

Artificial vs Human Intelligence

Background

- With the constant evolving of Artificial Intelligence (AI), there have been waves of propaganda resulting in fearmongering over AI takeover of human jobs, especially with increasing research and development being conducted in this field.
- Many, including Stephen Hawking and Elon Musk, have warned that development of intelligent machines beyond a certain point, as this could mark the end of humankind.
- This intimidation is of major job shortages and quick replacements of multiple occupations by rather accurate and efficient machines. Therefore, there is fear when it comes to the impact of AI on jobs.

Why there is fear of job loss?

- There is a decline in industrial employment in high-income countries like Singapore, Spain, and the United Kingdom over the last two decades.
- There are certain events in which automation turns out to be more efficient when compared to human labour.
 - Whether in assembly lines or in first responder situations, machines can certainly help a great deal in automating the process while boosting efficiency.
- As per the International Federation of Robotics (Frankfurt), the number of robots has doubled in their latest report compared to previous year's report.
- Therefore, people are worried about the impact of AI on jobs.

Reports on employment

- There is a decline in industrial employment in major economies but several industrial jobs have been created in emerging markets like Vietnam and Cambodia.
- As per the World Development Report (WDR) 2019 of the World Bank, on average, the share of industrial employment has remained stable in developing countries, despite the many predictions of job losses resulting from technology.
- In fact, this trend merely reflects a shift in employment from manufacturing to services as those countries grow.
- Also, the increase in robots and profound usage of automation can be noticed in countries like Germany, South Korea, and Singapore. Interestingly, the employment rate in all these countries remains high.

The real impact of AI on jobs

- The fact is that there is a changing nature in the global workspace. Technological progress is leading to employment generation as much as its destruction, with some direct job creation in the technology sector.
- In a relatively more indirect manner, automation advancements have also facilitated job creation through the use of innovations like e-commerce, gig economies, etc.

- Few research papers also point out the dubiousness in the self-adjusting core of AI and its resultant impact on human job replacement.
 - They claim in their paper that AI tends to occur on a task-by-task basis, and so it will never completely displace human contributions, although tasks within a multifaceted job can be re-engineered and re-bundled.
- A Professor in Machine Learning at Oxford University revealed that the introduction of artificial intelligence in the job space is disrupting three types of skills:
 1. The demand for non-routine cognitive and socio-behavioural skills is rising.
 2. The demand for routine job-specific skills is falling.
 3. The payoffs to a combination of different types of skills appear to be increasing.
- These changes show up not just through new jobs replacing old ones, but also through the changing skill profile of existing jobs.

Why automation will fail to completely replace humans

- Most of the jobs that we can think of require a multiplicity of skills. From technical expertise to intuitive mastery, jobs generally require a host of cognitive and socio-behavioural skills that are interconnected.
- There is a wide range of jobs which cannot be performed without human intervention.
- With tools and technology improving every minute, automation, in fact, magnifies the importance of our judgments rather than displacing them.
- Therefore, it is safe to assume that it is impossible for intelligent machines to completely replace human capital as long as the AI has not evolved to a point where it can interact, engage, think, adapt, and respond exactly in a fashion as a human can.
- This aspect is considered as the “human prerogative.”

Conclusion

- Rather than a test for the survival of the fittest, today we can expect a workforce that is a blend of human and machine intelligence.
- If automation ensures a smarter and safer existence for us, there should be no reluctance in embracing it.
- The “M project” launched by Facebook is probably a prime example of man-machine cordiality.
 - The project seamlessly blends humans and robots in a way that it becomes impossible for the end-user to identify whether they are communicating with a machine or a live person.
- Automation stands to challenge the very fabric of the traditional employment scenario.
- Definitive actions such as dedicated investments in human capital (early childhood development) and drawing social contracts that are relevant to the new age must be given priority to ensure economic growth, through the workforce of productive members in the society.
- In a world of expanding global value chains, gig economies, and dynamism in jobs, only through acknowledging this paradigm shift can we perceive a reality of humans and robots working together more closely than ever.