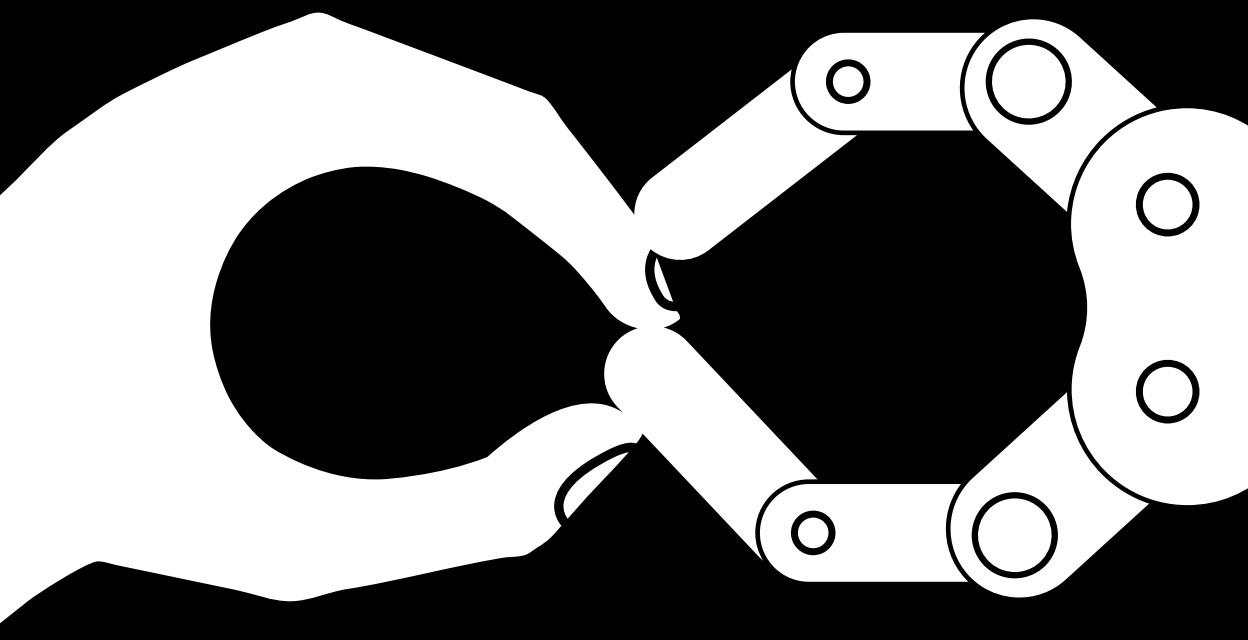
BETTER AT BEING HUMAN, THANKS TO AI

Fear and paranoia about where AI is headed helps no one. A positive outlook, combined with a strong foundation to make innovation safe – through cooperative governance, will help us amplify human potential – not destroy it with AI.

Over the past few years, a growing tribe of AI doomsayers has made several predictions on the threat of AI. The prophesies include, among others, an impending war by killer robots and the need for humans to become cyborgs to stay relevant in the age of artificial intelligence (AI). Statements such as these are not limited to technology leaders. For instance, a prominent theoretical physicist has warned that "AI could spell the end of the human race." Additionally, a British inventor publicly voiced his concerns about how the human race will be unable to survive against more intelligent machines.

This may seem far-fetched to many of us. As humans, we are all programmed to be aware and cautious as an in-built safety mechanism – but not to the point of being paranoid. Paranoia merely breeds panic and serves no purpose other than to impair the human condition. Humans are curious and positive creatures. This ability – to feel and find happiness in the simplest of things – without proven and accurate data is a human privilege. It gives us a unique advantage against any AI tool, robot or cyborg.

To be fair, some of the concerns voiced by the global community are certainly well-founded. For instance, the CEO of a high-tech automaker raised valid concerns that "AI will follow the will of the people that establish its utility function." In other words, he worries that AI can be dangerous in the wrong hands. To counter this, the industry needs



Infinite possibilities.

The future of AI is not dystopian.
It's about amplifying human potential.

robust regulatory frameworks and stringent governance that ensure innovations in AI are not hijacked for unethical or criminal purposes. Microsoft's AI bot, Tay, and its series of racist comments on Twitter is a classic example of how AI software may repeat user behavior gleaned from public data, particularly when there are no filters. Thankfully, Tay has been taken offline now and Microsoft is working on upgrades.

A Case for Stronger Controls

However, incidents such as the corruption of Tay may be giving AI an undeserved ticket to hell. All innovations have teething troubles. In the early days of cloud computing, security was the key concern. The question in everybody's mind was: Is my data safe on the cloud? Certainly, phishers and hackers were lurking in the shadows, waiting to steal sensitive data. But, this fear did not stop businesses from leveraging the transformational benefits of cloud. Very soon there were strong regulations making it mandatory for cloud service providers to adhere to certain standards. Today, security is no longer a major issue in cloud transitions.

Many organizations are making committed strides in this direction – to ensure that AI innovation is safe.

The same can be said of AI. With the right controls, why fear the power of big data and the value of deep AI? With proper regulations, big data and deep learning can only serve to amplify human potential, propel the global economy forward, and improve the overall human condition. Interestingly, many organizations are making committed strides in this direction – to ensure that AI innovation is safe. OpenAI, a non-profit AI research company, has been established to understand AI-centric governance and ensure that AI is used safely. Recently, a group called the Partnership on Artificial Intelligence to Benefit People and Society – comprising Google, Facebook, IBM, Amazon, and Microsoft has been formed to establish best practices, and conduct and publish research about all AI-related topics.

AI can Make Us More Human

When touting the benefits of technology, it is important to have a well-rounded and unbiased view. Consider for example that today, after decades of technology revolutions, 9.6% of the world's population continues to live in dire poverty. Despite all the technological advances that the world has seen in these past decades, a large proportion of the global population is still struggling to survive. Technology, largely, has thus far served the haves. AI has the potential to take the benefits of technology and learning and transform the lives of those who have been left behind – by the sheer scale, speed, and accuracy it can bring to global and large-scale initiatives. AI offers a great opportunity to provide a civilizational upgrade to the masses by allowing us to apply our innate qualities of 'empathy' and 'compassion' to improve the lives of have-nots. Freed from repetitive and mundane tasks, humans will be able to harness the power of knowledge on-demand to address daily job problems. AI can help them discover opportunities to truly advance their unique traits of imagination, creativity, and a quest for purpose. In doing so, we will be able to solve bigger problems such as hunger, disease, ignorance, and poverty. AI, in fact, holds the promise of helping us become more human.

The Power of AI

The current definition of a 'job' is a flawed one. Most of today's jobs are nothing but mundane economic tasks that need to be fulfilled. The dynamic human mind is capable of much more. If anything, it needs to feed on creative, imaginative, and innovative challenges such as the socio-philanthropic condition. This is where the power of AI comes in.

Here's an example: It's 2017. Tom and Dave are operations engineers with traditional 'jobs'. Tom is a subject matter expert (L2 function) while Dave is a dispatch / routing agent (L1). This two-person team is trained to understand insights generated through big data and ensure smooth operations. In future, this whole process can be replaced by a single person who can not only leverage analyzed data but also predict issues and recommend corrective actions. This will be enabled by a combination of cloud (for real-time actionable insights) and digital natives (to execute the recommended action). The end result: Higher operational productivity and better efficiency for the business. What about Tom and Dave then? Tom becomes a knowledge worker who finds ways to enhance the underlying

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IT operations, optimize robotic execution, and enable intelligent decision-making using digital natives. And, instead of simply relaying and executing actions, Dave is now free to find better ways to add value to the company and realize his true potential. Dave could be creating the next 'uber' marketplace for his enterprise.

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What about the robots?
With deep learning, the robots can learn to think and act based on data knowledge trees and human action knowledge trees. They can be taught to understand how human and business events influence economic activities, thereby empowering them to generate better output.

Consider how AI can deliver value to BPO employees who handle customer complaint calls, bank tellers who dispense cash, or toll booth operators who issue tickets. Imagine a future where healthcare providers leverage their digital avatars to provide trusted real-time care when required, without having to visit ERs. AI and automation will bring about significant and positive disruption in the lives of such people by encouraging them to adopt value-generating roles. In fields such as oilfield drilling and space exploration, where calculations are massive and extreme precision is critical, AI and Deep AI can offer advanced predictions, helping engineers improve drilling processes and enabling astrophysicists to make ground-breaking discoveries. The possibilities for digital natives and AI are endless: They can positively transform banking, finance, agriculture, government operations, healthcare, drug research, and clinical trials, to name just a few areas.

Bottom Line

In conclusion, it is evident that AI can help machines serve humanity better by creating a harmony between digital and biological intelligences.

We can safely put away our fears of a dystopian world or a post-apocalyptic future where humans serve robots. As we empower robots to take on some 'jobs', we will dedicate ourselves more emphatically to improving and enhancing the human condition. That is where the true power of AI will be clearly seen.

Human and artificial intelligence have to work together, as a team, complementing their abilities to realize human potential.

About the Author

Abhijit Shroff

AVP and Senior Principal Technology Architect, Infosys

Abhijit is an Associate Vice President and Senior Principal Technology Architect with Infosys, having around 19 years of experience in the industry. He has led emerging and niche technology business practices, built products, and led complex technology programs in the space of HPC, Big Data, Operations Autonomics, and Hybrid Cloud Computing. He is currently focusing on building and delivering the next-generation AI platform to help clients reimagine their business and IT operations landscape. His interests include adoption of technology for impacting social and economic transformation.

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