Calculative Risks should be Taken in Adopting AI Technology

Unnecessary fears should be forsaken, and anticipatory research should be strengthened to understand the potential impacts of AI

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History has seen the evolution of society from individual hunters, groups, communities, and to the 'God' oriented religions. At last, the modern era witnessed societies oriented to humanist philosophy. Every node at which a significant change took place has a technological advancement. Stone made tools, fire, the wheel, agriculture, metals leading to settled communities and then came the sophisticated inventions like catapults, chariots leading to the establishments of kingdoms and empires. Today, we arrive at the stage which transcends the humanist philosophy. Such transcendence is arguable but looking at the extent of technological dependence of an individual; maybe it is time to think about redefining 'being human.'

Harari opines that in a century or two, anthropomorphism of biotechnology and Information and Communication Technology (ICT) would usher a dawn of new humanoid civilization (Y. N. Harari 2018, 145). People depend on information technologies to interact, educate, and also to find help with their daily chores. This era has witnessed the dependence on satellite navigation systems to navigate routes and smartphone applications such as Zomato to decide which restaurant to choose and eat. Search engines eternally shape our decisions by providing biased search results; though it can be debated whether search engines are biased, or the induced bias is because of the personal search patterns. It is no wonder if internet-based technologies become ubiquitous very soon.

Adding to the uncertainty, the emergence of the breakthrough in the field of Artificial Intelligence (AI) has started the race of AI adoption. The entire manufacturing industries would be revamped into digital- robotic hubs replacing a vast number of floor technicians; health care sector would be re-imagined if AI-based systems such as IBM Watson is given the work of initial diagnosis; Education would never be same after the AI-based holographic personas would teach students and evaluate their performance just by analyzing the semantics of their physical and mental behaviour. These scenarios are not drawn from science fiction novels or movies. They are surreal depictions of what AI can do. This brings us to the question, whether we need to fear this disruptive technology?

Unnecessary Fears of the Technology

Eight decades earlier, people were frightened at the thought of whether wheeled automatic carrier would move with the speed of 100 km/hr. All the cart drivers were feared losing their livelihood. Even the famous luddites, a group of English textile workers feared economic loss because of the power looms. Now, the world has automobiles which drive at speeds exceeding 400 km/hr and power looms have become the norm Technology does not create hindrance to the human development but enhances their capacity. Decades earlier, diseases like cholera, smallpox was dreaded; now they no longer are a threat because of the new advancements in the medical technologies. Today, it appears like déjà vu when today's world fears of technologies such as AI. Aren't these the same fears which were present eight decades earlier with older technologies? Aren't they unnecessary?

The world is under a constant change, and the difference brought by technology is much more rapid and visible. Fear wouldn't have grappled public if there was no information about the same. It can be hypothesized that the advent of information and communication technologies have increased the fear of change. It would have been a matter of great concern for the public if they knew about project Manhattan in 1942. The point is confidentiality has put a check on the concern. So, it is an open question whether too much information instils fear?

AI and the change of socio-political structure

AI is the most sought technology which every business would like to adopt. Sectors such as BPOs, customer support, data analysis, risk assessment are some of the many sectors, where the future of human interference would become negligible. Similarly, it has a great capacity to affect governance and politics. Even the much-celebrated democracies across the world are in tantrums because of alternatives such as data democracy and AI democracy, within which open data and public sentiment analysis play a significant role than the vote. Because of all the capable changes which AI can bring, societies are under constant technical and digital iterations.

In the era of AI, it can be argued that the future of humankind is going to be forcibly mended in accordance to the "big digital corporations". There is a chance that in the world where liberties are respected and fought for would turn into the contrary. It is also possible that it is going to be the most democratic one. With every citizen having a fair chance to participate in drafting their future politically, economically, and culturally. Which way would the world societies move?

This question is not easy to answer. The digital future is blank or at least uncertain for all the countries. However, the emerging technologies and their impact on society are well researched, at least at the peripheral level. With that, the impacts are not difficult to anticipate. So, it is up to the states to steer the future of the nation. It has the mantle of taking a calculated risk and drafting policies which allows the development and deployment of technologies favoring the national development. Especially, it is the task of the representative groups (political leaders, public organizations) to gather the experts and understand the potential risk emerging from AI and make decisions accordingly (Luhmann 1990).

AI is not inherently harmful as a technology. There are a lot of positive use-cases which are also equally disruptive. For example, London police have made arrests using AI-based facial recognition technology, and the Delhi police have tracked and found 3000 missing children. If AI is used for the benefit of society, no one opposes it. But when it invades one's fundamental rights like privacy and freedom, it becomes a huge concern. The negative or fearful aspect of surveillance can be seen in Mainland China, where the public is continuously under surveillance. The strong grip of Chinese Communist Party (CCP) on the public is sometimes considered an act to withhold the power of the party (Vatsala Mishra 2021). They have created a society which has

to run by the commands of the party. It appears as if the nation is made for the survival of the state but not vice-versa. Interestingly, the world's top 5 surveilled cities are in China.

AI systems have the capacity to analyze large sets of data and provide desired results. Its application is sought not only in facial recognition but broadly in behaviour change identification, making citizens vulnerable to the illiberal governance. China has introduced "Social Credit System" in 2014 and put a deadline as 2020 for all citizens to enroll in the national database (Scott McGregor 2021). This system tracks public behavior and ranks them accordingly. Such ranks are used to punish or reward. It is similar to the cibil score or credit cards, but the Chinese social credit score includes public traffic violations, behavior in the public places, and online behavior. In China WeChat is the only application which is used for all the online communications and transactions. So, the public economic, business, political, and social behavior is effectively traced down. China has also something called corporate social credit system. It is exclusive for the business entities and the score is used to rank them. The score helps them in attaining perks form the government. Doesn't it remind us of Orwellian society? China is mastering the art of mass surveillance and its intensity is compared with East Germany's secret police – *Stasi* (Vatsala Mishra 2021).

China being the largest user of AI (qualitatively and quantitatively) is also the largest exporter of AI driven surveillance technologies. AI systems in China, even though it allows individual criticism of the state, shuns the collective criticism (King, Jennifer and Margarete 2013), thus maintaining the status quo of state apparatus. The Hong Kong National Security Law provides China to install a similar system in Hong Kong, which most probably will put an end to the mass protests. Soon, citizen movements such as Umbrella movement would become just an imaginary play which cannot be replicated.

How do we deal with AI?

According to Harari, Humans would no longer be the decision-makers deciding the usage of technology. Instead, they have adopted the approach somewhere between technological determinism and social constructivism (N. Y. Harari 2017). In such rapid and massive disruptions across social, societal, political, economic, and cultural aspects, evaluating the societal impact of AI becomes much necessary. Here it becomes essential to reiterate the fact that

the emergence and adoption of advanced technologies like AI would not bring human-level extinction. The fears of AI singularity are farfetched. Nick Bostrom in his famous book *Superintelligence,* opines that it would take centuries for AI to achieve super intelligence (Bostrom 2017). However, they bring high uncertainties in all the societal aspects.

All these known impacts should drive the Science Technology and Society (STS) discipline to initiate what David Guston has done with emerging technologies in the Arizona State University, calling it – Anticipatory governance of emerging technologies (D. H. Guston 2010). It involves understanding the technology and interactive social science research in collaboration with the technology scientists, workshop learning and exchange of various perspectives of technology's social impact; Public engagement using science cafes, discussion forums, podcasts, interviews etc.; and finally modelling ex-ante research for policymaking. Such anticipatory research would provide us with an opportunity to select our path towards the usage of technology. Such making of policy reduces the uncertainty and makes the society to embrace the change.

On a final note, this essay argues that technological disruptions are not new. Societies will and should welcome them in one way or another. Because of the long-amassed knowledge and connectivity, today's societies are capable enough to anticipate the impact of AI and consciously choose the future. Niti Aayog, an Indian government thinktank opines that AI is once in a decade technological innovation. It strongly believes that it will benefit all the sectors of the society and has released a paper advising to focus on Agriculture, Mobility, Health, Education, and Transport (Polcumpally 2021). The emphasis made by Niti Aayog is felt during the COVID-19 pandemic. During the second wave of the pandemic, India is under a health emergency. Introduction of AI into the healthcare would exponentially improve the healthcare infrastructure. However, the development should have the national will and courage. A calculative risk must be taken by Indian government. Without ex-ante research and anticipatory research, calculative risk cannot be taken. Risks of AI on the social, societal, economic, and political impacts of AI cannot be understood and sustainable & inclusive development of AI is impossible. Multidisciplinary research programs such as Science, Technology, and Society (STS) are capable enough to impact assessment research. Hence, it is imperative to make use of the emerging methods such as anticipatory research (there might be alternatives ways) and start understanding the impact of AI. This article hopes to have provided the readers the argument on the usage of AI and its unnecessary fears. It is up to the political elite to gather the existing techniques of anticipatory research and consider a calculative risk policy in the implementation of AI.

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