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THE ROLE OF ARTIFICIAL INTELLIGENCE IN MAKING FOREIGN POLICY DECISIONS IN THE UKRAINIAN-RUSSIAN WAR

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Annotation. The article considers the application of the artificial intelligence systems as a new tool in making foreign policy decision. The content of the concept of artificial intelligence is studied, the scope of the use of artificial intelligence systems in everyday life and in international relations is studied. It can be noted that AI, as a progressive and rapidly developing technology, has a large set of tools that help people make decisions and increase the efficiency of their work, for example, save time and spent resources to achieve a particular result. With the development of technology, more and more machines with artificial intelligence are used in various areas of life. For example, the field of medicine, mechanical engineering, data analysis, public administration and politics - all these fields are actively developing with using of artificial intelligence technologies. Special attention is paid to how artificial intelligence affects in making decision, event forecasting, and automation of data analysis. The use of artificial intelligence systems in international diplomacy was analyzed. Attention is focused on the weak and strong sides and what risks this technology can carry for foreign policy decisions. The given statistical data show how artificial intelligence is treated in Ukraine. Based on the research, it can be concluded that for the widespread use of artificial intelligence, it is necessary to develop convenient and transparent rules and algorithms, norms for the using of technology and its interaction with people. Summarizing the discussed topic, we will come to the conclusion that artificial intelligence will soon become a powerful tool in international relations, diplomacy, and in other areas of our life, which will bring benefit and a real threat. But in order for the benefit to be greater, it is necessary that the people who will use artificial intelligence be trained and knowledgeable in the technology.

Key words: artificial intelligence, diplomacy, foreign policy decisions, analysis, automation.

Formulation of the problem. As the modern world is developing rapidly, the speed of scientific progress is also increasing. In this regard, artificial

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intelligence technology penetrates human life in various spheres, especially politics and international relations. The relevance of the topic is caused by the fact that artificial intelligence is one of the newest tools in foreign policy decisions. The main goal of using artificial intelligence technologies is to create a system that can understand, reason and learn like a human. And in the future, use these opportunities to help a human automate certain processes that were usually performed by a human before, as well as replace his work in certain areas. The main thing is also to understand the advantages and risks that may be involved in the involvement of artificial intelligence in the diplomatic sphere. Since technologies are already changing the world today, it is important to have trained personnel who will competently use the latest artificial intelligence systems.

The topic of the role of artificial intelligence in making foreign policy decision is new and insufficiently researched. Artificial intelligence systems are often used to simplify simple tasks. Already now such technologies are already replacing humans in production. Therefore, the study of this issue is necessary, since artificial intelligence systems will and already influence in making decision in international relations, especially in the military sphere, will introduce new topics to the international agenda, will challenge geostrategic relations, and will also create new opportunities and problems.

The state of development of this problem. In scientific research, the popularity of the topic of the role of artificial intelligence in making foreign policy decision is growing rapidly, but today there are no comprehensive studies on this topic. The basis for writing the article was the scientific intelligence of modern Ukrainian scientists and diplomatic practitioners, namely: Vinnikova N. [1], Haber E. [2], Kuleba D. [3], Sliusar V. [4], Yushkevych O. [5]. Also here, it should be noted the scientific works of foreign researchers such as: El`kusa A. [6], Haleotti M. [8], Vel`sena D., Shtanzelia V. [12], Raita N. [13], Yantats` S. [14]. Such foreign researchers as Horovitz M., Makhani C. [9], Skot B., Khoiman S., Lorents P. [10] are the authors of studies highlighting the involvement of AI in the arsenal of foreign policy tools of states and the military sphere. It is appropriate to mention that representatives of "The Future Today Institute" also made a contribution to the research of this topic by presenting a report [11], as well as representatives of the European Parliament by presenting the document "Management of artificial intelligence as a new tool of foreign policy of the European Union" [7].

The purpose of the article. The goal of the article is to investigate the role of artificial intelligence in making foreign policy decision and outline challenges and prospects.

Presenting main material. At the time of the worldwide informatization of our lives, the human brain is no longer able to process such a large amount of information solely. And that is why human life is increasingly being filled with artificial intelligence systems.

Artificial intelligence is a branch of computer science that deals with the development of information systems that can solve problems that normally require human intelligence. But these systems, in turn, help a person to speed up the process of making and implementing decisions [1].

Such system should have ability to learn, plan, and think logically. Artificial intelligence systems must be capable of self-learning from previous experience, which they receive based on downloaded and processed input data.

And in the future, use these opportunities to help a person automate certain processes that were usually performed by a person before, and also replace his work in certain areas.

Artificial intelligence can provide a quick process of interaction between a human and programs, to make a decision at a certain moment. In the near future, artificial intelligence systems should facilitate the work of a human in various spheres of life.

With the development of technology, more and more smart machines with artificial intelligence in various areas of life are used by people. For example, the field of medicine, mechanical engineering, data analysis, public administration and politics - all these fields are actively developing with the use of artificial intelligence technologies.

Today, artificial intelligence is the most promising direction in the field of IT, in scientific research, military affairs, and public administration. Which, in turn, opens up development and new opportunities in the standards of professions in the labor market.

Machines with artificial intelligence are already replacing humans in service and production, and the use of, for example, a system such as computer vision makes it possible to control robots, or to assist in decision-making and forecasting, especially in the military field. What can we see in the war between Ukraine and the Russian Federation.

Against this background, according to the research of the Kantar company, we can see the fears of Ukrainians about the use of artificial intelligence.

The main fears of Ukrainians regarding AI:

22% – loss of jobs, devaluation of the profession;

22% – the threat of uncontrolled activity, rebellion of machines, aggression towards people;

21% – do not see threats.

Today, artificial intelligence not only makes simple decisions, such as performing repetitive tasks, but already begins to make foreign policy decisions that require an analysis of the situation in which they must be made, as well as taking into account the context of foreign policy relations, which indicates a high level of development .

In foreign policy, the military sphere can be an example of the use of artificial intelligence. Making decisions during military conflicts is one of the important elements of foreign policy decisions.

Artificial intelligence in the military and defense fields often centers around discussions of lethal autonomous weapons, or “killer robots”. Artificial intelligence is also used in observation missions at home and abroad, as well as for intelligence purposes. In case of a possible threat, the authorities can act in anticipation and make foreign policy decisions in advance. Artificial intelligence can also be used to build military strategies or operations to develop future situations. [4] This includes offensive and defensive systems,

frontline and auxiliary systems. New weapons technologies can affect the relative military power of a country or an alliance and may require, for example, reallocation of funds, development and financing of new areas of research and development, or the creation of new doctrine and strategy. However, the functions that artificial intelligence can perform and support in the military field are very diverse, from logistics to autonomous weapons, cyber warfare and disinformation. However, military systems with artificial intelligence also raise some other fundamental, social and geopolitical problems [7]. Predicting where artificial intelligence will have the greatest impact on military systems and operations is a difficult task. First of all, forecasting not only the likely development of military technologies, but also especially their impact on war and beyond, is complicated by the fact that the impact of military technology is not only its capabilities, but also the way the new technology is used [9]. In order, for the new technology to be effective, it is necessary to develop new ways of its application.

Systems which built on the principles of artificial intelligence provide the opportunity to cover two broad areas of application:

1. War strategy.
2. Providing aid and protection to victims of armed conflicts.

As in the case of quantum computing, the AI arms race is ongoing as countries seek to get ahead and change the global balance of power [8].

The great war against Russia forced the Ukrainian army to think about the use of artificial intelligence. All variants of such solutions are intended to meet the specific needs of the Armed Forces. Brave1 cluster was launched in April 2023 to stimulate the development of defense technologies. During the seven months of its existence, it received more than 780 applications from Ukrainian startups and provided 84 grants worth \$1.53 million.

Currently, 35 developments using artificial intelligence methods are registered on Brave1, of which 29 have passed military expertise. The defense cluster in the military's use of neural networks also relies on the RAND concept.

Considering the technical capabilities and urgent needs of the military, Brave1 focuses on Mission-Support AI and Operational AI to automate and empower existing weapons.

The war in Ukraine helped the US Army rethink its priorities in the development of machine learning. If earlier the Pentagon focused its main efforts on Enterprise AI and Mission-Support AI, now, analyzing the combat experience of the Ukrainian army, Operational AI is being actively developed.

In the conditions of active battles, the main task for Ukrainian developers is to provide solutions for the front with artificial intelligence. One of them is the Griselda system, which uses artificial intelligence to gather intelligence and increase situational awareness of troops. It is capable of processing thousands of messages from satellites, drones, social media, mass media, and hacked enemy databases.

Griselda processes more than 25,000 targets per month, and the record for the time from receiving information about the enemy to its appearance in the system was 28 seconds. The technology is integrated with the Delta situational

awareness system, “Armor”, “Nettle”, “Dill” and “HisArt” applications for artillerymen and tankers.

Political scientists and military analysts can use artificial intelligence to choose whom to attack and whom to hold hostage, or the use of nuclear weapons, the management of special operations, and the prediction of enemy actions. But these decisions need to be monitored with extreme care to avoid harming the civilian population, or to protect this data from being stolen.

The company Primer Technologies, which creates systems for the analysis of large data sets, used artificial intelligence to analyze the intercepted conversations of the occupiers in Ukraine.

Using of artificial intelligence on the battlefield already solves key problems: it saves people’s lives and neutralizes the effects of Russian electronic warfare systems.

Drones became an integral part of the front. They are used to conduct reconnaissance and destroy enemy equipment.

In this case, from the point of view of the application of artificial intelligence and machine learning in military affairs and humanitarian aid, appropriate legal obligations and ethical considerations should be introduced to guide their development and application.

Analyzing the Kantar company’s research, we can see that a certain number of Ukrainians are in favor of the law on artificial intelligence:

- 45% – believe that Ukraine needs a law on artificial intelligence;
- 53% – among respondents with an above-average financial situation;
- 51% – among respondents with higher education.

In order to highlight the strengths and weaknesses, as well as opportunities and threats of using artificial intelligence in making foreign policy decision, in my opinion, it is advisable to apply the SWOT analysis method. So, strengths are highlighted, among which are the following: process automation, efficient organization and data management, extensive analytical capabilities, machine learning and forecasting. Weaknesses of the use of artificial intelligence in diplomacy include: dependence on data quality, lack of subtleties and intuition in operations, and dependence on technical problems. The possibilities of applying artificial intelligence in making foreign policy decision are as follows: increasing the efficiency of diplomatic processes, strengthening the analytical base of diplomats, improving communication and diplomatic relations. Threats that may arise from the active use of artificial intelligence in making foreign policy decision include: vulnerability to cyber attacks, political, economic and other abuses, obtaining incorrect or incomplete data.

Conclusions. When researching the application of artificial intelligence technology in foreign policy decisions, it can be concluded that making decision cannot be entrusted to the machine as a whole, because the machine does not feel human emotions, is not able to take into account the sometimes hidden context of the political situation or historical prerequisites. Therefore, for now, using of artificial intelligence in the field of foreign policy can be as an additional tool for making decision, which requires additional stages of protection and verification of certain data.

References:

1. Vinnikova N.A. Artificial intelligence as a factor of geopolitical influence. Scientific periodical of Karazin University. URL: <https://periodicals.karazin.ua/politology/article/view/18660/16983> (access date: 07/10/2023).
2. Haber E. International relations in the era of artificial intelligence: do diplomatic translators have a future?. Mirror of the week | Mirror Weekly. URL: https://zn.ua/ukr/international/mizhnarodni-vidnosini-vepohu-shtuchnogo-intelektu-chi-mayut-maybutnye-diplomatichni-perekladachi-326099_.html (access date: 07/10/2023).
3. Kuleba D. Diplomacy of the future. Ukrainian truth – Blogs. URL: <https://blogs.pravda.com.ua/authors/kuleba/5a3cc08726814/> (access date: 07/10/2023).
4. Slyusar V.I. Artificial intelligence in the sphere of security and defense. Regarding the project of the Strategy for the Development of Artificial Intelligence in Ukraine FOR 2022–2030, 2020. P. 132–157. URL: https://www.slyusar.kiev.ua/Slyusar_AI_2022-1-1_ua.pdf (access date: 07/10/2023).
5. Yushkevich O.E. The role of artificial intelligence in making foreign policy decisions (using the example of the USA). Repository of the National Aviation University: Home. URL: https://dspace.nau.edu.ua/bitstream/NAU/55611/1/ФМВ_291_МИ_Юшкевич_О..pdf (access date: 10.07.2023).
6. Elkus A. The futility of (narrow) speculation about machines and jobs. Medium. URL: <https://medium.com/@Aelkus/the-futility-of-narrow-speculation-about-machines-and-jobs-a116a0672659> (date of appeal: 10.07.2023).
7. European Parliament. Artificial intelligence diplomacy. Europarl. europa.eu. URL: [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662926/IPOL_STU\(2021\)662926_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662926/IPOL_STU(2021)662926_EN.pdf) (date of appeal: 10.07.2023).
8. Galeotti M. The age of AI diplomacy. The spectator. 2023. URL: <https://www.spetstator.tso.uk/artitsle/the-ageof-ai-diplomacy/> (date of appeal: 10.07.2023).
9. Horowitz M., Mahoney C. Artificial intelligence and the military: technology is only half the battle. War on the Rocks. URL: <https://warontherocks.com/2018/12/artificial-intelligence-and-the-military-technology-is-only-half-thebattle/> (date of appeal: 10.07.2023).
10. Scott B., Heumann S., Lorenz P. Artificial intelligence and foreign policy. Stiftung Neue Verantwortung (SNV). URL: https://www.stiftung-nv.de/sites/default/files/ai_foreign_policy.pdf (date of appeal: 24.05.2023).
11. The Future Today Institute. 2018 tech trends report. Future Today Institute. URL: <https://bootstrapping.dk/wp-content/uploads/2018/03/FTI-2018-TrendReport.pdf> (date of appeal: 10.07.2023).
12. Voelsen D., Stanzel V. Diplomacy and artificial intelligence. Stiftung Wissenschaft und Politik (SWP). URL: <https://www.swp-berlin.org/>

- en/publication/diplomacy-and-artificial-intelligence#hd-d22571e579 (date of appeal: 10.07.2023).
13. Wright N. How artificial intelligence will reshape the global order. Foreign Affairs. URL: <https://www.foreignaffairs.com/articles/world/2018-07-10/how-artificial-intelligence-will-reshape-global-order> (date of appeal: 10.07.2023).
 14. Yantaç C.E. Artificial intelligence, society and democracy. Turkish Policy Quarterly. URL: <http://turkishpolicy.com/article/1097/artificial-intelligence-society-and-democracy> (date of appeal: 24.05.2023).