Is Information Technology an Opportunity or a Threat in International Relations? Case Study of Ukraine-Russia War

Asena BOZTAŞ *
Sibel AKGÜN **
Mustafa KOCAOĞLU ***
Dilsad TÜRKMENOĞLUKÖSE ****

ABSTRACT

Intensive use of information technologies with globalization in International Relations has brought about a great change and transformation in the discipline systematically. This change and transformation needs to be evaluated not only in one dimension but also in a multidimensional way. As a matter of fact, it is seen that the relations between states, together with information technologies, have settled on a brand new ground by intertwining military-economic-political and other multidimensional fields. In this sense, the existence of information technologies also includes great opportunities and risks in all these dimensions.

In this study, "How is information technology used in the Russia-Ukraine War? Along with the research question," What is the role of information technology in this war?" and "Is information technology bringing international relations closer to war or peace: opportunity or threat?" sub-questions will be answered. In the study, which will include discourse analysis with the Post Positivist (Interpretive) method, the content and applications of the war that started with the invasion of Ukraine by Russia will be evaluated through case studies and the data revealed at the systemic level will be discussed. Hence, in this case study, the effect of information technologies on the changing structure of international relations will be tried to be revealed. At the same time, the opportunities and risks created by information technologies in the systemic structure of international relations will be discussed and analyzed in a multifaceted way.

KeyWords: International Relations, Information, Information Technology, Russia-Ukraine.

LITERATURE REVIEW

The Place and Importance of Information Technologies in International Relations

The basic parameter of the relationship between states in international relations is to establish and maintain mutual goodwill relations within the framework of respect for sovereignty. Since the 17th century, when the Westphalian order was formed, the international system, which was formed on the basis of classical equality and respect for borders and territorial integrity, has been tried to be preserved since that period. However, the methods and tools used by states in international relations, while the basic ground has not changed, have also diversified and changed. One of them is technology. Josef Nye (2009) was one of the first to emphasize the importance of technology in the theoretical context in international relations. As with the emphasis on technology in international relations, there have been many theorists and theories trying to explain international relations through different dynamics (state, social interaction, international norms, etc.).

^{*} Assoc. Prof. Dr., Sakarya University of Applied Sciences, Faculty of Applied Sciences, aboztas@subu.edu.tr, Orcid:0000-0002-3216-3010.

** Assoc. Prof. Dr., Sakarya University, Faculty of Political Sciences, Department of International Relations, sgulcan@sakarya.edu.tr,
Orcid:0000-0002-8290-4227

^{***} Assoc. Prof.Dr., Necmettin Erbakan University, Faculty of Applied Sciences, mustafakoca og lu@erbakan.edu.tr, Orcid:0000-0002-9341-6341.

**** Faculty Member, PhD, Sakarya University, Faculty of Political Sciences, Department of Public Administration,

dturkmenoglu@sakarya.edu.tr, Orcid:0000-0002-8562-8184.

R.Q: Contrary to Nye, who evaluates technology in soft power format as the element that brings peace to the international system, technology has been a factor that brings the war closer to the war in the Russia-Ukraine War. In this context, in the study, "How is information technology used in the Russia-Ukraine War?" to the basic research question and "What is the role of information technologies in this war?" Answers to the first sub-question will be sought. Thus, at the same time, the second sub-question of the study, the Ukraine-Russia War of information technologies, will be evaluated by considering whether information technologies bring international relations closer to war or peace, and it will also be answered by discussing whether information technologies are a threat or an opportunity in international relations.

FINDINGS

The Utilization of Information Technologies in the Russia-Ukraine War

Within the scope of the study, firstly, "How is information technology used in the Russia-Ukraine War?" Based on the findings of the main research question and simultaneously "What is the role of information technologies in this war?" and "Does information technologies bring international relations closer to war or peace" will be included.

In this context, the war launched by Russia against Ukraine on February 24, 2022 provides important data on how the field of war and conflict is used in the field of information technology in international relations. This situation also reveals how the tools and techniques used by states to build power and hegemony have been transformed by globalization. In this war, it is also observed that technology, which Nye describes as soft power, does not provide "closeness to peace in international relations", contrary to what he himself stated. The war, which started and continues conventionally, has also revealed a situation where information technologies are used simultaneously. A digital war is waged in many other ways, too, from whether tech. companies should block content intended for Russia, to online censorship, to the spread of disinformation, and to Ukraine's internet being disrupted as missiles drop.

One of the most striking examples of the digital war in the ongoing conflict between Russia and Ukraine has been the issue of how digital platforms such as Google, Meta, Twitter, Telegram will use this power, which is among the increasing demands of Ukraine, Russia, European Union and USA officials. Ukrainian leaders have urged Apple, Meta and Google to restrict their services inside Russia. Subsequently, Google and Meta, the owner of Facebook, banned Russian state media from selling ads on their platforms. Google CEO Sundar Pichai also spoke with senior EU officials about how to counter Russian disinformation. At the same time, Telegram, a messaging app widely used in Russia and Ukraine, has threatened to shut down war-related channels due to widespread misinformation. Twitter has stated that it will tag all posts containing links to Russian state-affiliated media outlets, and Meta and YouTube will restrict access to some of these organizations in the EU to prevent war propaganda (Satariano and Frenkel, 2022).

On the other hand, Anonymous (Anonymous hacking collective) has declared cyber war on the Russian government. Microsoft said that malware "designed to be disruptive and render targeted devices inoperable" has been found in dozens of Ukrainian systems in the nonprofit and information technology sectors. He stated that he claimed to have targeted him (Wakefield, 2022).

Elon Musk, one of the richest people and technology bosses in the world, called on Russian President Vladimir Putin to fight one-on-one for Ukraine on his social media account. In his post on his Twitter account, Musk said, "I invite Vladimir Putin to a one-on-one fight." Musk continued to tweet, "Betsare on Ukraine," typing the country's name in his native language. Then, continuing in Russian, "Do you accept this fight?" he asked and tagged the Kremlin's official English account. SpaceX and Tesla CEO activated Starlink space internet equipment in Ukraine in late February. Musk has repeatedly expressed his support for Ukraine on his social media account (NTV, 2022).

When evaluated from a general perspective, it can be stated that companies holding communication technologies and their owners are also exposed to pressure and threats directed by states, which are the basic elements of international relations, as well as having opportunities in international relations in processes similar to the current situation.

When evaluated in this way, information technology was also used with the aim to change and directing the course of the war, deteriorating the morale and motivation of the Ukrainian Armed Forces in the war and breaking its strength. For example; There were also reports that the Ukrainian Armed Forces personnel sent messages on their mobile phones that Russia would invade the country and that they should not resist. It is thought that the Russian Leer-3 electronic warfare system, which can jam in the GSM network, was used in the mentioned psychological warfare activity (Kasapoğlu, 2022).

Similarly, it is possible to say that in addition to artificial intelligence-integrated autonomous weapons used in the active conflict area between Russia and Ukraine, artificial intelligence is also actively involved in the information and disinformation war. The impact of visual disinformation, especially spread on social media and produced by artificial intelligence, is high. In this context, there are many allegations that Russia uses "Deepfakes" for disinformation purposes. Deepfake videos; It is a technology in which artificial intelligence is used to create a digitally realistic replica of a person who can say whatever the creator wants. Facebook and Twitter revealed that Russia was using Deepfakes and deciphered the names of Ben Collins and Irina Kerimova, which are claimed to have been created using artificial intelligence in the Kremlin's "troll farm". It has been announced that both accounts have posted against Ukraine and Volodymyr Zelenskyy and supported the invasion of Russia. Subsequently, Facebook and Twitter announced that multiple Deepfake accounts produced with artificial intelligence were also suspended and completely deleted. The Ukrainian government has also frequently warned soldiers and civilians not to believe any video of Ukrainian President Volodymyr Zelenskyy declaring that Ukraine has surrendered to Russia or the soldiers lay down their arms. At the current point, the way photos and videos of the occupation are spread on social media makes it difficult form any people to understand what is real and what is not (Çelik, 2022).

Concepts such as cyberspace and cyber terrorism do not have internationally accepted definitions, and cyber warfare does not have a universally accepted definition. However, some definitions have been made for cyber warfare. The US Department of Defense has defined cyber operations as "the use of cyber capacity in cyberspace to achieve the main objectives of the attackers". Cyber warfare can also be seen as "all activities done to defend or attack cyberspace to protect information technologies or to prevent rival attacks". Today, countries are preparing for cyber warfare as well as conventional warfare strategies. Because the national defense systems of developed countries are protected by advanced information technologies. This leaves developed countries under the threat of cyber attacks in a possible war. In addition to the convenience of using technology at a high level in areas such as national defense and information storage, there are also important sensitivities in terms of the security of defense systems (Gürkaynak and İren, 2011:268).

As it can be understood from the examples given in the conflict between Russia and Ukraine, information technology in international relations have been widely used for power and opportunity in every field at bilateral and multiple levels. This situation is used more intensively, especially in situations such as war and conflict, and attempts are made to influence public opinion. It also formally includes the military forces and public authorities of the warring parties. Apart from this, global technology companies and groups, popular individuals and groups, have a strong influence on the purpose, content and direction of war. Information and communication technologies, which were seen as one of the soft power elements until recently, have gained much more importance in recent years as they gradually feed the hard power military power and transform it into a smart power. Information and communication technologies, which are especially effective in the Ukraine-Russia War, are used as weapons.

DISCUSSION AND CONCLUSION

Is the Utilization of Information Technology in International Relations an Opportunity or a Threat?

The intensive use of information technologies together with globalization creates multifaceted results in international relations. The most important positive contribution of the subject to international relations is that it strengthens the role of knowledge with the emergence of the internet. Because this source has made access to information much easier than before, access to information that will travel the world in almost no time in politics and national-international issues and increased accessibility have facilitated communication and relations. Information, which is a valuable part of politics and international life, has become a much more effective power with technology. An era has begun in international relations, where the actors are no longer just the states, but those who hold the information will also hold the power and become actors. In particular, information technologies have prevented the monopolization of power, and by distributing it faster and more actively, it has taken the system away from its solid state and brought it to a dynamic structure (KhumaloandBaloyi,2018:2).

With these positive features, in addition to geopolitical and geo-economic tensions and conflicts between global or regional powers, integrating cyber warfare and artificial intelligence into military technologies has the capacity to pave the way for exponentially larger crises. Due to these reasons, the international order and security may be further weakened, and some international regulations may be brought to the agenda, especially in the field of artificial intelligence and autonomous robotic systems, either completely prohibiting or limiting them in various ways. The main challenge will be that the acquisition and use of this technology will become easier than before, and that this will be seen as a right. In addition, the introduction of economic and trade embargo and other sanctions in accordance with unilateral attempts to limit restrictions will also destabilize the international order. Regardless, technological developments and innovations ultimately form the new strategic context for foreign policy and diplomatic activities.

We are living in a time when states experience both control and erosion of trust simultaneously. Although it is not possible to completely reverse the weakening of the state's control power in terms of globalization and the norms it brings, some steps can be taken to improve the environment of trust.

States, especially global and regional powers, have two options: Either they will make efforts in cooperation to repair the eroding environment of trust in the world, or they will have to follow the erosion of trust accelerated by technology and face the tragic consequences of this. Moreover, the field of the internet and technology is not only for states. The fact that it is open to the influence of non-state actors and even terrorist organizations should be taken into account as an "additional destabilizing factor" (Atatorun,2019).

In the globalized contemporary world of international relations, there is now an intertwined relationship between technology and social sciences. The post-Westphalian order has now eroded its absolute power within the borders of states. The instruments they use systematically in their mutual relations have increased, and even information technologies have become the most important of these instruments.

Technology has now started to play a strong role globally at the level of the individual and society, and later as the main act or in relations between states. In today's societies, there is an increasing interest in issues such as the widespread use of technologies, scientific knowledge, technology production and control, research and development. At the same time, political-social, cultural and economic dynamics have a profound impact on the development of knowledge and scientific progress, as well as technological applications.

As can be seen in the recent conflict between Russia and Ukraine, conventional warfare types are also carried out with information technologies, not just the use of military power in the field. This situation reveals that the

power in information technology is an important actor along with other powers, even surpassing them in some cases.

This is an issue that needs to be evaluated together with the risks and opportunities it contains. Namely, information technology and power create opportunities for facilitating-accelerating-transforming and pioneering in mutual relations between states. There are also risks in terms of erosion of sovereignty and power, creating information open to threats and disinformation, and hybrid attacks disorganizing the system. Therefore, it is necessary to focus on the productive, careful and transformative aspects of this power. Thus, the international relations system will be more stable, orderly and balanced for all states.

BIBLIOGRAPHY

- Atatorun M. (2019). "Teknolojik Devrim ve Uluslararası İlişkilerin Geleceği". Türkiye Politik veStratejikAraştırmalarVakfı (TÜRPAV), 7 March, https://turpav.org/serbest-alan/analiz/teknolojik-devrim-ve-uluslararasi-iliskilerin-gelecegi.html (Access:24.03.2022).
- Çelik E. (2022). "Rusya Ukrayna Savaşı'nda Yapay Zeka İzleri". Anadolu Agency (AA), 23 March, https://www.aa.com.tr/tr/analiz/rusya-ukrayna-savasinda-yapay-zekaizleri/2543138 (Access:24.03.2022).
- Gürkaynak, M. and İren, A. A. (2011). "Reel Dünyada Sanal Açmaz: Siber Alanda Uluslararasıİlişkiler". Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, V.16, N.2, pp. 263-279.
- Karagül, S. and Özkan, M. F. (2015). "Bilgi Teknolojileri ve Uluslararası İlişkilerde Fırsat-Tehdit Paradoksu", Bilgi Ekonomisi ve Yönetimi Dergisi, V.10, N.1, pp.115-127.
- Kasapoğlu, C. (2022). "Rusya–Ukrayna Savaşı: Askeri-Stratejik Değerlendirme". Ekonomik ve DışPolitikaAraştırmalarMerkezi (EDAM), 24February, https://edam.org.tr/rusya-ukrayna-savasi-askeri-stratejik-degerlendirme/ (Access:23.03.2022).
- Khumalo, N.B. and Baloyi, M. (2018). "The Importance of Information in International Relations", Library Philosophy and Practice (e-journal), 1842, June, pp.1-15.
- NTV(2022), "ElonMusk, Putin'iUkraynaiçinteketekdövüşeçağırdı", 14March, https://www.ntv.com.tr/galeri/ukrayna-savasi/elon-musk-putini-ukrayna-icin-teke-tek-dovuse-cagirdi,p64TXU6nFE-uLrpuljQCyw/uxPvkC1BCkiyLbSqoOIzJg(Access: 09.04.2022).
- Nye, J.S.Jr. (2009). SoftPower: The Means To Success In World Politics. Hachette UK.
- Özel, C. (2018). "Yumuşak Güce Bütünsel Bakış", Güvenlik Bilimleri Dergisi, May, V.7, N.1, pp. 1-27.
- Satariano, A. and Frenkel, S. (2022). "Ukraine War Tests the Power of Tech Giants", The New York Times, 28 February, https://www.nytimes.com/2022/02/28/technology/ukraine-russia-social-media.html (Access:09.04.2022).
- Wakefield, J.(2022). "Ukraine invasion: How the war is being waged online", BBC News, 28 February, https://www.bbc.com/news/technology-60559011 (Access:09.04.2022).