

## Digital sovereignty of Russia: barriers and new development tracks

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### Abstract

**Subject/Topic.** The article is devoted to the study of the concept, parameters, barriers and scenarios for ensuring the digital sovereignty of the Russian Federation in the era of Industry 4.0. **Methodology.** To study the concept of digital sovereignty as a scientific shortage, the authors used general scientific methods (observation, comparison, measurement, analysis and synthesis, the method of logical reasoning), when conducting an analytical study of indicators of the digital maturity of the national economy of the Russian Federation, the dynamics of high-tech challenges and threats specific scientific methods were used (static analysis, expert assessments, graphical method), to form scenarios of the future trajectory of the development of digital sovereignty, methods of strategic management – SWOT analysis, PEST analysis, Foresight tools. The validity and reliability of the results of scientific research is ensured by the correctness and rigor of the construction of the logic and research scheme. Scientific and applied research of Russian and foreign scientists in the field of innovative development, digital economy and public administration was used as a methodological and fundamental basis for the study. The initial statistical data for the analysis were taken from open sources of thematic reviews and analytical reports of the consulting agencies VC.RU, the Ministry of Economic Development of the Russian Federation, the Skolkovo Research Center, Digital IQ, PWC, statistical collections of the Higher School of Economics and Rosstat. **Results.** Currently, digital sovereignty is considered from a political, economic and technological point of view, which determines the presence of a pluralism of points of view on its meaningful definition in the scientific literature. The authors propose to understand by digital sovereignty the criterion of sustainability of the architecture of a socio-economic business model in front of external and internal digital challenges and threats of various origins, as well as its ability to adapt and proactively protect its own interests in the digital sphere. The development of the digital sovereignty of the Russian Federation is presented according to four scenarios: 1st – the Russian Federation is unable to build an effective national infrastructure and is dependent on these groups, digital sovereignty has become an object and means of influence of world leaders on the behavior of entire states and allied formations, an emphasis on military the political role of digital sovereignty; 2nd – the Russian Federation joins the digital infrastructure to the Asian group, and the Chinese conglomerate pursues a policy of soft absorption with the gradual assimilation of the

cultural and value paradigms of the population into non-Chinese paradigms; 3rd – the collapse of the oligo-polistic power, the FAMGA group (USA) and the BAT group (China), the entire world economy is being reshaped into autonomous digital ecosystems that build relationships among themselves on the principles of win-win partnership; 4th – the USA, EU, Russia is actively developing digital infrastructure in Asia, Africa, South America to form a new colonial system built on the basis of digital technologies. **Conclusions/Relevance.** As part of the scientific study, it was found that the digital sovereignty of the state directly depends on the level of digital maturity of the national economy and the digital responsibility of society's behavior. Taking into account the passage of the global economic system to the point of no return – the onset of the era of Industry 4.0 - the issue of ensuring the digital sovereignty of the state is becoming a new priority in the agenda for future development. **Application.** The results obtained in the process of scientific research can be used by the authorities and management as a theoretical and practical basis for making appropriate decisions in the field of improving the processes of digital transformation of various levels of society, and by business representatives – for adjusting business development strategies based on taking into account relevant digital challenges and threats.

**Keywords:** *digital sovereignty, Industry 4.0, technology infrastructure, digital maturity, cyber threats*

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