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WZMOCNIENIE INTERAKCJI MIĘDZY ORGANAMI WŁADZY PUBLICZNEJ A SPOŁECZEŃSTWEM W KONTEKŚCIE WDRAŻANIA KONTROLI

Arsen Marynuszkin
Student studiów podyplomowych na Wydziale Administracji Publicznej i Ekonomii
Uniwersytetu Narodowego im. Wernadskiego Tawri (Kijów, Ukraina)
ORCID ID: 0009-0004-8520-7365
df28102622@tnu.edu.ua

Adnotacja. W artykule zaproponowano zintegrowany system innowacyjnych i informacyjnych narzędzi monitorowania działań władz publicznych ze strony społeczeństwa na Ukrainie. Podstawowym aspektem jego rozwoju jest stwierdzenie, że na tle rozwoju społeczeństwa obywatelskiego istotna staje się rola efektywnego dialogu władz państwowych ze społeczeństwem. Świadomość społeczna treści procesów społeczno-gospodarczych zachodzących w kraju, aktywność społeczna w sprawach kontroli działalności władz staje się gwarancją powodzenia odnowy państwa i realizacji reform państwa. Okazało się, że w trakcie aktywnej interakcji władza ze społeczeństwem, to drugie ma stopniowo zdolność przekształcania się w podmiot w ramach informacji zwrotnej. Najogólniej za podmioty relacji PR pomiędzy państwem a społeczeństwem uważa się organy władzy państwowej i samorządu lokalnego. Zwiększenie efektywności interakcji władz publicznych ze społeczeństwem w kontekście kontroli można osiągnąć poprzez wdrożenie innowacyjnych podejść i narzędzi, w szczególności: wykorzystanie predykcyjnych systemów analitycznych (Predictive Analytics) (wdrożenie systemów sztucznej inteligencji do analizy duże ilości danych mogą pomóc w identyfikacji i analizie trendów w działaniach władz, a także zidentyfikowaniu obszarów wymagających większej kontroli); korzystanie z sieci społecznościowych (aktywne korzystanie z sieci społecznościowych w celu komunikowania się ze społeczeństwem i rozpowszechniania informacji o środkach kontroli może pomóc w zaangażowaniu większej liczby osób w proces kontroli i nadzoru); cyfrowe narzędzia do gromadzenia danych w terenie (wykorzystywanie narzędzi cyfrowych, takich jak aplikacje mobilne, do gromadzenia danych w terenie, gdzie społeczeństwo może obserwować działania organów i zgłaszać ewentualne naruszenia lub problemy); otwarte dane i wizualizacja informacji (zapewnienie dostępu do otwartych danych i ich wizualizacja pomoże społeczeństwu lepiej zrozumieć pracę organów i zidentyfikować potencjalne problemy czy niedociągnięcia). Zaproponowane innowacyjne sposoby mogą znacząco zwiększyć efektywność interakcji władz publicznych ze społeczeństwem w kontekście kontroli, przyczyniając się do powstania bardziej przejrzystej, otwartej i odpowiedzialnej władzy państwowej.

Słowa kluczowe: administracja publiczna, władza publiczna, system władzy publicznej, kontrola, społeczeństwo, kontrola publiczna.

STRENGTHENING INTERACTION BETWEEN PUBLIC AUTHORITY BODIES AND THE PUBLIC IN THE CONTEXT OF IMPLEMENTING CONTROL

Arsen Marynushkin
Postgraduate Student at the Department of Public Administration and Economics,
V. I. Vernadsky Tavri National University (Kyiv, Ukraine)
ORCID ID: 0009-0004-8520-7365
df28102622@tnu.edu.ua

Abstract. The growing need to build a democratic society and ensure human rights requires strengthening the mechanisms of control over the activities of state bodies. Interaction with the public becomes necessary to ensure the effectiveness of these mechanisms and increase citizens' trust in government structures. Modern research methods were used during the research: general scientific: systematic and logical analysis; graphical method. The article proposes an integrated system of innovative and informational tools for monitoring the activities of public authorities on the part of the public in Ukraine. The basic aspect of its development is the statement that, against the background of the development of civil society, the role of effective dialogue between state authorities and the public becomes relevant. It was revealed that during the active interaction between the authority and the public, the latter is gradually able to transform into a subject within the framework of feedback.

Key words: public administration, public power, system of public power, control, public, public control, integrated system.

ПОСИЛЕННЯ ВЗАЄМОДІЇ МІЖ ОРГАНАМИ ПУБЛІЧНОЇ ВЛАДИ ТА ГРОМАДСЬКІСТЮ У КОНТЕКСТІ ЗДІЙСНЕННЯ КОНТРОЛЮ

Арсен Маринушкін
аспірант кафедри публічного управління та економіки
Таврійського національного університету імені В. І. Вернадського (Київ, Україна)
ORCID ID: 0009-0004-8520-7365
df28102622@tnu.edu.ua

Анотація. У статті запропоновано інтегровану систему інноваційно-інформаційних інструментів контролю за діяльністю органів публічної влади з боку громадськості в Україні. Базовим аспектом її розробки є твердження про те, що на тлі розвитку громадянського суспільства стає актуальною роль результативного діалогу між органами державної влади й громадськістю. Поінформованість суспільства про зміст соціально-економічних процесів, що здійснюються у країні, громадська активність у питаннях контролю за діяльністю органів влади стає гарантією успіху оновлення держави, реалізації державних реформ. Виявлено, що під час активної взаємодії між органом влади й громадськістю остання поступово здатна трансформуватися на суб'єкт в рамках зворотного зв'язку. В цілому ж суб'єктом PR-відносин між державою і громадськістю вважаються органи державної влади та місцевого самоврядування. Підвищення ефективності взаємодії між органами публічної влади та громадськістю у контексті контролю може бути досягнуто шляхом впровадження інноваційних підходів та інструментів, зокрема: використання прогнозних аналітичних систем (Predictive Analytics) (впровадження систем штучного інтелекту для аналізу великих обсягів даних може допомогти виявити та аналізувати тенденції в діяльності органів влади, а також виявляти області, які потребують більшого контролю); використання соціальних мереж (активне використання соціальних мереж для комунікації з громадськістю та розповсюдження інформації про контрольні заходи може допомогти залучити більше людей до процесу контролю та нагляду); цифрові інструменти збору даних на місцях (використання цифрових інструментів, таких як мобільні додатки для збору даних на місцях, де громадськість може спостерігати за діяльністю органів влади та повідомляти про можливі порушення або проблеми); відкриті дані та візуалізація інформації (забезпечення доступу до відкритих даних та їх візуалізація допоможуть громадськості краще розуміти роботу органів влади та виявляти потенційні проблеми або недоліки). Запропоновані інноваційні шляхи можуть значно підвищити ефективність взаємодії між органами публічної влади та громадськістю у контексті контролю, сприяючи більш прозорій, відкритій та відповідальній державній владі.

Ключові слова: публічне управління, публічна влада, система публічної влади, контроль, громадськість, громадський контроль.

Introduction. In the contemporary world, where democracy, transparency, and efficient governance are the cornerstones of societal progress, the issue of interaction between public authorities and the public becomes extremely relevant. A key component of this interaction is control, which reflects the level of openness and accountability of government structures to society. The growing need for building a democratic society and ensuring human rights necessitates strengthening mechanisms for monitoring the activities of state bodies. Interaction with the public is essential to ensure the effectiveness of these mechanisms and to increase citizens' trust in government structures. In the context of modern challenges such as combating corruption, addressing climate change, health crises, and economic difficulties, the importance of interaction between government bodies and the public becomes even more pronounced. Only through collaboration and mutual understanding can we ensure the proper protection of societal interests and achieve sustainable development. Therefore, research on enhancing the interaction between public authorities and the public in the context of control opens up new opportunities for improving governance systems and building a strong and responsible society.

Main Part. Researchers such as I. Al'-Atti (2022), Y. Bobrovnik (2022), N. Bondarchuk (2023), K. Dashkova (2021), O. Dniprov (2020), I. Zavads'ka (2023), and others have devoted their attention to the study of this issue. However, at the present stage, an important problem is the search for ways to enhance the effectiveness of interaction between public authorities and the public in the context of control, particularly through modern methods and tools.

The aim of this article is to propose ways to strengthen the interaction between public authorities and the public in the context of implementing control.

Material and methods of research. The study used modern research methods: general scientific: systematic and logical analysis; graphical method.

Results and discussion. In today's world, the urgency of the problem of improving the efficiency of interaction between public authorities and the public in the context of control is becoming increasingly obvious and important. The growing complexity of social challenges and needs of society, rapid changes in the technological and information environment, as well as the deepening of democratic processes require new approaches to interaction between public authorities and the public. Improving the efficiency of this interaction is key to ensuring transparency, openness and accountability in the management of public affairs. Control over the activities of state structures is necessary to prevent corruption, local and global crises, as well as to ensure the efficient use of budget funds and the implementation of strategic development goals. In this context, public involvement in the process of control and decision-making is extremely important, as it contributes to greater legitimacy, trust and involvement of diverse views and experiences in the management of public affairs. Thus, research and development of methods and tools to increase the effectiveness of this interaction is of great importance for ensuring the stability, development and prosperity of modern society.

In the context of the structural and functional consideration of the interaction between the State and public control as a tool for implementing public administration, it is important to identify the functional influence of the public and the implementation of the State's control functions in creating the appropriate conditions for transparency of public authorities. I. Zavadska's statement that public control in public administration provides the following main functions is accurate: 1) "public (this is the most important function, as it should ensure timely and comprehensive articulation and aggregation of public interests, as well as their full satisfaction, which requires their balance with the state interests); 2) motivational (this function is aimed at fulfilling and involving all unused human resources, including the human resources of the public, in the public administration process, which allows to ensure appropriate motivation of its executors to improve the efficiency of this process) 3) corrective or resultant (this function is related to the refinements made to the process of management decisions that are most often controlled by the public) 4) monitoring (this function involves the collection and accumulation of information on the state of formation and implementation of public administration on a systematic basis with the involvement of representatives of the public); 5) diagnostic or analytical (this function is aimed at identifying effective ways to improve the public administration system, based on the data obtained on the shortcomings in its" (Завадська, 2023: 72-73).

Considering this, public control, becoming an effective tool for ensuring "open data" from public authorities and access to them, should formulate their normative responsibility for disclosing false statistical information. Such a context precisely allows demonstrating in a methodological and technological aspect the profound essence of the functional impact of public control on state control. Thus, it will enable guaranteeing the impartiality of control and minimizing procedures for its violation both by the state and civil society.

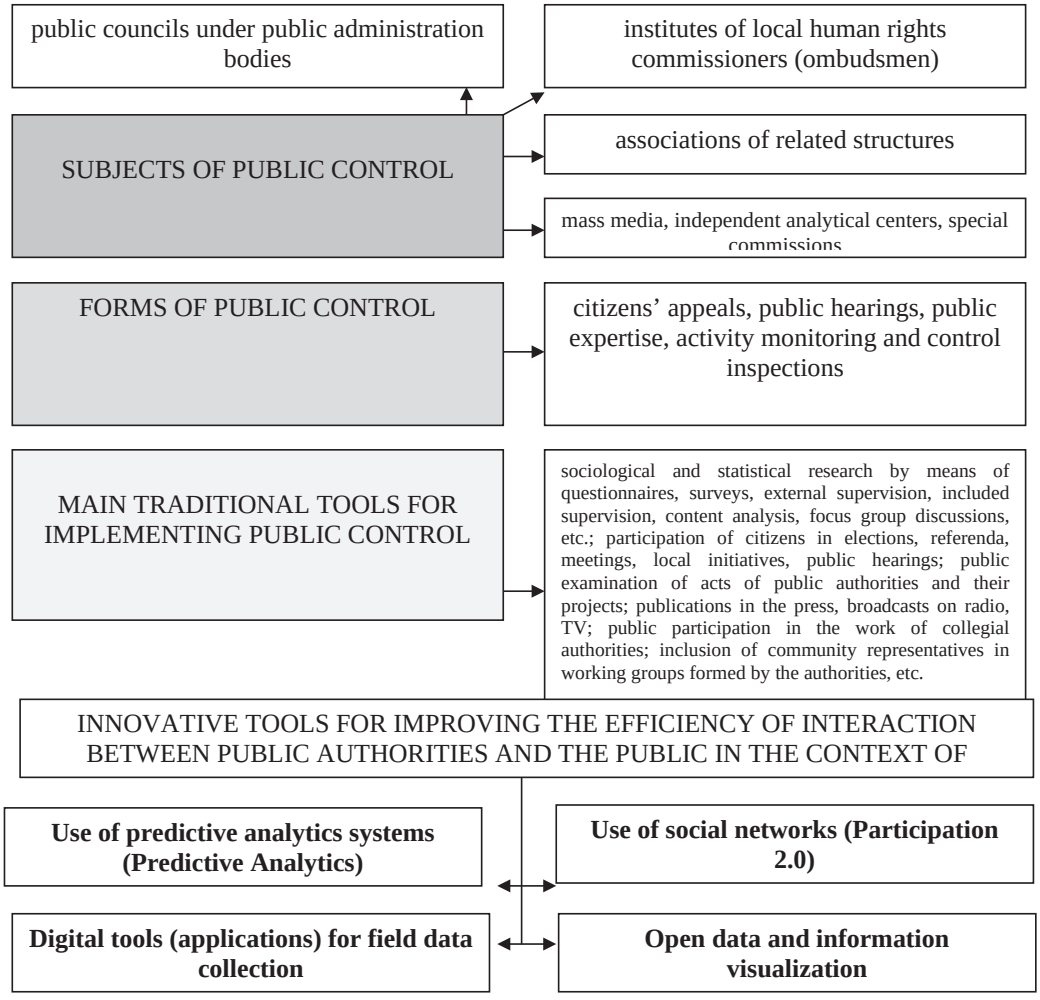

Fig. 1. An integrated system of innovative and informational tools for monitoring the activities of public authorities on the part of the public in Ukraine

Source: author's own development.

Figure 1 illustrates the integrated system of innovative-informational control tools over the activities of public authorities from the public in Ukraine. The basic aspect of its development is the assertion that against the backdrop of civil society development, the role of effective dialogue between government bodies and the public becomes relevant. The society's awareness of the content of socio-economic processes taking place in the country, public activity

in overseeing the activities of government bodies, guarantees the success of state renewal and the implementation of state reforms. This defines the need for effective state relations with the public, the necessity for permanent constructive communication between them. Therefore, the strategy of state policy regarding public relations management should be formed in accordance with the principles of openness and transparency for timely provision of significant information to society regarding the work of government bodies.

Against the backdrop of the formation of a democratic society and the modernization of the system of public administration, the problem of communicative technologies as an effective management tool becomes particularly relevant. One such tool is modern communication technologies, namely, PR communication technologies, the implementation of which determines direct and feedback between government bodies and society. During active interaction between a government body and the public, the latter gradually becomes a subject within the framework of feedback. Overall, the subjects of PR relations between the state and the public are considered to be government bodies and local self-government.

In our opinion, increasing the efficiency of interaction between public authorities and the public in the context of control can be achieved through the implementation of innovative approaches and tools. Specifically:

1. Predictive Analytics: The use of predictive analytical systems involves implementing artificial intelligence systems to analyze large amounts of data. This can help identify and analyze trends in the activities of government bodies and identify areas requiring greater control.

2. Social Media Utilization: Active use of social media for communication with the public and dissemination of information about control measures can help engage more people in the control and monitoring process.

3. Digital Data Collection Tools on Site: Using digital tools such as mobile applications for data collection on site, where the public can observe the activities of government bodies and report potential violations or problems.

4. Open Data and Information Visualization: Providing access to open data and visualizing it will help the public better understand the work of government bodies and identify potential problems or shortcomings.

The proposed innovative ways can significantly increase the effectiveness of interaction between public authorities and the public in the context of control, contributing to a more transparent, open and responsible government. In this context, it is worth noting that the latest organizational transformation of public authorities in Ukraine creates certain challenges for the state, business, and individual citizens, primarily in terms of their effective and continuous interaction. In our country, the relevance of big data is considered even more urgent. On the one hand, the scientific community is trying to study this topic, and on the other hand, the state is applying the achievements in big data and tools derived from it in practice. It is worth noting that "volume in big data means the amount of data generated by a company. It is the large volume that allows you to benefit from the entire data set. Such a large amount of data is called one of the most important advantages of big data, which distinguishes it from simple information. Diversity refers to the types of big data that can be structured, such as tables, or unstructured, such as a set of information about users' purchases on a website. Speed means how fast big data can be processed per unit of time, because to work with such a large amount of information, powerful computers and the ability to analyze the necessary information in almost real time are required. Value means how much the information obtained from big data processing will benefit the person who will use it. There may be cases when processing or analyzing a large amount of data will not be useful or its effectiveness is less than the cost of analyzing such information. The accuracy or reliability of the data is important because the quality of the data directly affects the analytics that will be conducted on its basis" (Hiba, Jasim, 2015).

Since these data often form large arrays of information that are difficult for a person to work with, the use of computer algorithms is required for their processing. Such computer algorithms are understood as artificial intelligence, which can not only establish and process large volumes of information, but also structure them, as well as trace relationships between them. As for specific tools for performing predictive analytics, the following examples should be highlighted:

1. IBM Watson Analytics – a tool that uses artificial intelligence to analyze large volumes of data, allows you to use various forecasting methods, including machine learning models, to predict future events and trends.

2. SAS Predictive Analytics – data analysis software that provides a wide range of tools for solving forecasting problems, has the ability to solve a variety of tasks, from sales forecasting to anomaly detection.

3. Microsoft Azure Machine Learning is a cloud service that provides opportunities to create and run machine learning and forecasting models on the Azure database, has built-in algorithms for various types of forecasting, and allows you to quickly create and deploy models.

4. RapidMiner is a data analysis and forecasting tool that provides a graphical interface for creating complex machine learning models, has a large number of built-in algorithms and features for automating the data analysis process.

5. Google Cloud AI Platform – a service for creating, training and deploying machine learning models on the cloud infrastructure of Google Cloud, has tools for developing predictive models and using them to predict future events based on data. As for the use of social networks, Participation 2.0 is a technology focused on the use of social networks to improve the interaction of citizens with public authorities. "Participation 2.0" is a concept that arose in the context of the development of information technologies and their impact on public participation in political processes and decision-making. It defines a new level of citizen participation in public life, based on innovative technologies such as the Internet and social media. In the context of "Participation 2.0", citizens not only receive information from government bodies or political leaders through traditional mass media, but also have the opportunity to actively interact, exchange thoughts and ideas, express their suggestions and views through

online platforms, web forums, social networks, etc. In general, the "Participation 2.0" technology should be divided into the following elements:

1. Informing. In terms of information exchange, one of the positive aspects of the Internet and social media is their ability to guarantee instantaneous exchange of information between citizens and public authorities. In combination with mobile phones, social media tools can instantly transmit information to citizens wherever they are.

2. Consulting. Social media technologies increase the ability of local authorities to consult with citizens. Consultations can include receiving and responding to comments, inquiries, and complaints. The first successful example of such interaction may be the application "SeeClickFix" (SCF) in the UK. SCF is designed to help citizens provide information about issues related to various problems in their neighborhood.

3. Engagement. The next way of applying the Participation 2.0 technology is public participation in the procedure of processing public and administrative information and providing citizens with the opportunity to have a greater influence on decision-making.

4. Cooperation. Participation 2.0 technologies allow the government to establish partnerships with the public throughout the entire decision-making process, from identifying the problem to developing alternatives and outlining desired solutions. The goal was to ensure that citizens were involved and given a voice in the development and selection of policing priorities and strategies for their neighborhoods.

5. Delegation of power. Participation 2.0 technologies can also be used to empower citizens, in other words, to delegate decision-making authority to them, in other words, to guarantee the highest degree of citizen participation in public administration.

At the same time, unfortunately, current standard social media services do not provide the capability to automatically receive and compare new knowledge or ideas from the content that citizens transmit through existing information dissemination channels. In certain situations, the content of comments itself greatly complicates the appropriate analysis. Therefore, creating tools for processing such information effectively and efficiently plays a significant role. Existing tools, such as "Salesforce Marketing Cloud" (www.salesforce.com), a commercial application for social media monitoring, can contribute to providing an overview by informing about the audience's "temperature". However, it is much more challenging to generalize content and obtain new ideas, as well as contemporary knowledge from the continuous flow of information received by public authorities with every tweet or comment.

New open innovation platforms, such as "SeeClickFix", are designed to fill this gap. Through these platforms, public authorities have the opportunity to use a crowdsourcing approach and appeal with an open call to a broad, usually undefined audience (all citizens, potential contractors, representatives of the field, programmers, etc.) so that a wide range of people can contribute to solving a specific urgent problem. The platform aggregates contributions made by citizens (or app developers, knowledge experts, companies, etc.) through social media channels. Similar open innovation crowdsourcing mechanisms are advantageous in situations where expert knowledge may be inaccessible or very expensive to access. Moreover, they increase citizen participation and engagement. Thus, crowdsourcing allows public authorities to directly involve citizens in decision-making procedures. Typical applications in this context include:

1. CitySourced is a mobile application that allows city residents to report various issues and malfunctions in the city, such as animal rescue, damaged roads, pollution, etc. Users can send photos and a description of the problem, which is automatically forwarded to the relevant city government services for resolution. Features: convenient user interface, ability to send photos, geolocation of the problem.

2. The London Data Store is a web portal that provides access to a large amount of open data about the City of London. Here you can find data on transport, real estate, education, ecology and other areas of city life. This data is used to analyze urban problems, make decisions and create new services. Characteristics: a large volume of open data, the possibility of use for research and project development.

3. Crunchbase is an online platform for collecting and analyzing information about companies, investment rounds, startups and technology trends. It provides users with the opportunity to study the market situation, find partners, receive data on financial indicators of companies, etc. Features: Large database of companies and startups, investment information and technology trends.

4. FixMyStreet is a platform that allows city residents to report problems on the streets, such as saving sidewalks, fixing lighting or removing trash. Users can mark the location of the problem on the map and send a message that is automatically sent to local authorities for resolution. Features: notification of problems on the streets, geolocation of the problem, the ability to track the status of the solution.

5. OpenBudgets.eu is an online platform that provides access to open data on budgetary resources and government spending on various programs and projects. It allows the public to analyze and control the use of money from the budget. Characteristics: open data on budget expenditures, the possibility of data analysis and comparison.

6. GovTrack.us is a web platform that provides information on bills, laws and activities of congressmen and senators in the United States. It allows the public to monitor the legislative process and influence its course. Features: information about legislative initiatives, activities of political figures, the possibility to subscribe to notifications about changes in legislation.

The above applications differ in their specifics and purpose, but they are all aimed at controlling and improving the quality of the urban environment, access to open information, and creating favorable conditions for business

development and innovation. These tools have been developed by governmental and non-governmental organizations, have significantly changed the way public authorities and citizens interact, and have helped to create and develop distributed democracy.

Discussion. The use of open data and information visualization tools is becoming an important step in ensuring transparency and openness of government agencies to the public. Data visualization tools enable the public to better understand complex processes and trends in the work of government agencies through convenient and understandable graphical displays. This allows citizens to more objectively assess the work of government agencies, identify possible problems and shortcomings, and create constructive proposals for their solution.

In addition, open data allows the public to be actively involved in the process of monitoring and controlling the activities of the authorities. Wide access to information on the use of budget funds, decisions and orders of the authorities creates preconditions for greater responsibility and transparency of governance. Let us consider some specific tools for open data and information visualization:

1. Tableau Public is a free data visualization tool that allows for creating interactive and appealing visualizations based on various data. It offers extensive capabilities for creating diverse graphs, charts, and maps.
2. Google Data Studio, a tool by Google, enables visualization creation based on data from various sources such as Google Analytics, Google Sheets, BigQuery, etc. It allows for creating interactive and dynamic reports and charts.
3. Power BI, a Microsoft tool for data analysis and visualization, provides broad capabilities for connecting to various data sources and creating various visualizations, including graphs, choropleths, diagrams, etc.
4. Infogram is an online tool for creating infographics and interactive maps. It offers a wide selection of templates and features for creating attractive and understandable data visualizations.
5. Datawrapper is an online tool for creating simple and effective graphs and charts. It allows for quickly and easily creating visualizations based on data, providing various formatting options.
6. Carto is a platform for creating interactive maps and analyzing geodata. It allows visualizing geographic data in the form of a map with different layers and connections between them.
7. RawGraphs is a free tool for creating creative and non-standard data visualizations. It allows you to create various types of graphs, including network diagrams, parallel coordinates, and heatmaps.
8. D3.js is a JavaScript library for creating complex and interactive data visualizations. It provides advanced capabilities for visualizing data in web environments and creating various graphs and diagrams.
9. FusionCharts is a library for creating professional graphs and diagrams on web pages. It offers a wide selection of built-in templates and capabilities for interactive interaction with graphs.

The use of data visualization tools and open data is an important step towards the development of public control over the activities of the authorities, which contributes to the efficiency and openness of governance and promotes democratic values in society.

Conclusions. Summarizing all of the above, we can conclude that due to the constant development of society and the growing requirements for transparency, openness and efficiency of governance, improving the efficiency of interaction between public authorities and the public in the context of control is an extremely important task. This is evidenced by the need to introduce modern innovative information tools aimed at increasing transparency and involving the public in controlling the activities of public authorities. Ways of implementing such tools may include the creation of open platforms for access to data and its visualization, development of feedback mechanisms between the authorities and the public, as well as active use of social networks for communication and information exchange.

Examples of such innovative information tools include open data systems, online reporting and monitoring platforms, interactive websites, feedback applications, and the use of analytical systems and forecasting tools. The implementation of these innovative information tools can improve cooperation between the authorities and the public, increase the level of transparency and openness of governance, and increase the effectiveness of control over the activities of public authorities.

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