



AI and Its Policy Implications in Global Politics: Leverages and Impediments

* **Dr Divya Rani**

Assistant Professor

Department of Political Science

Banaras Hindu University

Abstract

Artificial Intelligence (AI) is becoming one of the major evolutions in global politics along with other emerging technologies that comes under the umbrella terms of the Fourth Industrial Revolution. This new revolution has been challenging the traditional notion of economy and security since its inception. Many countries are investing massively in the advancement of this technology, and now it has become an indispensable aspect of global power. All countries have different approach of adoption and implications. China, United States and India have introduced their strategy paper on AI and policy makers are utilizing these emerging technologies as per their needs with the consideration of the environment of the society. There is no universal pattern on the policy making as there is no universal laws and norms of the usage of this technology and hence it creates apprehensions and hope among nations. This paper is focusing on the policies that have been introduced by major countries and it will critically analyze the opportunity and challenges to the global politics and its impact on nations. AI is creating another kind of digital divide and technological advancement gap between developed and developing nations. The quest of supremacy in AI between China and the United States is a major concern among nations as well as main determinant in policy making.

Keywords: Artificial Intelligence, Policy, Security, Global Economy, Global Politics, World Order

Introduction

Artificial Intelligence (AI) has become a revolution in the contemporary world and extensively adopted by many major nations. However, its evolution spans more than 60 years (McCarthy et al., 1955) when John McCarthy proposed hosting a two-month workshop around the newly created idea called Artificial Intelligence. With the breakthrough of Machine Learning in 2010 that engages in 'deep learning' and advancement of computer system have made AI more advanced and accessible. The usage of AI is not limited to Information Technology (IT); it has gone beyond IT, expanded and applied in various aspects of human life including health, education, defense, art and social sector. As per AI experts, after almost 25 years, with the dawn of Artificial Super Intelligence (ASI), AI will supersede human beings, and that could be the biggest threat to humankind where technology overpowers human brain. Artificial General Intelligence (AGI), machine can easily replace human and her activities in almost everything. Many countries such as the United States, China, Israel, Canada, EU member states and Japan are promoting AI and making it an integral part of their economy, security and defense sector. India is not an exception. However, it has limited access to different sectors. In India, AI has been mostly used by Private sectors, Industries and corporates (like Amazon, Flipkart, Symphony AI etc.), and expertise of AI is mainly in few hands (mainly technocrats). Recent advancement in AI and race of supremacy in its field among global powers are a wakeup call to policymakers in India. After providing the basic information of AI, this paper seeks to explain AI policy impact on global politics and analyze on leverages and challenges that AI can impose on global order in general and on balance of power in particular. It further argues that policy makers should focus on positive outcome by using this

technology rather than being apprehensive about the negative impact such as Job cuts, new warfare strategy. How AI can be useful in helping and enhancing the growth of human kind globally.

What is Artificial Intelligence?

Artificial Intelligence can be defined as an ability of machine to achieve goals, especially in a complex, uncertain environment. Machine has ability to perform cognitive tasks like thinking, perceiving learning, problem solving and decision making (NITI Aayog Discussion Paper, 2018). It is a wide-open field that can be used in any area from Robots to self-driving cars. Genesis of this technology has started with the workshop in 1956, John McCarthy the pioneer of this intelligence-based technology had never thought that AI would become such a powerful phenomenon. Since the beginning, this technology has been evolving; the workshop had encouraged research that led first to automated and then to expert systems in the 1970s and 1980s respectively. The former involved simple machine automation of mathematical and statistical questions, including the solving of logical theorems, derivations and proofs. Expert systems were designed to solve these limitations by programming in expert knowledge from a given field. However, this expert system was not applicable as all of the programming, training and implementation had to be repeated every time the expert knowledge advanced and that made this technology non-approachable (Vempati, 2016). The important breakthrough came in AI with a period of research into Machine learning and Deep Learning which models higher level processing by abstracting smaller modules together (Ayoub, Kareem and Kenneth Payne, 2016). With overwhelming advancement in data collection, because of third revolution known as Information and Technology revolution during 1990s, higher processing and computation power, intelligent system can do variety of tasks and enhance productivity immeasurably. This characteristic has made AI inevitable and helped in its expansion and utility in different fields.

Types and Phases of AI

AI has two broad categories Modular and General. Modular AI has narrow expertise in a particular context and is able to learn through practice to improve its performance. A general AI can use its knowledge much more flexible, to tackle a far broader array of more abstract and unbounded problems, including those that require an understanding of meanings and values. Both categories are capable of ‘learning’ about the task engaged in, and improving their performance over time. Machine learning systems that engage in ‘deep learning’ are biologically-inspired. Their ‘neural’ architecture is also designed with nested, hierarchical pattern recognizes that can adapt to new environments, learning new skills and tactics (Ayoub, Kareem and Kenneth Payne, 2016). Persson further explains that the general AI can be subdivided in to more specialized area i.e., Micro and Macro. Micro level deals with models composed of several simple and often randomly connected components. On the other hand, at macro level, it combines the simple basic components to complex but specialized problem-solving units (Persson, 1964). AI has also categorized into three types: artificial superintelligence, artificial general intelligence and artificial narrow intelligence which is based on the functionality of Modular and General (Marda, 2018). On the basis of these two types modular and general AI, Lee has defined four phases of AI that shaping global politics and creating competition among nations for achieving objective of supreme power on these phases.

According to Lee, there are 4 waves in AI: Internet AI, Business AI, Perception AI and Autonomous AI. Internet and Business AI are around us and reshaping our digital and financial worlds immensely. These two waves are dominant in almost all countries and leading Perception AI is now digitizing our physical world learning to recognize our faces, understand our requests and ‘see’ the world around us. Autonomous AI is like General AI. Internet and Business have been extensively used by many developing nations including India and other countries. However, United States and China have been competing each other to seize the lead on Internet and Perception AI. China’s policy on AI and its implementation by Government and Entrepreneurs have created a strong position to lead or co-lead in Internet AI and Perception AI. In Autonomous AI, United States and Germany are in the top lists and China is trying to catch up with them (Lee, 2018). According to 2018 report, Business AI remains the only arena in which the United States maintains clear leadership. It is obvious that these four phases are reshaping the economy and security of the nation. Autonomous AI has brought drastic change in the perception of traditional notion of economy and security. It is imperative to study policies of the nation to understand country’s requirement of using AI for the leverages or countering the forthcoming challenges that can be imposed by these emerging technologies.

Policy Implementation

With the massive implications and leverages of AI, it has given opportunities to many countries to consider this technology as a game changer in global politics. Consequently, many countries have come up with policy paper on AI. However, names and positions are different in different countries such as India has policy paper focusing on using AI responsibly, China has upcoming objectives to achieve in certain time period and make the country completely AI based. Western countries like the United States and European Countries (especially Germany, France and United Kingdom) are focusing AI in their National strategic paper as well as in foreign policy. Japan, Canada, Israel and Saudi Arabia have also different approach to adopt this technology in their respective national policies. Saudi Arabia wants to create a whole new city could be AI skill-based hub that would decrease the dependency on oil-based economy structure. Policies can bring opportunity to countries to expand their economy and enhance their defense sector, although it is also bringing many challenges to nations. Degradation of Ethics, digital capitalism, threat to global order, perpetual security threat, competitiveness and new unpredictable challenge imposed by emerging technologies. To understand this leverages and challenges, first we need to study strategy papers of different countries on AI and analyze the hidden threat and open opportunities for the world order and world peace. In the following section, policies of major countries have been highlighted with the relevance and dominance in the specific areas where they are different from one another.

India

Considering the Indian economy and society, policy makers are focusing on the development, adoption and promotion of AI in the realm of welfare of the populace of the country. The primary focus is on the social sector as well as digitally empowered society and economy. Moreover, policy makers are encouraging to provide funds towards research, training and skilling in emerging technologies (Marda, 2018). For adoption of this technology systematically, Indian government set up Artificial Intelligence Task Force in August 2017 under the Union Ministry of Commerce and Industry with the objective of inclusion of AI in economic, political and legal thought process. It would provide systemic capability to support the goal of India becoming a global leader of AI. According to government report that issued on March 2018 has identified 10 sectors of relevance for AI in India. These include manufacturing, financial technology or Fin Tech, agriculture, health, technology for the differently abled, national security, environment, public utility services, retail and customer relationships and education. Not only commerce and industry but also Union Ministry has also taken AI seriously in 2018 with the set up four committees which are studying AI in context of citizen centric services: data platforms, skilling, reskilling and R&D. Furthermore, the National Institution for Transforming India (known as NITI Aayog), has been assigned to produce/ draft national AI policy to direct the government's AI efforts and finally they came up with a discussion paper in 2018 with the heading of "Responsible AI for India". The main objective of the paper was the leverages of AI for economic growth, social development and inclusive growth and eventually making it as a "Garage" for emerging and developing economies. As the title of the paper itself proclaimed the motive of the country and policy makers are using this technology for the advancement of the society in terms of facilitate services for the welfare of the people (NITI Aayog Report, 2018). It further expanded in 2021 with a new report on AI by NITI Aayog in which they have highlighted the approaches that focus on Operationalizing principles on responsible AI. The previous paper's objectives have been achieved and India has significant position in robust startup, skill-based profession and high result in private sectors. AI for all is the essential characteristic of National strategy and focusing on the removing digital divide in the nation. The new paper is aiming on seven principles for the development of the AI ecosystem in India that includes principle of Safety and Reliability, principle of equality, principle of inclusivity and non-discrimination, principle of privacy and security, principle of transparency, principle of accountability and principle of protection and reinforcement of positive human values (NITI Aayog Report, 2021. p.4). This report has made AI an important part of the country as it is advocating fundamental rights of the technology and its impact on human life. These seven principles have safeguarded almost all areas that this technology can bring and impose as opportunities and challenges to the populace.

United States of America and China

Considering the birthplace of AI, US has many advantages over this technology. In the realm of research on AI, US is undisputable on the top position as the research and development has been going on since the inception of this

technology. As this technology is amalgamation of data and high processing that makes it dependent on software as well as hardware. As we know that, US has dominance over software and China has supremacy over hardware productions in the world (Lee, 2018), it gives advantage to both US and China to reach the topmost position in the leverages of AI however the usage and requirements are different in these countries. US has privilege to have first or second position in all four phases that has mentioned by Lee in the previous section and policy makers are enhancing scientific and technological capabilities and promoting democracy and human rights with other partners and allies of US. Together with allies and partners, the Department of State promotes an international policy environment and works to build partnerships to enhance capabilities in AI technologies, protect national and economic security, and promote values. The Department engages in various bilateral and multilateral discussions to support responsible development, deployment, use and governance of trustworthy AI technologies. It provides policy guidelines through the Organization for Economic Cooperation and Development (OECD) AI Policy Observatory, a platform established in February 2020 to facilitate dialogue between stakeholders and provide evidence-based policy analysis in the areas where AI has the most impact. They are working together to counter challenges through shared norms and agreements on the responsible use of AI. Responsible use of AI is not only tagline but motto of many countries especially for developing nations. Massive investment in AI have led to transformative advances in many areas that are impacting American's everyday lives, including mapping technologies, voice-assisted, smart phones, handwriting recognition for mail delivery, financial trading, smart logistics, spam filtering, language translation and more. AI advancement are also providing great benefits to social well-being in areas such as precision medicine, environmental sustainability, education, and public welfare. These are the areas where AI has entered for good transformation in the country.

China

China's policy on AI that is known as New Generation Artificial Intelligence Development Plan (AIDP), released by China's State Council (top administrative body) in 2017. It was the first unified document that outlines China's AI policy objectives with the goal of making China 'the World Centre of AI innovation by 2030. The focal point of this plan is to function as a catalyst for busting the development of AI tech by private companies and local governments. The strategic aims of the plan can be divided up into 3 main goals: international competition, economic development, and social governance. China's main focus on in international competition is to develop breakthrough AI military technologies to overtake the US. By 2025 China aims to have achieved a major breakthrough (as stated in the document) in basic AI theory and to be world leading in some applications. China's massive investment plan by government as well as private partners are shaping the country at another level. From Robot army to food ordering, there is not a single area where AI has not reached. By 2030, China seeks to become the world's innovation centre for AI (Roberts & et.al. 2020). Massive investment, skill and supportive environment from the government have made US and China AI giants. China's commercial market success has direct relevance to China's national security, both because it reduces the ability of the United States government to put diplomatic and economic pressure on China and because it increases the technological capabilities available to China's military and intelligence community (Allen, 2019. P.21).

European Union (EU)

EU member states are divided in to two regions: core and peripheral countries. Policy papers are either independent policy of a country or adopted/ influenced by US policy papers. Core countries are coming up with independent papers on responsible AI according to their requirements on the other hand many peripheral countries are adopting US based strategy on AI for nation. However, EU has combined approach and concentrated on the limitation and norms of the usage of AI with the objective of enhancing digital single market and data protection. EU has world class researchers, labs and startups and also have strong transport, healthcare and manufacturing sectors that give AI huge scope of adoption. European leaders have put AI at the top of their agendas. On 10 April 2018, 24 Member States and Norway committed to working together on AI. Building on this strong political endorsement, policy makers are working together for significant change in AI countering the competitiveness in the world. EU is different from the other part of the world as they are adopting these new technologies with values, the General Data Protection Regulation that came in to existence on 25 May 2018, is one of the major steps for building trust among populace. European Commission is playing an important role in encouraging member states to develop AI strategies that tackle issues around how to make sure AI is ethical and trustworthy. EU is also playing significant role in bringing many

liberal democracies together for international cooperation on AI. Many Western countries and their allies have set up new forums for cooperation on how to take AI forward (Franke, 2021. p.2). There is difference between European policy makers and rest of the world; European leaders are less concerned about the geopolitical consequences of AI and primarily focused on economic and social impact. 21 strategy papers which are published or drafted by EU member states in which few countries have discussed geopolitical implications of AI. France is exception and its strategy paper is drafted with a geopolitical mindset and many peripheral countries have also drafted their papers considering the digital colonies of the Chinese and American giants (Franke, 2021. P.8)

Middle East Countries

In this region, Israel and Saudi Arabia have dominance compared to other countries. Oil-rich countries are also investing immensely in the adoption and advancement of AI in their economy. Their AI's objectives are influenced by two digital giants and proximity with these countries. Saudi Arabia has issued strategic framework in 2016, having vision of 2030 reform plan in which they want to create new mega-city Neom to free the kingdom from dependence on oil exports. In October 2017, a humanoid named Sophia became the first robot to be granted citizenship. In 2020, Saudi Arabia planned on becoming the world leader for AI events with the organization of a global summit for AI, bringing together decision-makers, experts, and specialists from public and private sectors from Saudi Arabia and around the globe, including technology companies, investors, and businessmen. With the massive investment in economy and upgradation on skill, the country came up with its national strategy for data and AI focusing on six dimensions: ambition, skills, policy and regulations, investment, research and innovation and ecosystem. The strategy aims to create the environment for at least 300 AI and data startups to thrive by 2030 (Saudi Arabia and Artificial Intelligence – MEPEI). Approach of the policy makers to AI is business oriented and they want to use this technology for economy and social sectors like health, transport and creation of new environment for skill-based enterprises. Israel has different approach to AI advancement with the economy advancement. Policy makers are focusing on the advancement of the defense sector as Israel has the most advanced defense system and it covers huge amount of GDP of the country. Technological development has re-enforced the belief that AI would extensively affect a country's national security. AI has significantly affected different aspects of Israel's national security that Antebi has mentioned in the article. There are three important areas: foreign and domestic security through military intelligence, weapon systems, and other military systems; foreign relations and Israel's international reputation by preserving the status of Israel as a technological leader and exporter of technology and knowledge; the economy and the national resources (Antebi, 2021. P. 94).

Policy papers of Canada, Japan, Australia and Singapore have objectives of enhancement of their economy and welfare of the society. As many countries have published their first paper with the tagline of Responsible AI that notify their intention to use this technology for the welfare of the society. However, many countries are hiding their data and information regarding upgradation of defense sector. Continuous research and emergence of technology-based arms and weapons are major concern for the international balance of power. Policy papers are providing the present and future of economy of any nation and leverages of AI in this particular area.

Leverages

With the emergence of AI and continuous upgradation in this technology has been providing opportunities as well as challenges for policy makers. It has given leverages to those countries who has achieved supremacy, known as digital colonies (US and China), in any of the phases that Lee has described in his book as well as countries who have adopted this technology with open arms since the breakthrough in AI during 2010. There are many sectors in which AI has immense support to improve and adopt for the welfare of the human kind such as health, agriculture, education, e- commerce and manufacturing.

The most important areas where AI is a blessing is e-government domain and health, it has considered as an effective and affordable solution to many issues in the public sector such as poor efficiency and lack of resources and experiences (Toll et. Al, 2019). In these areas, AI can increase productivity, lower costs and availability of products and services at broader level and could be a great assistance to public sectors, citizens in particular and society in

general (Wang et al, 2022). This emerging technology has set up a tendency of intense commercial competition among the world's leading technology companies, mostly are from China and United States. AI is transforming almost every sector of national economies and is accelerating globalized competitions among digital platforms and services (Schmidt, 2022).

In the healthcare, the importance of a robust healthcare system for any nation cannot be ignored, and the pandemic has brought fissures in the healthcare system into sharp focus. This intelligence will certainly be a blessing in conferring better medical care to patient. With the help of AI, patient journey can be mapped, with immediate effect, to create transparency across medical service providers, taking the cost of service lower and effectiveness higher. It will increase efficiency of healthcare sector with the help in centralize patient records through a cloud-based health management system in India as US is using AI profoundly to deal with chronic cases in the country. In the health sector, AI has tremendous impact, intelligence with automation have direct impact on medical sector from simple to chronic diseases, from diagnosis to advanced equipment to robot nurses to smart data record of patients to advanced camera for operations. AI has multiple benefits in this particular sector. India, US, China, EU member states, Russia, Middle East, and other nations all are using this technology immensely for the advancement of health sector. In US, AI has been used for Cancer treatment and diagnosis, in Denmark, AI is helping save lives by allowing emergency services to diagnose cardiac arrests or other conditions based on the sound of a caller's voice. In Austria, it is helping radiologists detect tumors more accurately by instantly comparing x-rays with a large amount of other medical data. Moreover, AI is also plummeting fatality rates in traffic accidents, fighting climate change and helping in disaster management (especially in India and other parts of Asia) and anticipating cybersecurity threats.

Agriculture sector, one of the oldest professions globally is a foundational element of the Indian Economy and is one of the largest livelihood providers globally. In India, drones have become important assistant of farmers and NITI Aayog report is also focusing on agriculture sector to make it more technology based. The importance of this technology can be seen in the government policy as well. In the Union budget of India 2022, Finance Minister Nirmala Sitharaman emphasized on that the budget was focused on farmers, agriculture, value chain and transformation to digitalization. The budget proposed to deliver digital and Hi-tech services to the farmers including drones for crop assessment, digitization of land records, spraying of insecticides and nutrients. Many farms across Europe are already using AI to monitor the movement, temperature and feed consumption of their animals. The AI system can then automatically acclimate the heating and feeding machinery to help farmers monitor their animals' welfare and save farmer's time and energy. AI is beneficial for the agriculture-based economy and nation. It will not only facilitate farmers with equipment but also intelligence-based system will save time and resources.

Manufacturing industries and Banking and Financial Sectors have leverages of this technology. On the basis of leverages of AI, there are Global Index of AI that is created by the index assessed based on 143 indicators across areas such as the talent of AI researchers and practitioners, infrastructure, R& D, government strategy and commercial activity, following countries are ruling on the top position: The United States leads China by the widest margin in the talent category. It also holds significant leads in research and in commercial AI (Schmidt, 2022 and Lee, 2018). Several European Countries are also holding the higher score in AI talent compared to China. India's overall has much lower scale than China. However, India ranks second in the world in AI talent, behind only the United States. It also gives opportunity to Indian policy makers to improve its position in other areas such as national infrastructure, government strategy, and commercial application (Schmidt, 2022). These are some of the many examples of what we know AI can do across all sectors, from energy to education, from financial services to construction. AI is evolving rapidly, so there are many sectors that can not be imagined today might emerge in the future. That's the advantage with new technologies where there is unexplored areas that cannot be imagined. It's emerging nature also limit the policy makers to make any universal laws. We can not ignore the fact that AI has huge opportunity to yield positive and productive results for the society, however, we can not also ignore the challenges attach with it.

Challenges

After perusing policy papers of aforementioned countries, we can find numerous similarities in the making of policy papers. Many countries have commenced their serious work on this area after 2015. By the end of 2018, most of the leading nations have a strategy or policy paper on AI in which there is one common word in the title i.e., Responsible

AI for the nation. All are encouraging responsible AI for the society and focusing on the welfare of society and advancement of the country's economy and security. Even though having many benefits of this technology, the challenges cannot be ignored as it was not discussed in many papers. It is imposing new kind of threats to the world order such as security threats, ethics, supremacy race and violation of international laws and norms. However, these are challenges to a nation in security realm; at societal level, it is creating digital divide and digital capitalism.

First and the foremost, the major concern with this technology is how it is going to change the nature of war in the future. Advancement and autonomous weapons have capacity to change warfare strategy in global politics that would give advantage to highly technology based over less technology-based nations for example, as Hannes Ebert states that the Indian state would be unable to keep pace with the technological advances compared to US and China as Indian Policy on AI is mainly focusing on the social sectors. However, China's rapid progress in AI-based research, it is imperative that India view AI as a critical element of national security strategy and economic policy (Vempati, 2016).

The question is "Are leaders or policymakers (of Developing nations) ready for upcoming wars that could be fought by robots and advance AI application-based arms?". If not, then in the near future the country will be at a disadvantageous position where national security can be affected lethally and adversely. In the contemporary era, the nature of war has been changing with the advancement of technology; it is not limited to conventional form, but it has changed into a cyber threat, data privacy and bank crisis. For any nation and policymakers, it is essential to know the nature and character of war. Nature of war is violent, lethal and fundamentally political but war's character is influenced by technology, law, ethics, culture, military organization and other factors that change across time and place. It is imperative to have cognizance of the nature of war to the policymakers. Carl Von Clausewitz, in his book '*On War*' highlighted how failing to understand the character of war leads to disaster. As we are witnessing many incidents in world such as recent war between Israel- Palestine, Russia and Ukraine, Pakistan's Drone in Indian territory, and also harbinger of upcoming wars in the near future, where, there is significant use of advanced weapons. New and powerful robotic systems will be used to automate complex actions, make intelligent decisions, deliver lethal force, provide intelligence and speed response times over wider areas of the globe. To deal with this type of war, policymakers have to prepare the military organization for a new era of warfare. Governments must be prepared for the political, strategic, and ethical shifts in the dimensions of the character of war (Mallik, 2019). Hence question arises, is it going to put extra burden on the economy of nation who has hostile and AI advanced country as neighbour?

With the existing national security threats, AI is also imposing data security issues that can lead to cyber security threats at another level. This technology has been used for preventing such problems, however this technology completely dependent on data, so it is also prone to be misled and other threats. The open nature of free and democratic societies, combined with their increasing reliance on poorly secured digital networks, makes them especially vulnerable to these threats. AI opens new horizons of capabilities in the information space, both in monitoring and in disinformation and disruption. Data security and security concerns in cyber domain are becoming more complex and automated (Schimdt, 2022).

Supremacy Race: a threat to Balance of Power

During Post-Cold War, it was an accepted realist theory that world is unipolar and somehow, we have established perpetual peace through nuclear stability. It has also marked by the Globalization and liberalization period and it changed the world economy and made it more connected or dependent on each other. This dependency can also be seen during economic crisis by the domino-effects of one another and evaluate the relations among nations. The twenty-first century is characterized by a world bifurcated between two dominant powers i.e., US and China. However, superpowers would not dominate or wage war to prove their supremacy, they would remain a significant foreign policy and security challenge for developing and developed nations especially China will be a major concern for India (Khilnani, 2012). China's quest for AI supremacy is subject of concern for Indian policymakers and challenges to US leaders. Becoming a supreme power in AI, four attributes are imperative to have in a country that includes abundant data, tenacious entrepreneurs, well trained AI scientists and a supportive policy environment (Lee, 2018). In the previous sections, we have read that US and China are after one another to reach at top at all phases of AI. Policy makers of many countries are using this technology for the welfare of society, on the basis of Government,

technology sector, data and infrastructure, the 2021 AI readiness Index has declared rank of 160 countries in which it is evaluating how governments are preparing to use AI in public services. The USA at the top position followed by Singapore and United Kingdom in third. Therefore, not only in security but also in economic and social level, countries are racing against each other to achieve supreme power in AI.

When there are open areas of AI, it is natural that AI adoption systems have geopolitical consequences and eventually will affect the balance of power. In particular, AI may give one actor considerable power over others, be it in the form of an economic boost or an AI-enabled military advantage, or through control over crucial technology components and standards. In US, there is growing concern over the possibility that China might become an important player as an AI actor. The competition over global leadership between the US and China is escalating, with technology in general, and AI in particular, as competition. The US fears that AI may give China a competitive edge. Therefore, countering China's AI ambitions has become US's important motive and for this US is seeking for international technology standard bodies that can bring ethics and value in the usage of AI. In this context, Joe Biden has proposed an "alliance of liberal democracies" to present an economic and political alternative to China (Franke, 2021. p.7) however EU has been advocating this for long. The future balance of global powers is likely to change as the United States and its adversaries move toward the advancement of this technology beneath of the development of defense-related technologies. While a powerful first-to-market technology is the most obvious source of sudden destabilization, the AI policies that the United States and other nations implement in the next decade are primed to have long- reaching effects on balance of power and military superiority (Briscoe and James, 2020)

Digital Divide

AI supremacy will also widen the gap of Digitally advanced and deprived nation. The country has all four elements of being a superpower in AI would have digital capitalism in their countries. The notion of capitalism is different in digital world, as it is not confined in particular region or any resource distribution. It is related to data supremacy with skill-based technology system in a country. It is natural, US, Western European Countries and China have advantage over other countries and through assistance they can create digital colonies in different regions. At internal level, society would be divided through knowledge of Digital world, the people who have access to use and operate this technology will be privileged ones. It would bring many societal problems in developing nations where people are struggling with their basic necessities. It will change the traditional notion of inequality or will add a new term with it. Now, it is not only inequality, poverty, distribution of resources but also digital divide in the society.

Conclusion

On the basis of important points of policy papers, it is clear that AI is bringing new positive changes in many countries. Both, developed and developing nations are focusing on the responsible AI for the society and nation. However, the policies have been influenced by their own requirements or influence of major powers of AI. Considering the evolving nature of the technology has made it unpredictable. US and China have been advancing their economic, social and defense sectors and other countries are chasing these two countries to achieve same objectives. This technology has brought immense positive changes in many sectors such as health, education, agriculture, manufacturing and banking and finance sector. It has also brought complete transformation in warfare strategy with the advanced technology-based arms. Absence of laws and ethics especially manipulating ethics can bring disastrous result if balance of power will be determined by the possession of this technology. Technology can be blessing if it is used for the welfare of the society that AI can do, but it can be lethal if it is used for redefining balance of power in international relations.

References

Allen. C. Gregory (2019). Understanding China's AI Strategy: Clues to Chinese Strategic Thinking on Artificial Intelligence and National Security. *Center for a New American Security*. February. pp.1-30.

- Antebi, Liran. (2021). Artificial Intelligence, National Security in Israel, and the IDF Strategy. *Institute for National Security in Israel*. pp.90-95.
- Ayoub, Kareem and Kenneth Payne. (2015). Strategy in the Age of Artificial Intelligence. *The Journal of Strategic Studies*, 30(5-6): 793-819.
- Briscoe, Erica and James, Fairbanks. (2020). Artificial Scientific Intelligence and Its Impact on National Security and Foreign Policy. *Foreign Policy Research Institute by Elsevier Ltd*. Fall 2020 | 544
- Buzan, Barry. (1983). *People, States & Fear an Agenda for International Security Studies in the Post-Cold War Era*. Great Britain: Wheatsheaf Books.
- Desai, Nishith. (2018). The Future is here: Artificial Intelligence and Robotics.
- EUR-Lex - 52018DC0237 - EN - EUR-Lex (europa.eu)
- Franke, Esther Ulrike (2021). Artificial Divide: How Europe and America could Clash Over AI. *European Council on Foreign Relations*. Policy Brief. January: pp.1-16.
- Ganguly, Sumit, Nicolas Blarel and Manjeet S. Pardesi. (2018). *The Oxford Handbook of India's National Security*. New Delhi: Oxford University Press.
- Khilnani, Sunil and et.al (2012). *Nonalignment 2.0 A Foreign and Strategic Policy for India in the Twenty First Century*. New Delhi: Penguin Group.
- Kugelman, Michael (ed.). (2011). *India's Contemporary Security Challenges*. Pennsylvania: Woodrow Wilson International Centre for Scholars Asia Program.
- Lee, Kai-Fu (2018). *AI Super-Powers China, Silicon Valley, and the New World Order*. New York: Houghton Mifflin Harcourt.
- Mallick, K. P. (2019). Is Artificial Intelligence (AI) Changing the Nature of War?. www.vifindia.org/article/2019/january/18/is-artificial-intelligence-changing-the-nature-of-war. [Accessed on 18 January 2019].
- Mallick, K. P. (2019). Is Artificial Intelligence (AI) Changing the Nature of War? www.vifindia.org/article/2019/january/18/is-artificial-intelligence-changing-the-nature-of-war. [Accessed on 18 January 2019].
- Marda, Vidushi. (2018). Artificial Intelligence policy in India. *Philosophical Transactions: Mathematical, Physical and Engineering Sciences*. 376 (2133):1-19.
- Margetts, Helen (2022). Rethinking AI for Good. *Daedalus*. 151(2):360-371.
- McCarthy, J., Minsky, M. L., Rochester, N., & Shannon, C. E. (1955). A proposal for the Dartmouth summer research project on artificial intelligence. *Artificial Intelligence: Critical Concepts*, 2:44–53.
- NITI Aayog. (2018). National Strategy for Artificial Intelligence. Discussion Paper. June 2018. Retrieved from file:///C:/Users/DIVYA/Downloads/NationalStrategy-for-AI-Discussion-Paper.pdf.
- NITI Aayog. (2021). Responsible AI #AIFORALL Approach Document for India: Part2- Operationalizing Principles for Responsible AI. August.
- Persson, Staffan. (1964). An Introduction to Artificial Intelligence. *The Scandinavian Journal of Economics*. June. 66(2):88-112.

PWC (2018). Artificial Intelligence in India-hype or reality Impact of artificial intelligence across industries and user groups. Retrieved from file:///C:/Users/DIVYA/Downloads/artificial-intelligence-in-india-hype-or-reality%20(1).pdf.

Robert, Huw and Josh Cowls & et al. (2020). The Chinese Approach to Artificial Intelligence: an Analysis of Policy, Ethics, and Regulation. *AI & Society*. September.

Saudi Arabia And Artificial Intelligence – MEPEI.

Schmkidt, Eric. (2022). AI, Great Power Competition & National Security. *Daedalus*. Vol. 151 (2): 288-298.

Sen, Gautam. (2016). India's National Security Policy-Making Prism. *CLAWS Journal*. Winter 2016.

Toll, D., Lindgren, I., Melin, U., & Madsen, C. Ø. (2019). Artificial intelligence in Swedish policies: Values, benefits, considerations and risks. In Lindgren, I., et al. (Eds.), *Electronic Government. EGOV 2019: Lecture notes in computer science*. Vol. 11685: 301–310. Springer.

Vempati, Shekhar Shashi. (2016). *India and the Artificial Intelligence Revolution*. Carnegie. India.

Victor, G. David. (2019). How Artificial Intelligence will affect the future of energy and climate. <http://www.brookings.edu/research/how-artificial-intelligence-will-affect-the-future-of-energy-and-climate> [accessed on 11 January, 2019].

Wang, Youkui, Nan Zhang and Zhao, Xuejiao. (2022). Understanding the Determinants in the Different Government AI Adoption Stages: Evidence of Local Government Chatbots in China. *Social Science Computer Review*. 40(2): 534-554.

