



ЦИФРОВОЕ ПРОСТРАНСТВО ПОЛИТИКИ DIGITAL POLITICS

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Contemporary State in the Context of Digital Technological Transformations: Political Opportunities, Risks, and Challenges

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Abstract. Modern state faces the need to adapt to the changing external environment, which is characterized by intensive digital technological transformations. Thus, it is important to determine how contemporary state and its power institutions adapt to digital technological transformations and identify the key risks, threats, and challenges associated with such adaptation. To do so, the authors of the article conducted a corresponding international expert study, which allowed them to determine the degree of digital technological transformations' influence on the functioning of traditional states and their power institutions. Also, based on the integration of expert assessments, the authors identified the essential characteristics of digital technological transformations' effect on contemporary institutions of state power. The study results concluded that the digitalization of contemporary states and their adaptation to current technological transformations is a complex and largely ambiguous set of processes. These include both political opportunities and the associated risks, threats, and challenges for both the state and its institutions, as well as directly for the civil society, which is rapidly increasing its complexity and diversity through intensive digitalization. This brings to a wide range of scenarios for forming state and political management models in the context of a rapidly emerging digital technological reality of a new type. The article proves that the adaptation of the traditional state as a management system to the technologically more complex environment is necessary to ensure the effective viability of both the state itself and its institutions.

Keywords: state institutions of power, technological transformations, digitalization of political governance, digital politics

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Современное государство в условиях цифровых технологических трансформаций: политические возможности, риски и вызовы

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Аннотация. Основная цель исследования — определение политического потенциала адаптации современного государства и его институтов власти к цифровым технологическим трансформациям, а также выявление ключевых рисков, угроз и вызовов, связанных с процессами такой адаптации. Для достижения данной цели авторами было проведено соответствующее международное экспертное исследование. Результаты исследования позволили определить степень влияния цифровых технологических трансформаций на функционирование традиционных государств и их институтов власти. Также по итогам комплексирования экспертных оценок авторы выделили наиболее важные характеристики влияния цифровых технологических трансформаций на современные институты государственной власти. По итогам исследования сделан вывод о том, что цифровизация современных государств и их адаптация к актуальным технологическим трансформациям является сегодня сложным и во многом неоднозначным комплексом процессов, включающим в себя одновременно как политические возможности, так и связанные с ними риски, угрозы и вызовы как для самого государства и его институтов, так и непосредственно для гражданского общества, которое не менее стремительно увеличивает свою сложность и разнообразие посредством интенсивной цифровизации. Данное обстоятельство формирует потенциал для существования широкого спектра сценариев формирования моделей государственно-политического управления в условиях стремительно формирующейся цифровой технологической реальности нового типа. В статье доказывается, что адаптация традиционного государства как системы управления к технологически усложняющейся среде своего функционирования является необходимым условием для обеспечения эффективной жизнеспособности как самого государства, так и его институтов.

Ключевые слова: государственные институты власти, технологические трансформации, цифровизация политического управления, цифровая политика

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Introduction

At present, the state as a complex system inevitably faces the need to adapt to the changing external environment, which today is characterized by intensive digital technological transformations of a global nature.

With the improvement and spread of a wide range of digital communication technologies, the intensification and penetration of digital information flow into key areas of the state and society, a kind of state of technological turbulence has emerged, characterized by the predominance of a variety of technologies over a variety of systems (state-managerial and political). According to the law of necessary diversity of W.R. Ashby, the complexity and diversity of a management system to maintain its effective viability must exceed the complexity and diversity of the managed systems it manages.

At some point, the diversity of the digital space of socio-political communications and digital technological infrastructure turned out to be higher than the complexity of management systems typical of traditional political regimes [Hustad, Olsen 2021].

For this reason, technologically advanced states were forced to adapt their management systems to the new socio-technical reality in a forced mode [Baxter, Sommerville 2011], increasing their own diversity and reducing the diversity of the digital communication space [Volodenkov 2021].

In this regard, we have witnessed the emergence and implementation of such digital technologies in the current social and political practice as online voting, electronic referendums, and closely related blockchain data distribution technology, digital government services for the population (within the framework of the concept of a service state and digital bureaucracy), online services that allow citizens to put forward various initiatives or vote for them, electronic government technologies, automated algorithms for processing large databases of public and political information, technologies for the formation and analysis of public and political Big Data, technologies for biometric identification of citizens [Smorgunov 2021].

Thus, the content and functional parameters of the digital policy and public administration space began to change under the new technological conditions.

In this regard, the primary purpose of the study was to identify expert positions on the ways how the state can adapt to current technological transformations and the growing digitalization of government institutions and society's life, as well as to identify key opportunities, risks, threats, and challenges associated with such adaptation. Additionally, an important research task was to identify expert assessments of the impact of digital technological transformations on the features and parameters of the functioning of traditional states and their institutions of power, as well as to study qualitative expert ideas about the content, structure, and features of such influence.

Research methodology

In September-October 2021, the authors conducted an international study on the topic “Digital space of modern politics in the context of global technological transformations: content, structure, and features”, relying on the method of expert interviews. 22 academic experts from Russia, the United States, Serbia, Poland, the Republic of Belarus, Kyrgyzstan, and Uzbekistan were interviewed as part of the study. To achieve the goal of the study, combined expert assessments were used to process and analyze the data obtained.

Results

In order to test the relevance of the research question on how digital technological transformations affect modern states and their institutions of power, as well as how the state should adapt to new technological conditions to maintain its viability, ensure socio-political stability and maintain the effectiveness of its functioning in changing conditions, experts were asked to assess the degree to which digital technological transformations affect the functioning of traditional states and their institutions. Based on the study results, we can state a high degree of such influence (the average score of expert assessments of influence on a 10-point scale was 7.0) (Fig.1).

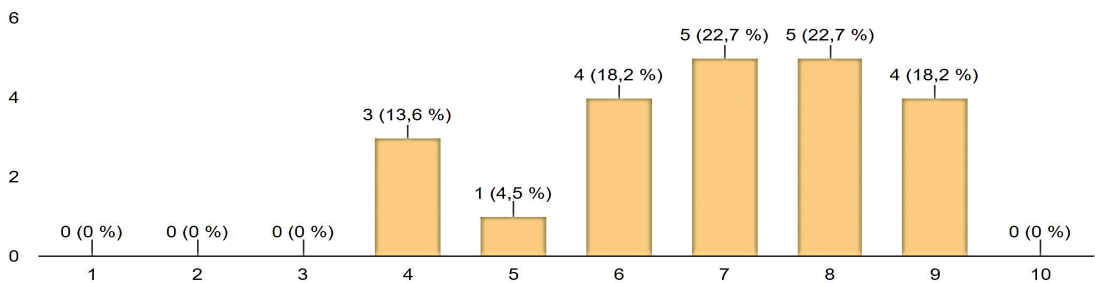


Fig. 1. Expert assessment of the degree of influence of digital technological transformations on the functioning of traditional states and their institutions of power. Quantitative assessment from 1 to 10 points (1 — absolutely do not influence, 10 — maximum influence)

Source: made by authors.

Among essential characteristics of the impact of digital technological transformations on government institutions, based on the results of combining expert assessments, we can distinguish the following:

- digital technologies, due to their extraterritorial nature, contribute to the weakening of traditional state institutions and strengthen the control of multinational companies and countries with access to the latest digital technologies over less technologically developed countries (for example, works have already appeared on the risks of asymmetry between states due to the use of artificial intelligence in migration policy [Beduschi 2020]);
- the state loses monopoly control over the production and dissemination of information. It is forced to “open up”, providing a representation of its

institutions and activities in the digital space, competing for the attention of citizens with new political actors, including external ones (moreover, some studies record the role of information and communication technologies in the emerging risks of destructive archaization of states [Lebedeva et al. 2016]);

- in competitive conditions, it is more difficult for the state to form and define an agenda in the digital space, which can affect both the nature of the perception of the state by its citizens and the parameters of socio-political stability at the national level (this partly coincides with the conclusions of R. Collington [Collington 2021]);
- the axiological and normative hierarchy of the society is being transformed, and the needs of digital systems and their development requirements are becoming the essential elements of the modern agenda and the strategic doctrines of socio-political development;
- the development of digital technologies and means of virtual communication has significantly expanded and complicated the socio-political space. Quantitative and qualitative changes in the system of public power relations can already be clearly traced, which brings to the emergence of new models of power interaction in the personality — society — state system (digital government, virtual officials, state service platforms), fundamentally new actors (online communities, hybrid political entities — avatars, digital copies, virtual agents) and actants (automated digital algorithms, artificial intelligence systems, self-learning neural networks, algorithmic expert systems);
- under the influence of digitalization institutional structures and public-power relations lose their traditional resource of legitimacy and social significance, and most interactions are implemented through digital intermediaries (platforms, algorithms);
- the structure and nature of the political process, as well as the forms of socio-political mobilization and identification, are radically changing, new forms of political governance, techniques of “soft” digital pressure and targeted manipulation are emerging, which are available for use by a wide range of actors other than the state itself;
- digital technological transformations allow traditional states to gradually move to a predominantly client-centered model of interaction with citizens;
- key mobility centers, forms and technologies of social and power communication are being restructured, key resources of a socio-political organization are being changed, and digital data generated by the population and organizations are becoming crucial. It is digital data that become the basis for the constant circulation of information, content, and the basis of a modern “digital formation” (such conclusions acquire new relevance in connection with the latest attempts to reconceptualize the model of biopolitics and biopower by M. Foucault [Kubler 2017]);

We see an intensive virtualization of the political process, the distribution of digital copies of political actors, digital politicians and algorithmically constructed political events. The traditional political space of struggle and

competition is complicated by the participation of digital entities (algorithms, bots, and other digital actors), which significantly changes the rules, norms, and technologies for achieving political goals.

This level of expert assessments allows us to stress the importance of the question raised on how the state can adapt to the changing environment.

Based on the received expert opinions, we can identify several key areas of state adaptation to current technological transformations and digitalization of the main areas of functioning of government institutions and society's life.

Many experts participating in the study emphasized the need to form the digital sovereignty of the state in the context of the emerging global digital communication space. At the same time, the very concept of digital sovereignty is a complex phenomenon, including such components as national digital infrastructure, digital technologies, digital resources, regulatory framework, digital skills, and competencies both at the level of government entities and society itself.

According to experts, the formation and maintenance of digital sovereignty requires the state to independently create and control critical technologies for the functioning of the digital space and develop its own national digital platforms that use information networks to monitor, prevent and counter various risks, challenges, threats in key areas of the state and society. This topic is quite relevant both in Russian and foreign science [Leksin 2021: 154-159; Pohle, Thiel 2020].

Digital threats, risks, and challenges should be controlled and regulated within the framework of the sovereign jurisdiction of a particular state since it ensures, on the one hand, the protection of citizens' and organizations' data from their free use; and, on the other hand, the protection of the national and cultural specifics of a certain society and the adequacy of the development of digital technologies to the unique development trajectories of certain civilizational systems [Leksin 2021: 74].

In this regard, it is important to develop legal forms and regimes that are adequate to modern digital realities of society's development and ensure advanced legal modeling of socio-political relations.

Generally, according to experts, the state should legislate the responsibility of platforms for content, the risks of individuals and society from exploiting new digital technologies and ensure the use of digital technologies in the public interest. Such assessments are quite consistent with the concern of several scientists about the growing dependence of citizens' communication on digital monopolies [van Dijck, Winkel, Schäfer 2021].

According to experts, a significant area of state adaptation is forming a harmonious model of socio-political life in the context of digitalization. It requires the renewal of political and economic elites, whose activities will be dominated not by the desire for innovative technological breakthroughs, but by a strategic vision of possible scenarios for the "harmonization" of social, digital factors and development dominants, as well as the ability to predict their possible interaction and mutual influence.

In this regard, citizens' trust (as a source of legitimacy for the institutions of state power) in the functioning of digital services, in digital technologies and practices of their application is extremely important.

Experts also stress the importance of the “competence-based” approach to the state’s adaptation to the current digital technological transformations. Thus, the state is required to carry out educational activities in technological training of civil servants, increasing the digital literacy of politicians and citizens themselves, as well as popularize digital forms of interaction between the state and society¹.

We also support this position. We consider that even the presence of a developed digital infrastructure, technologies, platforms, and solutions, in the absence of high-quality digital skills and competencies, both at the level of management systems and at the level of society itself, will not allow us to form a harmonious and effective interaction between the state and society to achieve the goals of digital development in the national interests.

The lack of necessary competencies, knowledge, skills, and abilities can become a serious obstacle to the involvement of citizens in political processes occurring in the digital space and the expansion of digital forms of political participation of citizens [Bykov, Medvedeva 2021].

Only in the case of successful implementation of the directions of state adaptation to digital technological transformations identified by experts do weighty prospects arise for developing the state and society, as well as the socio-political sphere of their interaction².

According to experts, the constructive potential of digitalization in the case of successful adaptation of the state to the new operating conditions is weighty — for the state itself, in the context of digital technological transformations, new opportunities in the field of socio-political management appear.

Thus, digital technologies can significantly simplify the bureaucratic process and free up managerial and organizational resources when used correctly.

In the context of forming Big Data digital arrays, the provision of empirical data and analytics management in decision-making makes it possible to improve the quality and efficiency of planning and forecasting in the socio-political sphere, as well as to ensure high quality and efficiency of the functioning of the public administration system as a whole. On the one hand, system-oriented machine learning facilitates the advancement of social and political development models based on large amounts of digital data, analytical and expert materials. On the other hand, they allow

¹ As the key problems associated with the formation of digital competencies, the survey participants identified differences in the speed of mastering digital management competencies; socio-cultural obstacles for supporters of traditionalist rule; conservatism of supporters of traditionalist culture in society, distancing certain groups of citizens from modern technologies; insufficient level of professional training of personnel, whose job responsibilities include the use of digital technologies, which initiates professional risks.

² In this regard, numerous experts identified such threat as the lag of modernization (in terms of the introduction of digital technologies) efforts of the state from the modernization needs of society. We are talking about carrying out imitation modernization — “attempts to hang digital technologies like Christmas tree decorations on the old system of socio-political institutions.” It leads, according to experts, to a drop in the effectiveness of the system of state authorities and political institutions in general. Additionally, it leads to the delegitimization of the political system, which does not meet new social needs.

qualitatively improved prediction systems and simulation programs to improve various areas and sectors of social life, providing opportunities for monitoring public attitudes and taking them into account when making decisions³.

Increasing the speed and algorithmization of communications between segments of the state through digital technologies [Beer 2017; Bucher 2012] allows ensuring the efficiency of inter-institutional coordination and response of the public administration system to complex processes in key areas of the state and society functioning. Also, it helps to optimize the processes of interdepartmental and intradepartmental interaction, facilitates and accelerates the communication with citizens, allows optimizing the process of providing public services.

In turn, the possibility of involving artificial intelligence as an impartial arbiter in socio-political processes makes it possible to reduce the level of socio-political tension, provided that the population has a sufficient level of trust in artificial intelligence technologies. Machine complexes and algorithmic solutions allow achieving relative objectivity in making power and managerial decisions, and blockchain technologies can ensure the authenticity of data and information, improve the system of advanced law-making and socio-political forecasting⁴.

Additionally, artificial intelligence technologies in the context of the development of public monitoring systems, predictive justice, and machine forecasting significantly increase the capacity of state bodies to ensure political and legal order, and citizens' social life and activities become primarily open and transparent for decision-makers. The danger of opaque digital systems is sometimes considered within the framework of an algocracy model — algorithmic power or a control system based on the principles of programmed algorithms [Aneesh 2009; Danaher 2016]. Algocracy, as further rationalization of classical bureaucracy, is focused on solving non-standard problems through data analysis, automated consultations, and more centralized decision-making mechanisms [Lorenz, Meijer, Schuppan 2021]. Algocracy may be associated with mediacracy [Fedorchenko et al. 2020].

The implementation of “smart” solutions based on artificial intelligence systems and neural network algorithms can also contribute to the formation of effective feedback channels with citizens. Unlike traditional management models, such

³ Moreover, according to experts, any forecast, any strategy will be inadequate if, in addition to behavioral and other social factors, they do not include modeling the development of digital forms, technologies, and tools. In other words, modern socio-political forecasting and public-law governance no longer lay down only “social” as a fundamental element and dominant trend.

⁴ Simultaneously, numerous research participants noted the potential threat of “shadowing” the processes of making management decisions based on oriented machine learning systems, as well as the risks of government dependence on technology experts, developers, and operators of digital systems and technologies. According to some experts, today, there is a shift in real power and centers for making management decisions from the public space to a new spatial sphere — “digital laboratories” (developing, implementing, and operating complex digital algorithmic systems). Simultaneously, citizens do not have real tools of public control over the operation of digital technologies, including the ability to influence autonomous digital experts, bureaucratic and other algorithmic decision-making systems. It is no coincidence that works on “smart citizenship” have appeared recently [Zandbergen, Uitermark 2020].

“smart” solutions have several principled advantages: collecting analytical data, processing them, and forming their own arrays of Big Data they become an algorithmic “objective” process, which makes it difficult for operators, analysts, sociologists, and managers to impose subjective, biased assessments on the data received. Moreover, using Big Data arrays allows developing targeted solutions, implementing personalized policies for specific groups of people and individuals, and customizing the political proposals.

Thus, we can state that the experts who took part in the study assessed the potential of digitalization of the state very highly while formulating a whole range of priority actions to adapt the state to the conditions of modern digital technological transformations.

Interpretation and conclusions

The opinions of the study’s participants do not allow us to clearly determine whether modern technological digitalization has an unambiguously positive or negative impact on the public administration system and the functioning of state institutions of power. Rather, we deal with a complex set of effects that have unclear consequences. It is no coincidence that most expert opinions received speculated on modern digital technologies’ constructive and destructive potential in adapting states to the new technological environment. The controversial nature of this problem is also emphasized by other researchers [Smorgunov 2021].

Experts highly appreciate the opportunities for constructive use of digital information tools for effective coordination of government institutions and civil structures, public discussion of socio-political management projects with the participation of a significant number of citizens using digital channels of interaction with the authorities. Communication between the authorities and citizens in digital format is becoming easier, more accessible, and faster, creating a sense of a more open and “transparent” government.

The study participants see digitalization as an opportunity to involve society in making managerial decisions, to participate fully in the discussion of socially significant initiatives, to have total control over the functioning and performance of public authorities and their officials, as well as to create convenient digital public services and other interactive platforms.

Thus, experts link the modern digitalization of public and political communications with the following:

- high level of transparency (openness) and online accessibility of public authorities;
- emergence of effective mechanisms for influencing and controlling the process of making and implementing government decisions;
- developing political institutions’ culture and orientation to improve the quality of public services and social responsibility;
- ensuring the openness of processes related to the organization and implementation of public power;

- improving the availability of public services, the speed and convenience of socio-political participation, action, and mobilization.

Additionally, based on the analysis of expert responses, we can talk about the potential for the emergence of new forms and technologies for involving society in the political process [Achkasova, Dobrovolskaya 2021], new technological tools for mobilizing civil participation and increasing socio-political activism, as well as the formation of more effective network forms of integration and articulation of social expectations, public needs, and public interests.

Simultaneously, the simplification of the production and distribution of political content, the availability of extraterritorial digital communications also allows to:

- solve the problem of “district size”;
- create opportunities for forming “direct democracy” institutions⁵;
- design an effective digital space for socio-political interactions of citizens;
- provide citizens with new technological opportunities and schemes for political participation and civil society development.

At the same time, based on the example of such corporations as Uber, attempts to use “digital agoras” and create the appearance of civil mobilization for their own purposes are obvious [Ranchordas 2017].

At the same time, we can’t underestimate the fact that the state authorities are losing their dominant position in the new technological environment, which can technologically strengthen the “blocking effect of institutions”, protect and hide digital data, manipulate them, and control the political choice and behavior of the population on a larger scale using digital manipulation and propaganda technologies.

No less significant is the potential for applying technologies in the field of modern management of Big Data. We can note the possibilities of higher efficiency of management processes due to a more precise definition of the characteristics, needs, and preferences of the target audiences, more targeted information and communication interaction with them, and the creation of more effective strategies and methods of communication with various groups of citizens.

The use of Big Data allows, in general, to better understand the audience and its needs, use the language of communication that is understandable to it, and provide “personal” contact with the citizens, which significantly increases the potential of communication influence on society. Improving technologies for collecting, storing, and structuring Big Data creates fundamental opportunities for forming a personalized state policy for each citizen.

Additionally, the potential for improving the effectiveness of governance in the socio-political sphere lies in the emerging opportunities for building models of socio-political development based on a massive array of data, analytical and expert materials,

⁵ At the same time, the reverse side of this process is the weakening (up to the disappearance) of the classical function of parties as “driving belts” between citizens and politics. Another aspect of the formation of direct digital channels of political communication is the decline of the authority of the institution of political representation and, accordingly, of representative bodies of power, the need for which in conditions of “direct access” to power does not seem quite obvious to the ordinary person.

the formation of objective and adequate political forecasts, strategies, models, and programs for improving various spheres and sectors of socio-political life.

With the help of Big Data, we can ensure the simplicity, convenience, speed, and efficiency of storing and using data, information, and acquired knowledge, as well as instant access to the achievements of humanity, cultures, and civilizations, which significantly enriches and qualitatively improves the process of developing and making significant socio-political decisions.

At the same time, it's worth mentioning the possible risks associated with the use of Big Data in public and political practice. First, these include significantly increased possibilities for manipulative influence by forming individual models of political reality and behavioral models based on the analysis of personal characteristics of citizens, their value systems, and ideas about the world around them (which can be successfully implemented based on the study of personal digital traces of online users).

Particularly noteworthy is the risk of forming practices of total control of public consciousness through the collection, processing, analysis, and use of personal data related to the behavior and preferences of the population [Ulbricht 2020]. It leads to another threat — the emerging digital control society based on round-the-clock monitoring of citizens in the digital space, collecting information about any types of activity, and using the obtained data to implement restrictions against a particular individual who has digital signs of unreliability, as well as for the implementation of ranking, “social segregation” of citizens according to the degree of “social approval” based on the analysis of civil activities.

Moreover, we can see the emerging potential of digital deprivation of citizens, digital erasure of individuals, and digital restrictions on objectionable persons at the discretion of only those who control digital data.

As for the integration of artificial intelligence technologies and neural network algorithms into current socio-political practice, there are also opportunities to realize constructive potential [Gran, Booth, Bucher 2021]. The creation and implementation of AI systems allow solving real-time analytical tasks related to processing and analyzing Big Data and supporting decision-making both at the national level and at the level of each citizen.

Machine complexes and algorithmic solutions can ensure objectivity in decisionmaking, revealing the facts of political violence [Muchlinski D., Yang X., Birch et al. 2020], eliminating cultural, historical, ethnic, and other prejudices, cliches, and stereotypes, while blockchain and Big Data technologies can ensure the authenticity of data and information, improve the system of advanced law-making and socio-political modeling, improve the system of taxation, healthcare, social security, education, which in general will contribute to socio-political development in technologically developed countries.

Simultaneously, we can also identify significant risks associated with introducing artificial intelligence systems and neural network algorithms into public and political practice. First, we are talking about the possible prejudice of artificial intelligence systems and machine failures/errors in oriented machine learning, which entail mass discrimination of citizens [Borgesius 2020] (based on gender, race, ethnic, and other

social characteristics), defragmentation of the socio-political integrity of society and a more radical “digital stratification” of society, organized at the discretion of “smart systems”.

There’s a trend toward combining artificial intelligence systems and self-learning neural networks with Big Data resources and technologies into unified automated projects, in which digital traces and biometric data of citizens are automatically collected, accumulated, processed, analyzed, and used by artificial agents to control individuals, which can lead to the formation of political and technological regimes of total digital control “for the benefit of society” — digital Panopticon⁶.

It is no coincidence that today Sh. Zuboff, a professor at Harvard University, puts forward the concept of surveillance capitalism [Zuboff 2019]. Notably, even in the absence of such projects of digital control over the population, the negative effect of the spreading mass social phobias of “total control” may turn out to be quite real in full accordance with the well-known Thomas theorem (“if men define situations as real, they are real in their consequences”). The result of these processes is the emergence of “algorithmic identity” monitored by the authorities (the phenomenon of “jus algoritmi”), which is described by J. Cheney-Lippold [2016].

Another significant risk of digitalization identified in the study is the axiological reprogramming of the society, reducing its cognitive abilities and cutting it off from the real world using digital technologies and algorithms.

The involvement of citizens in virtual social life makes the political behavior, values, and identity of citizens subject to influence and manipulation by a variety of political forces, including large IT corporations, foreign states, and non-governmental organizations, which results in political values becoming more fragmented, and the political behavior of the masses becoming less predictable.

Personalized news selection algorithms determine the scope of perception of certain events, targeted distribution of digital contextual and individualized information, news based on the analysis of personal digital traces, and allowing for individual characteristics to be taken into account during information and communication impact. This creates a powerful manipulative and propaganda potential in the space of digital socio-political communications, associated with the formation of a distorted picture of socio-political reality and information-technological construction of controlled public opinion, imaginary contradictions, social problems and conflicts that are not real, but virtual in nature.

In the short term, the situation may worsen because software systems and digital autonomous algorithmic systems replace the real political process with virtual events and digital processes, algorithmically constructed information, digital policies, and

⁶ Such political and technological regime, according to experts, is characterized by the following key features: the expansion and legislative consolidation of authorized access by the state and its bodies to personal data and the possibility of their use against the will of citizens; strengthening of state control over the digital behavior of citizens; introduction of more stringent rules for finding and behaving users in the digital space; forced narrowing of the acceptable format and content of digital communications on topical socio-political problems; deanonymization of digital users; decreasing value of privacy; the abusive use of digital data arrays; pre-trial prosecution based on personal digital data.

false meanings. It is fraught with the disappearance of the ability to give realistic assessments of the political situation, a change in mass value-normative preferences and an increase in the importance of digital technologies as the foundation of the modern socio-political process, the loss of public trust in traditional political institutions and traditional formats of policy⁷.

Simultaneously, as real human voices, opinions, public/civil positions are lost in the “avalanche” of digital bots and fakes, as well as comments generated by them, the virtualization and illusory nature of the socio-political process, with augmented reality causing the distortion of political ideas, can lead to the complete disappearance of such phenomena as “public opinion”, “political position”, “deliberation”.

Another important digital threat is the emergence of opportunities for aggressive substitution of reality by the virtual content of political processes, monopolization of information and symbolic public space (including based on the dominance of AI agents), the complete exclusion of citizens from the process of making public and political decisions, virtualization of political action and the replacement of real political participation with virtual, as well as the emergence in the digital space of actors with undetectable interests and hidden beneficiaries.

As a result, new technologies make the traditional political governance space more fragmented, polarized, conflictual, manipulative, and ideologized.

These phenomena and effects can be interpreted from the perspective of the concept of “Truth Decay”, which combines four interrelated and mutually determining trends:

- 1) growing disagreements and fundamental discrepancies between facts and digital opinions interpreting these facts;
- 2) blurring boundaries between facts and digital opinions interpreting them;
- 3) growing influence of disseminated digital opinions and interpretations on the perception of facts;
- 4) declining public confidence in the previously authoritative sources of factual information.

One of the consequences of such a development in a pessimistic scenario may be the shift from democratic legitimacy (appeal to the ideological and conceptual foundations of the democratic regime and adequate institutional implementation of the democratic idea) to a socio-technological one (argumentation through the discourse of convenience, interactivity, advancement), which ultimately leads to the destruction of traditional value and institutional foundations of political governance.

At the same time, it seems that today, in many cases, digital technologies only complement the mechanisms of offline politics with new technical tools, which, however, inevitably become limited to institutional and legal institutions and their powers.

⁷ Moreover, according to numerous research participants, the intensive development of algorithmic systems can devalue the meaning and value of public-power interaction between society and the state. Furthermore, the development of autonomous expert systems, automatic collection of information, a machine for processing social requests and generating responses can not only call into question the need for specialized professional knowledge and skills of civil servants but create a sufficiently large distance between government bodies and the population, reduce the potential of legitimacy for the overall power and administrative structures in the eyes of the public.

Today, socio-political reality and its spatial dimensions are still determined by pre-digital characteristics — fractured value systems, individualism/collectivism, legalism/clientelism, models of forming connection, traditions. Furthermore, over time, technological spheres, primarily the Internet, “normalizes” into a space where traditional offline hierarchies are introduced.

Based on these views, we can conclude that the digitalization of modern states and their adaptation to current technological transformations constitutes a complex and largely ambiguous set of processes today. It includes both political opportunities and associated risks, threats, and challenges for the state and its institutions, as well as directly for civil society, which is no less rapidly increasing its complexity and diversity through intensive digitalization.

What will be the final design of new model for political and managerial relations and the distribution of political power? Which models of adaptation to digital reality will be the most viable? These are essential and relevant questions for modern researchers that lack a clear answer.

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References

- Achkasova, V.A., & Dobrovolskaya, Yu.A. (2021). Network Leadership: Towards the Question of the Mechanism of Political Mobilization. *Journal of Political Research*, 5(4), 23–36. <https://doi.org/10.12737/2587-6295-2021-5-4-23-36> (In Russian).
- Aneesh, A. (2009). Global Labor: Algoratic Modes of Organization. *Sociological Theory*, 27(4), 347–370.
- Baxter, & Sommerville, I. (2011). Socio-technical systems: From design methods to systems engineering. *Interacting with Computers*, 23(1), 4–17. <https://doi.org/10.1016/j.intcom.2010.07.003>
- Beduschi, A. (2020). International migration management in the age of artificial intelligence. *Migration Studies*. mnaa003. <https://doi.org/10.1093/migration/mnaa003>. Retrieved from <https://academic.oup.com/migration/article/9/3/576/5732839> Access date: 14.06.2022.
- Beer, D. (2017). The social power of algorithms. *Information, Communication & Society*, 20(1), 1–13. <https://doi.org/10.1080/1369118X.2016.1216147>
- Borgesius, F.J.Z. (2020). Strengthening legal protection against discrimination by algorithms and artificial intelligence. *The International Journal of Human Rights*, 24(10), 1572–1593. <https://doi.org/10.1080/13642987.2020.1743976>
- Bucher, T. (2012). Want to be on top? Algorithmic power and the threat of invisibility on Facebook⁸. *New Media & Society*, 14(7), 1164–1180. <https://doi.org/10.1177/1461444812440159>
- Bykov, I.A., & Medvedeva, M.V. (2021). The importance of media literacy for political communication in Russia. *Journal of Political Research*. 2021, 5(4), 7–22. <https://doi.org/10.12737/2587-6295-2021-5-4-7-22> (In Russian).

⁸ 21 марта 2022 г. Тверской суд города Москвы признал Meta (продукты Facebook и Instagram) экстремистской организацией.

- Cheney-Lippold, J. (2016). Jus Algorithmi: How the National Security Agency Remade Citizenship. *International Journal of Communication*, 10, 1721–1742.
- Collington, R. (2021). Disrupting the Welfare State? Digitalisation and the Retrenchment of Public Sector Capacity. *New Political Economy*. <https://doi.org/10.1080/13563467.2021.1952559> Access date: 14.06.2022.
- Danaher, J. (2016). The Threat of Algocracy: Reality, Resistance and Accommodation. *Philosophy & Technology*, 29(3), 245–268. <https://doi.org/10.1007/s13347-015-0211-1>
- Fedorchenko, S., Alekseev, R., Kurenkova, E., & Ezhov, D. (2020). Democratic political regime in development context of online network communities. *E3S Web of Conferences*. 8. *Innovative Technologies in Science and Education*. ITSE 2020, 16016. <https://doi.org/10.1051/e3sconf/202021016016>
- Gran, A.-B., Booth, P., & Bucher, T. (2021). To be or not to be algorithm aware: a question of a new digital divide? *Information, Communication & Society*, 24(12), 1779–1796. <https://doi.org/10.1080/1369118x.2020.1736124>
- Hustad, E., & Olsen, D.H. (2021). Creating a sustainable digital infrastructure: The role of service-oriented architecture. *Procedia Computer Science*, 181, 597–604. <https://doi.org/10.1016/j.procs.2021.01.210>
- Kubler, K. (2017). State of urgency: Surveillance, power, and algorithms in France's state of emergency. *Big Data & Society*. <https://doi.org/10.1177/2053951717736338> Access date: 14.06.2022.
- Lebedeva, M.M., Kharkevich, M.V., Zinovieva, E.S., & Kuposova, E.N. (2016). Archaization of the state: the role of modern information technologies. *Polis. Political studies*, 6, 22-36. <https://doi.org/10.17976/jpps/2016.06.03> (In Russian).
- Leksin, V.N. (2021). *Artificial Intelligence in Economics, Politics and Private Life: Experience in Systems Diagnostics*. Moscow: LENAND. (In Russian).
- Lorenz, L., Meijer, A., & Schuppan, T. (2021). The Algocracy as a New Ideal Type for Government Organizations: Predictive Policing in Berlin as an Empirical Case. *Information Polity*, 26(1), 71–86. <https://doi.org/10.3233/IP-200279>
- Muchlinski, D., Yang, X., Birch, S., Macdonald, C., & Ounis, I. (2020). We need to go deeper: Measuring electoral violence using convolutional neural networks and social media. *Political Science Research and Methods*, (9)1, 122–139. <https://doi.org/10.1017/psrm.2020.32>
- Pohle, J., & Thiel, T. (2020). Digital sovereignty. *Internet Policy Review*, 9(4). <https://doi.org/10.14763/2020.4.1532> Access date: 14.06.2022.
- Ranchordas, S. (2017). Digital agoras: democratic legitimacy, online participation and the case of Uber-petitions. *The Theory and Practice of Legislation*, 5(1), 31–54. <https://doi.org/10.1080/20508840.2017.1279431>
- Smorgunov, L.V. (2021). Digitalization and Network Efficiency of State Controllability. *Political Science*, 3, 13-36. <https://doi.org/10.31249/poln/2021.03.01> (In Russian).
- Ulbricht, L. (2020). Scraping the demos. Digitalization, web scraping and the democratic project. *Democratization*, 27(3), 426–442. <https://doi.org/10.1080/13510347.2020.1714595>
- van Dijck, J., de Winkel, T., & Schäfer, M.T. (2021). Deplatformization and the governance of the platform ecosystem. *New Media & Society*. <https://doi.org/10.1177/14614448211045662> Access date: 14.06.2022.
- Volodenkov, S.V. (2021). The potential of state-corporate hybridization in the processes of transformation of traditional political regimes. *Journal of Political Research*, 5(2), 19–28. <https://doi.org/10.12737/2587-6295-2021-5-2-19-28> (In Russian).
- Zandbergen, D., & Uitermark, J. (2020). In Search of the Smart Citizen: Republican and Cybernetic Citizenship in the Smart City. *Urban Studies*, 57(8), 1733–1748. <https://doi.org/10.1177/0042098019847410>
- Zuboff, S. (2019). *The age of surveillance capitalism: the fight for a human future at the new frontier of power*. New York: Public Affairs.

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