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THE DIGITAL SILK ROAD: CHINA'S STRATEGY FOR GLOBAL TECHNOLOGICAL LEADERSHIP

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Annotation: This article offers a comprehensive analysis of the Digital Silk Road (DSR) initiative developed by China as part of the Belt and Road Initiative (BRI). It explores the DSR not only as an economic development tool but also as a key geopolitical instrument in China's competition with the West, especially the United States, in the context of a global technological rivalry. The study emphasizes the complexity of the DSR, considering its multidimensional nature—economic, technological, political, and ideological. It also highlights the systemic fusion of public state interests and private technological corporations, a phenomenon shaping new forms of geopolitical influence and global digital governance. Special attention is given to Russia's strategic role in the DSR as a digital transit hub and partner, evaluating both opportunities and risks associated with deeper integration. Drawing on classical and modern geopolitical and economic theories, the paper aims to define the core features, actors, and consequences of the DSR and provide insight into potential models of cooperation in the evolving digital landscape.

Keywords: Digital Silk Road, Belt and Road Initiative, China, geopolitical competition, digital sovereignty, technology transfer, digital infrastructure, United States, Russia, public-private partnerships, cyber geopolitics, digital economy, technological cold war, global governance, digital colonialism.

Currently, digital transformation is perceived not only as a direction of economic development, but also as an important factor in geopolitical competition.

The Digital Silk Road (DSR), developed as part of the large-scale Belt and Road Initiative (BRI), has become China's public bet in the geopolitical confrontation with the West, especially in the context of the technological cold war between the United States and China.

Since the launch of the digital initiative, China has invested more than ten billion US dollars in the digital infrastructure of the countries of the Asia-Pacific region, Africa, South America and Central Asia, including the construction of fiber optic cables, satellite systems and data centers.

China has chosen a different approach to promoting its technological initiatives from the West. As a result, the modern digital map of the world presents two polar (Chinese and American) strategies of geopolitical leadership, each of which is aimed at forming the widest possible consumer market and reducing the influence of the competitor. From a geopolitical point of view, the DSR is China's public bid for global technological leadership. But its implementation is expected to face serious resistance from the West. The information space is deliberately developing a rhetoric of resistance to Chinese technologies under the auspices of ensuring national cybersecurity, maintaining technological sovereignty, and minimizing the risks of debt dependence. For example, in January 2025, US President Donald Trump threatened to demand the return of the Panama Canal to the United States if Panama did not stop participating in

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China's One Belt, One Road program, of which the Digital Silk Road is a part. Following a visit to the country by US Secretary of State Marco Rubio, Panamanian President José Raúl Mulino publicly announced the end of his participation in China's initiatives1. This fact is further evidence that the economic and digital competition between the United States and China is not only not abating, but is growing every day, acquiring new geopolitical, economic and even ideological contours.

In order to deeply understand the problem and find optimal directions for further digital development, it is important to have a systemic understanding of what the Chinese Digital Silk Road initiative is, what goals it pursues and in what direction it is developing.

The question of Russia's role in the implementation of the DSR is also relevant. The need for a deep understanding of this issue is explained by the strategically important geographical position of the country. Linking Europe and Asia, Russia is becoming a key transit hub for digital data flows. In addition, in the context of Western sanctions pressure, the Russian Federation is actively looking for alternative ways to develop the digital economy, and cooperation with China within the DSR is becoming one of the possible areas of the national digital strategy. Such cooperation is seen as especially important in terms of developing the data economy (the global data volume is about 175 zettabytes2), developing 5G technologies and artificial intelligence. For Russia, participation in the DSR is associated with both opportunities and risks. On the one hand, such cooperation opens up access to Chinese technologies and investments that can accelerate the digitalization of the Russian economy. On the other hand, it can call into question the country's digital sovereignty and reduce the competitiveness of its own digital solutions.

The purpose of this article is to conduct a comprehensive analysis of the Chinese Digital Silk Road (DSR) initiative, identify its stable features and systemic patterns, and outline possible areas of cooperation between Russia and China in its implementation.

The main difference between this study and other works devoted to the Digital Silk Road is that the author deliberately does not limit himself to assessing the project's economics, but offers a comprehensive assessment based on a study of classical and modern geopolitical and economic theories. The Digital Silk Road is a modern interpretation of an ancient trade route adapted to the digital age. Modern scholars seek to understand its economic and geopolitical effects using various concepts and theories.

The problem, however, is that due to the variety of tools used by China and the global influence of the DSR on the economic, political and social situation of the participating countries, it is sometimes difficult to explain the nature and direction of this digital initiative and relate it to the economic and geopolitical priorities of global political actors. The novelty and complexity of the phenomenon under consideration forces researchers to delve into specific aspects of the problem, leaving the phenomenon of global governance through technology transfer without attention.

As a result, a mosaic (fragmented) understanding of the geopolitical content of the DSR is formed, consisting of the following important theoretical and methodological blocks:

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- study of the phenomenon of merging public functions of the state and private interests of large technology companies;

- explanation of the economic and geopolitical objectives of the Chinese technological initiative; – consideration of the nature and forecasting of the development of digital competition between China and the United States.

Considering the phenomenon of the merger of interests of states and large technology companies, scientists have different views on the legitimacy of such interaction and the status of its participants. In particular, some experts see Chinese digital giants as full-fledged participants in international politics (Zaitsev, 2022), others allow a conglomerate of power and business only within the framework of ensuring international information security (Fedorov, Zinovieva, 2017), and others see in such a merger a new political entity - a technological system (Kulikova, 2016). In modern geopolitical studies, the Chinese digital initiative is also considered as a Chinese strategy in the digital war with the United States (Degterev et al., 2023), and as an inevitable condition for the formation of a single global digital agenda (Vykhodets, 2022; Danilin, 2020; Vinogradov et al., 2019).

The most important and difficult issue in understanding the economic and geopolitical basis of the Digital Silk Road is that China considers technology companies, rather than the state, as the main actors of technological change, which brings to the forefront the problem of merging the public interests of the government and the private interests of large corporations and gives rise to a new, previously unstudied phenomenon of "published" private interest.

Unfortunately, neither domestic nor foreign science has yet come close to developing a formula for the ideal combination of public and private principles in a technology corporation as an actor in international politics.

Political scientists explain the growing geopolitical influence of large digital companies by several circumstances: the concentration of capital and competencies among digital giants, their great political and economic ambitions; the impossibility of implementing global digital projects only at the expense of state resources without involving private business; increased pressure and control over employees of digital corporations, etc. (Tomin, 2019).

An interesting explanation for the phenomenon of merging the interests of states and technology businesses is provided by K. Krause's theory of technology diffusion. It allows us to consider it as a geopolitical bipolarity, which, in turn, is a key mechanism for technology transfer (Krause, 1995). Supporters of the theory distinguish four groups of states depending on their attitude to technology: those considering the global digital transformation as an instrument of geopolitical influence, those introducing private digital solutions to the market, those copying technologies, and those importing technologies. Digital companies of the first type of countries can have geopolitical weight (and China belongs to this group). At the same time, researchers note that it is in the first group that the conflict between public and private interests will only intensify, which will subsequently affect the pace of development of the Chinese digital initiative (Sidorenko, 2024). Modern political economy determines the role of technology companies based on the strategy of their use by states. The following four models are distinguished: the use of corporations as an instrument of foreign policy; as a platform for

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proposals; as an initiator of legislative strategies and as an instrument of media strategy (Temirbulatov, 2013). In this regard, the DSR program itself is assessed as a unique model based on a combination of four well-known strategies, which gives it a margin of safety, but at the same time expands the possibilities for attacks by geopolitical competitors. It is no coincidence that the US rhetoric uses a complex of different content settings: from calls to save the national economy from debt obligations to threats to change the political regime in the countries participating in the DSR project. will become the engine of a new generation of digital society (Duarte et al., 2022).

Proponents of the concept of economic interdependence (Rosecrance, 1986) see China's initiatives as a long-term program to create information exchange networks that are a way to maintain China's geopolitical influence. In their opinion, global networks and investments in digital infrastructure are the most effective mechanisms of the Digital Silk Road.

The theories of the "core-periphery" of I. Wallerstein3, structural economics of R. Prebisch (Vernengo & Caldentey, 2016) and network governance (Slaughter, 2009) have found a new interpretation in the process of explaining the goals of the DSR: within its framework, China is considered as a new "center integrating semi-peripheral and peripheral countries through digitalization" (e.g. projects in Central Asia). But at the same time, according to researchers, such influence will inevitably lead to inequality in global value chains, economic imbalances “center-periphery”, glocalization and digital colonialism.

Much attention in modern science is also paid to the digital confrontation between China and the United States. Western scholars, as a rule, focus on China's colonial ambitions, attributing to it the goals of technological dominance over all developing countries (Creemers, 2021). One of the main sources of concern, in their opinion, is the possible use of DSR to export the Chinese model of digital authoritarianism, including mass surveillance technologies. Huawei, HikVision and Dahua are actively promoting such solutions, which raises concerns about human rights violations and data privacy.

It is interesting to explain China's cooperation with the EAEU as part of the justification for the importance of winning the confrontation with the United States. According to proponents of the Eurasian approach, China is positioning itself as a leader in digital transformation, strengthening its influence through technology exports and infrastructure creation in the EAEU countries, thereby closing the region to the transfer of American products (Sahakyan, 2022). At the same time, the emphasis is on the “cyber sovereignty” of individual countries and the region as a whole.

Looking at the confrontation between the two countries, proponents of the digital infrastructure export theory see the main difference in the ideological attitudes of the opponents: China promotes the concept of “digital sovereignty”, while the West defends the idea of an “open Internet” (Streinz, 2021).

Chinese researchers, as a rule, see the Digital Silk Road initiative as the goal of developing broadband Internet in regions with underdeveloped digital infrastructure or its complete absence, as well as upgrading existing Internet connections to achieve higher bandwidth in the BRI regions. The DSR serves as a reminder of the need to take into account the interests of

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developing countries in the process of digital transformation of the global economy and their integration into global trade networks (Peng, 2021).

The above points of view clearly indicate that the Digital Silk Road initiative is at the epicenter of important issues for modern economics and geopolitics, while simultaneously accumulating a wide range of diverse geopolitical discourses, attitudes and narratives.

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