The potential dangers of AI on the democracy of the country

No Author Given

Faculty of Science, Vrije Universiteit, Amsterdam, The Netherlands

1   Introduction

Artificial Intelligence(AI) technologies have developed rapidly in the 21st century and have revolutionized our lives. Artificial Intelligence, as we know it today, takes control over most aspects of our life without us being fully aware of it. The algorithms that the intelligence community, the smart people write over time, tends to affect most of the decisions that we make as a human race today. It has a vast collection of metadata, continuously analyzing and processing out information in real-time that make our lives way easier.

Tech companies, especially huge tech companies play an important role in both promoting the development of AI technology and changing our daily lives. AI is not only used for advanced research, data analysis and predicting models in medicines and creating a Digital Ecosystem, but, also by political leaders and influential people to manipulate the democracy of the country and control the civilians. But, for these emerging industries,Laws and regulations are weak for sure. Do people think adding regulation is necessary? Why the Anti-monopoly Laws didn't work for those tech giants? What kind of regulations or measures can be taken? In this paper, the above issues are discussed and analyzed through both popular press and some scientific literature.

2   Is AI a potential threat to Democracy?

With great advancement in the AI field, are we, the humans growing, or are they, the community of Artificial Intelligence growing? Elections and worldwide decision-making of political leaders, shaping the personalities of a targeted population, and controlling them is not a big deal anymore. Whether we believe that technological singularity is near or far, likely or impossible, apocalypse or utopia, the very idea raises crucial philosophical and pragmatic questions, forcing us to think seriously about what we want as a species.

2.1   Popular press

US Defence expert, Jay Tuck opens his TED talk with the definition of Artificial Intelligence, as software that writes its updates, renews itself, independently and autonomously, at speeds that we can hardly comprehend. It develops its

own set of knowledge and own way of thinking[1]. We seem unable to marshal the appropriate emotional dangers that lie ahead. The concern lies in the fact that we will build machines that are so much more competent than we are that the slightest divergence between their goals and ours could destroy us. Considering the example of an ant, we don't hate them, we don't harm them, but, whenever their presence seriously conflicts with one of our goals, we annihilate them without a qualm. The point is that we might end up building machines, self-aware or not, who could treat us with similar disregard.[2]

In a poll conducted on behalf of Stevens Institute of Technology by Morning Consult between September 8-10,2021 among a sample of 2200 adults, majorities of adults believe AI has played a role in the loss of trust in elections (57%) and institutions (56%), as well as the spread of misinformation (58%), political polarization (53%), and threats to democracy (52%)[3]. Modern media has a big focus on personalities. We all have a stake in this, the balance of power between the citizenry and the government is becoming that of the ruled and the ruling, as opposed to actually the elected and the electorate[4].

Many movies on the internet show how Artificial Intelligence takes over mankind and controls them. Sma Haris says that it's not that our machines will become spontaneously malevolent. The concern is that the appropriate computation systems for information processing developed by humans would be so powerful that the horizon of cognition is very unlikely to exceed what we currently know[2]. Artificial General Intelligence (AGI) will become so powerful and intelligent that it will suppress our emotional reasoning as human beings. In a way, the fear is that we would be working for those AGIs to build a world where we are nothing but mere, slaves. The metadata that gets collected by many big tech companies, for-profit can be used to form an image of the personality of individuals and target a set of the population to bias their votes to a certain political party. The algorithms are designed in such a way to trigger appropriate information to their users and trigger in them an emotional surge that takes away their own free will. In 2018, Cambridge Analytica became a potent symbol of social media's dark side. The resulting wake-up call raised broad concerns about data privacy and targeted advertising, triggering numerous government hearings and widespread condemnation of Facebook.[5] And, it's fair time that we realize how vulnerable we are to social media these days for all kinds of information and entertainment.

2.2 Scientific Literature

The Internet giants are the single group of corporations in history that have managed to keep their output largely unregulated, to dominate markets and be most profitable at the top of the stock exchange, to command important influence on public opinions and politics, and at the same time stay largely popular with the public. In a history of 'Google books', Scott Rosenberg [6] describes the early attitude of Silicon Valley as engineering-driven and without respect for the law. This 'better ask forgiveness than permission' attitude brought 'Google Books' into conflict with copyright laws and 'Uber' with labor law and regulation of

public transport. The struggle to evade democratic law, and thus responsibility, is not limited to only the political arena but is also fought before the judiciary. Their explicit and implicit claim that parliamentary and governments do not understand the Internet and new technologies, thus have no legitimacy to put rules in place. At the same time, it's self-realization as to how little technologists actually understand democracy and the functioning of the rule of law as well as the need to protect fundamental rights in a world in which technology increasingly tends to undermine all the pillars of constitutional democracy.[7]

In states with unaccountable institutions and frequent human rights abuses, AI systems will most likely cause more damage. Taking China as an example, the government set up the world's most sophisticated surveillance in Xinjiang province, tracking citizens' daily movements and smartphone use.US police are using advanced software to predict where crimes will happen and relevantly send their troops on patrol. They use facial recognition and DNA analysis in criminal investigations which are mostly trained on biased data leading to unfair outcomes, such as falsely determining that African Americans are more likely to commit crimes than other groups. In addition to continuous high-revolutionized surveillance, AI can help repressive governments to manipulate available information and spread disinformation[8].

One of the activities that have been fueled by AI to manipulate elections is micro-targeting on different levels. AI can help with the extraction of information by scanning the web and analyzing all unstructured data to build personal profiles in social media. Research has shown how voters receive hyper-personalized messages that are relevant to them, biasing their decisions towards or against certain groups [9][8]. AI also underpins the technology commonly called "deepfake," in which algorithms create realistic video and audio forgeries. Muddying the waters between truth and fiction may become useful in a tight election when one candidate could create fake videos showing an opponent doing and saying things that never actually happened.[8]

Another potential threat on democracy is the frustration of citizens, who at some point will become non-voters and will no longer participate in any political or democratic life, in a dilemma of distinguishing between the real and the fake. The more deceptions that occur and the more difficult the verification of content becomes, the more likely that people's trust in their institutions will continue to decrease.[10]

Even when we speak of threats of AI to democracy, there are people who believe that AI can rather be used to replace the democratic system for good. Over long periods of time and across cultures, it has been observed that tyrants relish and demand flattery. Nowadays, being a democratically elected government is seen as a job or career, rather than a public duty, letting the mass be ruled by the powerful few. An appealing aspect of democracy lies in the perceived equality between people's the ballot box. This sophisticated software can be used to create a fair voting system irrespective of age, mental impairments, and geographic discrimination. This can be used to protect, strengthen and create a better political system.[11]

3   The era of big tech lacking - regulation must end

Due to the coronavirus global pandemic and the development of AI, all of us are increasingly dependent on services provided by tech companies for so many aspects of our lives, news, education, work, food, and health information[**?**]. Mastering a large amount of data leads to a concentration of power in the hands of such a small number of companies posing a danger to democracy. But to some extent, while the power of Big Tech has grown to staggering new levels, their regulation and oversight have not.

3.1   Popular press

The proprietor of a small or medium-sized business would say, "We wouldn't have survived without Amazon." During the lockdown, some of them are required to furlough all employees and stop their business. But thanks to Amazon, they can still sell their products online and make their living. During the pandemic, not just Amazon, Apple, and Android smartphones and tablets, Facebook apps, and Microsoft tools provided us vital ties with friends, family, and co-workers. [12] However, an increasing number of people and scholars are concerned that such reliance on Big Tech will spiral out of control as a result of their growing power. According to a survey of US internet users conducted by SurveyMonkey for Axios in February 2018, 55% of respondents are concerned that the government will not do enough to regulate the way tech companies operate.[13].

What makes people concerned? The tech giants are powerful in new ways: they have power that stems from their mastery of digital technology and that societies yet have measures to contain.[14] These companies have a lot of user data, which will undoubtedly result in information imbalance. Because of their combined platform, power, and information asymmetry, those companies have the ability to influence or even dictate the rules for large sections of the economy. *"That is how they can function as a monopoly without being a monopoly."*[14] said by José van Dijck, the professor of media and digital Society at Utrecht University.

Tech columnist Farhad Manjoo from The New York Times describes the five biggest tech companies such as Google, Apple as "Frightful five". He warns that they are collectively more powerful even than many governments.[15] In terms of innovation, they are doing what the government used to do. They are both involved in Artificial Intelligence research. And their technologies will most likely affect the majority of our jobs, as well as the entire society and inequality.

One possible approach to make a difference, according to Tobias J. Klinge, is to adopt "open source" methods to circumvent Big Tech enclosure; another is to take the infrastructural core of Big Tech into public hands entirely, treating them as critical public utilities. [16]. For the complexity of the digital economy, Jason Furman, professor of practice economics and former head of the Council of Economic Advisers, urged that traditional policy methods such as tighter enforcement of merger and antitrust laws should be rejuvenated and enhanced.

However, the government also needed to create a pro-competition digital regulator to establish fair rules of the road that could be stated and enforced in advance.[17]

3.2 Scientific literature

The Scientific community was also aware of these issues. According to Jonne Julia Clara, these companies unaccountably dominate society due to (1) certain powerful features and (2) underlying societal structures, resulting in (3) monopolistic tendencies. [18]. This permits internet companies to meddle in society without fear of being held accountable. I argue that firms' dominance can be moderated by a co-determination scheme in which secondary associations participate in the decision-making process of tech companies, making their authority democratically responsible.

Some Researchers from Australia thought that since big tech poses high risks to public health and safety, Australia needs to pivot to adopt a stronger approach to regulating Big Tech. And the light-touch regulation as before won't work for data protection. They also think this is a global industry, and it's going to need a sort of rigorous regulation from multiple countries that catalyzes the much-needed change to their practices. We can't leave this to Europe or America to do alone. [19].

Several possible ways to improve the current situation was suggested by Arian Tiwari[20], including ensuring that competition is not killed when acquiring other companies, breaking up the huge giant, limiting the conditions of using the user's data, and, most importantly, improving the customer representative commitment.

However, Some people don't think regulation is the best way. For example, Dr. Sid Lukkassen argues that governments should encourage the free flow of information on the internet, regardless of its reality, rather than combating false news with increased regulation and pressure on social media sites. No government or organization, no matter how well-intentioned, has the authority to tell people what content is appropriate or inappropriate. Governments can help people learn to think critically for themselves by introducing critical thinking into education curricula, for example.[21]

4 Conclusion

In conclusion, the AI power in Big Tech has posed a big threat to our society and democracy. Although there exist already some regulations(considered as light-regulation), more regulations and methods are needed to constrain the power of big tech companies. They have power in new ways and can function as a monopoly without being a monopoly. Thorough legislation should be set up to govern how much of a user's private data should be open to access by the big companies, so as not to limit the boundaries of the intellectual exploration. In general, while the world benefits from AI, it should work together to handle the new concerns and challenges it brings.

References

1. Artificial intelligence: it will kill us. [EB/OL]. `https://www.youtube.com/watch?v=BrNsOM77Pd4` Accessed Feb , 2017.
2. Can we build ai without losing control over it? [EB/OL]. `https://www.youtube.com/watch?v=8nt3edWLgIg` Accessed Oct, 2016.
3. Stevens techpulse report. [EB/OL]. `https://www.stevens.edu/news/stevens-techpulse-report`.
4. citizenfour. [EB/OL]. `https://www.youtube.com/watch?v=EDhB-A23IUk`.
5. Netflix documentary the great hack turns the cambridge analytica scandal into high drama. [EB/OL]. `https://www.theverge.com/2019/1/30/18200049/the-great-hack-cambridge-analytica-netflix-documentary-film-review-sundance-2019`.
6. How google book search got lost. [EB/OL]. `https://www.wired.com/2017/04/how-google-book-search-got-lost/`.
7. Paul Nemitz. Constitutional democracy and technology in the age of artificial intelligence. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 376(2133):20180089, 2018.
8. Steven Feldstein. How artificial intelligence systems could threaten democracy. *The Conversation*, 2019.
9. Andreas Sudmann. *The Democratization of Artificial Intelligence: Net Politics in the Era of Learning Algorithms (Edition 1)*. transcript Verlag, 2019.
10. Ayşen AKKOR GÜL. *Digital Transformation in Media and Society*. Istanbul University Press, 2020.
11. Oggie Arandelovic. Ai, democracy, and the importance of asking the right questions. *AI & Ethics Journal*, 2021.
12. Sooraj Shah. Have we become too reliant on big tech firms? [EB/OL]. `https://www.bbc.com/news/business-53046873` Accessed June 19, 2020.
13. Ross Benes. Big tech backlash? *Public opinion may be turning against companies like Facebook and Google. eMarketer*, 2018.
14. Martín Harracá Pete Swabey. Digital power: How big tech draws its influence. [EB/OL]. `https://techmonitor.ai/boardroom/power-of-tech-companies` Accessed Feb 16, 2021.
15. Farhad Manjoo. How 5 tech giants have become more like governments than companies. [EB/OL]. `https://www.npr.org/2017/10/26/560136311/how-5-tech-giants-have-become-more-like-governments-than-companies?t=1642252396063` Accessed Otc 26, 2017.
16. Rodrigo Fernandez. How big tech is becoming the government. `https://www.somo.nl/how-big-tech-is-becoming-the-government/` Accessed Feb 5, 2021.
17. Jason Furman. The value and challenges of regulating big tech. `https://www.hks.harvard.edu/faculty-research/policy-topics/business-regulation/value-and-challenges-regulating-big-tech` Accessed Dec 16, 2020.
18. Jonne Julia Clara Maas. The power of tech companies: towards a non-dominating technology sector. Master's thesis, University of Twente, 2020.
19. Rys Farthing and Dhakshayini Sooriyakumaran. Why the era of big tech self-regulation must end. *AQ-Australian Quarterly*, 92(4):3–10, 2021.
20. Aryan Tiwari. Big tech monopoly-effects, desirability and viable regulations. *CYBERNOMICS*, 1(7):19–22, 2019.
21. Dr. Sid Lukkassen. On the power of big tech to shape politics and culture, and its ethical problems. 2020.