological breakthroughs, advances in AI will be positive in many areas, including medicine, education, fighting climate change, etc. On the other side, some believe that beyond a certain threshold, sentient AI could become dangerous as the intelligence of machines exceed that of humans.

There is also a genuine concern for the ethical and privacy issues arising from these advances. Key considerations are the public's lack of awareness and understanding of what is happening; the industry's lack of transparency in what is coming; the absence of any regulatory framework or oversight on the industry; and the impact these advances will have on the economy. Further, the very nature of work and its ethical, societal and economic impact on society are also of concern.

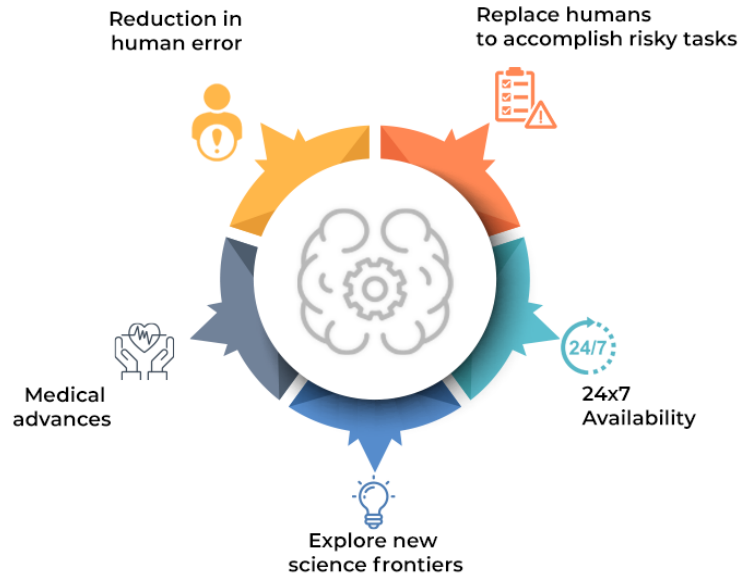
Questions:

1. What are the challenges and opportunities for businesses arising from the evolution of AI as it affects customers, employees and other key stakeholders? How would you propose to address those challenges and opportunities?
2. What role, if any, should governments have in overseeing the ethical and economic implications of AI, and how do you propose organizations work with these regulatory bodies?

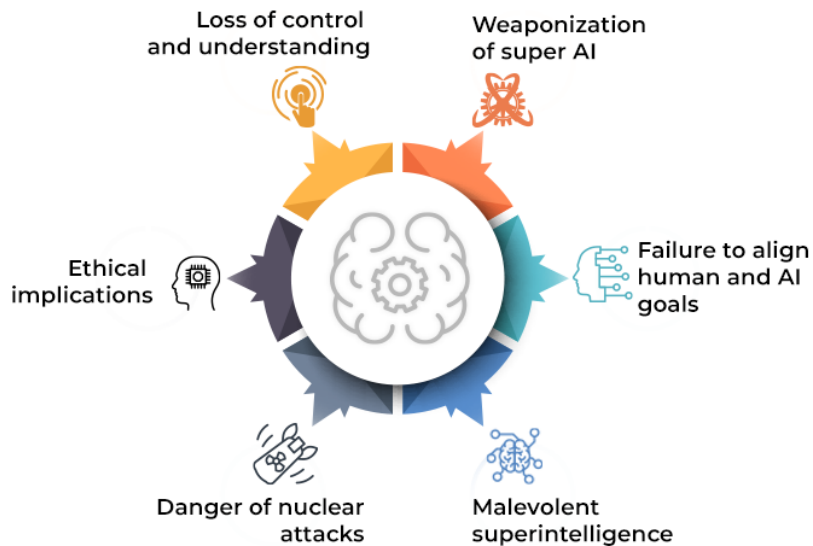
Annexure I

Artificial Super Intelligence: Advantages & Disadvantages

Advantages of ASI



Potential threats of ASI



Source: Kanade Vijay, “What Is Super Artificial Intelligence (AI)? Definition, Threats, and Trends”,
<https://www.spiceworks.com/tech/artificial-intelligence/articles/super-artificial-intelligence/>, March 11th

