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# The essence and classification of methods of public administration in the context of the development of the Smart City concept

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**Abstract.** Under conditions of the digital transformation of public authority, the strengthening of the role of urban territories in ensuring sustainable development and the growing societal demand for transparency, accountability and citizen participation, the rethinking of methods of public administration through the prism of the development of the Smart City concept becomes particularly relevant. The aim of the study was the conceptual substantiation and systematisation of approaches to understanding methods of public administration under conditions of the digitalisation of management processes and the introduction of smart-oriented models of urban development. The article provided a theoretical and methodological analysis of the essence of methods of public administration in the context of the transformation of the public governance system under the influence of digitalisation and the development of the Smart City concept. The evolution of academic approaches to interpreting methods of public administration is revealed – from the classical rational-legal model to contemporary concepts of good governance, results-oriented management and digital governance. It is substantiated that, in the Smart City environment, methods of public administration acquire an integrative character, combining legal regulators, administrative and organisational procedures, economic incentives and communicative instruments with digital platforms, data analytics, electronic services and mechanisms of citizen participation. It is shown that traditional classifications of methods, formed within the hierarchical model of governance, do not fully correspond to the challenges of network interaction, interoperability, digital by default and the growing role of data-driven governance. A generalised classification of methods of public administration is proposed in the context of the development of the Smart City, which takes into account organisational, economic, digital and social aspects of governance and reflects the functional purpose in the "goals – functions – methods – instruments – results" system of sustainable development of urban territories. The practical value of the study lies in the possibility of using the proposed classification of methods of public administration in the activities of local self-government bodies to increase the effectiveness of management decisions and to adapt European Smart City approaches to national conditions

**Keywords:** digitalisation of public authority; data-driven governance; electronic services; citizen participation; sustainable development of territories; public governance

## Introduction

Contemporary processes of reforming public administration have taken place under conditions of the digital transformation of management processes and the strengthening of the role of cities as centres of economic, social and innovation-driven development. In this context, the academic discourse on the Smart City is increasingly shifting from the technological description of solutions to the analysis of management mechanisms, institutional capacities and policy implementation practices. Specifically, E. Przeybilovicz & M.A. Cunha (2024) emphasised that the development of Smart Cities is largely dependent on managerial and institutional factors, including the ability of public authorities

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to coordinate digital initiatives, align them with public policy objectives, and integrate technological solutions into sustainable management processes, rather than treating them as autonomous technical projects. A similar logic of the development of "smart" urban practices in Europe was revealed by L. Brzeziński & M.K. Wyrwicka (2022), who stressed that the effect of the Smart City is determined not by the set of technologies but by the manageability of change, institutional coherence and the ability of cities to scale solutions at the level of policies.

The organisational and managerial conditions of the digitalisation of local self-government are also in the focus of contemporary research. O. Bobrovska (2020) emphasised that the introduction of digital technologies in public governance requires managerial "re-tuning" – changes in procedures, the distribution of responsibility, data management and new competences, otherwise digitalisation reproduces the traditional bureaucratic logic in a new form. In the context of the quality of public services, T. Mamatova & O. Kravtsov (2021) underlined that digital transformation changes not only the channels for providing services but also the requirements for management methods – from process control to managing outcomes and user experience, which requires measurable criteria and constant feedback.

A separate group of contemporary works comprises studies that describe the Smart City through the prism of citizen participation and platform-based models of interaction. I. Dunayev *et al.* (2023) proposed a platform-oriented model of civic participation within the Smart City, showing that co-participation mechanisms (e-participation) become effective only under conditions of institutional consolidation of procedures, transparent rules for the use of data and the integration of participation into the policy cycle. In the same direction, A. Kuzior *et al.* (2023) and K.V. Dziundziuk (2023) summarised global trends in e-governance in smart cities and identified the factors that "switch on" digital governance: interoperability, data management, trust, cyber-resilience and organisational capacity for change. These results made it relevant not only to describe digital tools, but also to systematise precisely the methods of managerial influence through which digital tools are implemented.

In the Ukrainian academic discourse, attention to the managerial content of the Smart City and to the need to classify methods of public administration taking into account the digital environment has increased. B. Karpinskyi *et al.* (2022) substantiated a strategic-management approach to smart urbanism, within which the "smart city" is considered as a model of managed development that requires the alignment of management instruments with the goals of territorial competitiveness and sustainability. O.V. Nemirovska (2025) revealed the Smart City as a social space of sustainable development, stressing that management effects are formed at the intersection of institutional decisions, digital services and social interaction, and therefore methods of public administration should be analysed as an integrated mechanism rather than as a list of disparate instruments. H. Komarnytska (2025), studying the Smart City in the system of open data and e-governance, emphasised that open data are not only a technical resource but also a management instrument of transparency and accountability that changes the design of regulatory and communicative methods.

Thus, despite the growing number of Smart City studies, in many approaches the technological or institutional perspective dominates, whereas methods of public administration often remain secondary or are described fragmentarily. In this context, there is a need for theoretical and methodological clarification of the essence of methods of public administration and the formation of the generalised classification capable of reflecting the conditions of digital transformation and the practice of implementing the Smart City at the level of urban territories and communities. The aim of the article was defined as the theoretical and methodological substantiation of the essence of methods of public administration and the formation of the classification, taking into account the specific features of the implementation of the Smart City concept in the contemporary public governance system.

## Materials and Methods

The methodological basis of the study consisted of approaches from the theory of public governance and public administration, as well as the conceptual provisions of digital governance and sustainable urban development formulated in contemporary academic works devoted to the transformation of management practices in the digital environment (Bobrovska, 2020; Kuzior *et al.*, 2023). To substantiate the management dimension of the Smart City, approaches of strategic and institutional analysis of urban development were used, as proposed in the works of B.A. Karpinskyi *et al.* (2022) and E. Przeybilovicz & M. Cunha (2024).

The materials of the study were academic publications on the problems of methods of public administration, the digital transformation of public authority and the development of the Smart City, selected on the basis of targeted bibliographic search. The search was carried out in the academic databases Scopus, Web of Science and Google Scholar, as well as in Ukrainian national specialist journals that are indexed in international databases or have stable DOIs. The main search queries were: "public administration methods", "Smart City governance", "digital governance", "urban management", "Smart City Ukraine". The criteria for including sources in the analysis were defined as follows: publication period 2020-2025; academic character of the publication (articles in specialist or indexed journals); the presence of a direct connection with the subject of management methods, digital governance or the Smart City; the availability of the full text and a correct bibliographic description. Analytical reports and programme documents of international organisations – United Nations Human Settlements Programme (2024), OECD (2015; 2023), World Bank Group (n.d.) – were used as contextual and auxiliary sources for interpreting the results but did not constitute the basis of the academic analysis.

At the first stage of the study, methods of analysis, synthesis, and generalisation of academic sources were applied, which made it possible to systematise approaches to interpreting methods of public administration in the works of contemporary researchers. The analysis was carried out according to the logic of content analysis and conceptual comparison of management categories described in works devoted to methods of public governance, digitalisation and the Smart City (Vdovychenko, 2022; Frolova, 2023; Nemirovska, 2025). Within this stage, the key features and functional characteristics of methods of public administration relevant to the conditions of digital transformation and sustainable urban development were identified.

At the second stage, a comparative method was used, which made it possible to compare traditional classifications of methods of public administration with the approaches proposed in contemporary studies of the Smart City and digital governance. The comparison was carried out according to such criteria as management logic, toolkit of influence, the role of digital technologies and the level of stakeholder involvement (Brzeziński & Wyrwicka, 2022; Dunayev *et al.*, 2023; Kuzior *et al.*, 2023). The result of this stage was the identification of the limitations of existing classifications and the substantiation of the need for the integration, taking into account the digital and institutional dimensions of governance.

In the process of generalising the results of analysis and comparison, the method of conceptual modelling was applied, within which generalising tables and schemes were formed. In particular, the basic principles of applying methods of public administration under conditions of sustainable development were identified and groups of methods were defined, taking into account the specific features of the functioning of the Smart City. These generalisations formed the basis for the development of the author's integrated classification of methods of public administration.

At the third stage of the study, systemic and institutional approaches were applied, according to which methods of public administration were considered as interconnected elements of a holistic management mechanism aimed at achieving sustainable development goals and the effective functioning of urban systems. Institutional analysis made it possible to assess the role of public authorities and local self-government in the selection and implementation of management methods in the environment of digital transformation and decentralisation (Murayev, 2020; Shulzhik *et al.*, 2025; Serhiichuk, 2025). The use of this set of methods ensured the academic robustness of the study's results and made it possible to form a classification of methods of public administration adapted to the conditions of implementing the Smart City concept in the contemporary public governance system.

## Results and Discussion

Public administration in contemporary public governance science appears as a multidimensional category that integrates legal, managerial, economic, social, and digital mechanisms for achieving socially significant goals. Its evolution has been driven by transformations of statehood and political systems, the strengthening of the role of civil society, the development of market relations, as well as digitalisation and urbanisation processes. As a result, public administration has gradually moved away from an exclusively administrative and hierarchical model and has acquired the features of an integrated management mechanism oriented towards effectiveness, openness, and interaction with stakeholders. This has led to an expansion of the toolkit of public administration and a complication of methods of managerial influence, which is particularly evident in the context of digital transformation and the development of the Smart City concept.

Classical approaches to administration were formed within the Weberian model of rational-legal bureaucracy, where legality, procedurality, competence and the formalisation of managerial activity are key (Weber, 1978). At the same time, in response to the increasing complexity of socio-economic processes and the dynamism of the environment, modern management concepts were formed: New Public Management (orientation towards effectiveness and client-oriented service), Good Governance (transparency, accountability, citizen participation, inclusiveness, the rule of law and anti-corruption approaches) (OECD, 2015), as well as digital governance (Digital Governance), which is based on electronic services, data, digital registers, analytics, and tools for automating management decisions. As a result, public administration has developed as a combination of managerial, network and digital practices, and the Smart City environment has strengthened the role of data and smart infrastructure as the technological core of modern governance (OECD, 2023; Przeybilovicz & Cunha, 2024).

In this study, public administration is defined as a systemic process of searching for and applying the best ways of using resources to achieve the socially significant goals of public policy, taking into account the principles of sustainable development, urbanisation and Smart City technologies. This understanding makes relevant the systematisation of the methods through which public authority performs its functions and influences socio-economic processes, forming the operational architecture of public policy. Public administration methods reflect the instruments and ways of targeted influence by public authorities on social processes in order to achieve policy goals, ensure manageability and the sustainability of territorial development. The academic discourse offers several complementary approaches to the classification of methods, each of which captures a particular dimension of governance:

- functional approach (linking methods with management functions) (Bobrovska, 2020);
- legal approach (methods as ways of legal influence);
- economic approach (budgetary, tax, tariff, and investment instruments);
- sociopsychological approach (persuasion, engagement, trust-building) (Frolova, 2023);

- institutional approach (network governance, partnerships, co-regulation) (Murayev, 2020; Serhiichuk, 2025);
- digital approach (e-government, data-driven governance, digital platforms) (OECD, 2019; Zablotskyi *et al.*, 2021).

In the academic tradition of public governance, the basic classification of methods for a long time has been into administrative, legal, economic, sociopsychological, organisational and information methods (Bobrovska, 2020; Mamatova & Kravtsov, 2021; Hrytsak & Durman, 2022). At the same time, modern academic approaches, including developments in the field of smart urbanism and digital governance, emphasise the need to rethink the classification in view of digital transformation and the Smart City (Chourabi *et al.*, 2012; Kuzior *et al.*, 2023; Dunayev *et al.*, 2023). As a result, an integrated classification that combines different approaches and takes into account the digital layering of methods is appropriate.

As shown in Figure 1, public administration methods perform the function of an integrating link between strategic development goals and specific instruments for implementing public policy. These methods ensure the transformation of normative and programme guidelines into measurable results of sustainable development and the functioning of the Smart City system. This logic underlines that the effectiveness of applying methods is determined not only by the instrumental content, but also by adherence to the principles on which managerial influence is based.


***Figure 1.*** *The place of public administration methods in the "goals – functions – methods – instruments – results" system*
***Source:*** *developed by the author on the basis of M. Weber (1978), B.A. Karpinskyi et al. (2022), L.B. Hrytsak & M.O. Durman (2022)*

Methods should be considered as a set of coherent procedures, instruments, and technologies through which public authorities: (1) specify and implement policy goals; (2) ensure the functions of the management cycle; (3) influence the behaviour of actors; (4) achieve balanced results in the dimensions of economic, social, environmental and institutional sustainability. These methods constitute a dynamic system that changes under the influence of the transformation of governance models, technological development, the growing role of citizens and the dominance of the principles of sustainable development.

The essence of public administration methods is revealed through the system of principles of the application, which, in the context of sustainable development and the Smart City, significantly expands classical ideas about governance. Alongside the principles of legality, validity, effectiveness and responsibility, contemporary practice requires a systemic combination of different groups of methods, an orientation towards the openness and transparency of managerial decisions, as well as clear provision of the accountability of public authorities. Of particular importance are the principles of scientific character and evidence-based practice, which involve the use of data, analytics and modelling in decision-making, as well as the principle of orientation towards sustainable development, which requires the alignment of management methods with long-term economic, social and environmental goals.

In the context of digital transformation, special importance is attached to the principles of citizen and stakeholder participation, which are implemented through instruments of e-democracy and co-governance, as well as the "digital by default" principle, according to which priority is given to methods capable of functioning in a digital environment with opportunities for scaling and interoperability. The application of these principles leads to a change in the logic of public administration – from the dominance of formally procedural decisions to the use of flexible, data-oriented and participatory methods of managerial influence. In this context, digital tools are regarded not only as technical means but as components of a new governance paradigm. The generalisation of these principles is presented in Table 1, which serves as a methodological framework for the transition from a formally procedural model of governance to a results-oriented system of public administration based on data, participation, and innovation.

***Table 1.*** *Basic principles of applying public administration methods in the context of sustainable development*

| Principle | Content of the principle | Practical manifestation in the activities of public authorities | Example in urban/agglomerated governance |
|---|---|---|---|
| Legality | Application of methods within the Constitution, laws and by-laws | Existence of legal grounds for decisions, observance of procedures, administrative appeal | Adoption of a decision on the introduction of a video surveillance system on the basis of a council decision and a regulation on data processing |
| Systemic character | Co-ordinated use of different groups of methods within a single policy | Combination of administrative, economic, sociopsychological and digital methods | Accompanying tariff reform with an information campaign, e-services and benefits for vulnerable groups |
| Openness and transparency | Accessibility of information on the content of methods and the results of the application | Publication of regulatory acts, open budgets, open data, reports on programme implementation | City open data portal with information on tariffs, infrastructure projects and environmental indicators |

***Table 1.*** *Continued*

| Principle | Content of the principle | Practical manifestation in the activities of public authorities | Example in urban/agglomerated governance |
|---|---|---|---|
| Accountability | Clear identification of those responsible for the adoption and implementation of decisions | Delimitation of powers, regular reporting, audit | Identification of the department responsible for implementing the Smart City platform and public presentation of results |
| Efficiency and effectiveness | Orientation towards achieving goals with optimal use of resources | Evaluation of policies by results and not only by processes; use of indicators | Evaluation of the effect of introducing "smart" lighting through energy savings and improved safety |
| Scientific character and evidence-based practice | Use of data analysis, scientific approaches and expertise | Analytical briefs, scenario analysis, impact assessment | Use of transport models for planning new public transport routes |
| Orientation towards sustainable development | Alignment of methods with economic, social and environmental goals | Consideration of SDGs, environmental standards and social impact | Integration of green infrastructure and energy-efficient solutions in the reconstruction of neighbourhoods |
| Citizen participation | Engagement of residents and stakeholders at all stages of policy | Public consultations, electronic participation instruments, participatory budgeting | Use of an e-platform for voting on priority projects in the Smart City sphere |
| Digital by default | Priority of digital methods and solutions | Transition to e-services, interoperability of systems, minimisation of paper procedures | Introduction of electronic building permits, digital city maps, resident mobile applications |
| Adaptability and innovation | Ability to rapidly adjust methods and seek new solutions | Pilot projects, experiments, updating regulations | Testing new mobility instruments (for example, e-scooters) on the basis of temporary regulations |

***Source:*** *developed by the author on the basis of B. Zablotskyi et al. (2021), O.A. Morhunov (2021), OECD (2023)*

The systematisation of the principles of applying public administration methods makes it possible to consider these principles not in isolation but as an interconnected methodological basis for the formation and implementation of public policy in the context of sustainable development and the Smart City. This approach creates a basis for analysing how different groups of public administration methods are aligned with one another and directed towards achieving the strategic development goals of urban systems, particularly in the economic, social, environmental and institutional dimensions of resilience. Figure 2 schematically presents the correlation between individual groups of public administration methods and the achievement of the corresponding Sustainable Development Goals within urban systems. The proposed scheme shows that public administration methods have a clearly defined functional purpose in the system of sustainable development, and the level of the alignment and comprehensive application is a determining factor in the effectiveness of urban policy implementation.

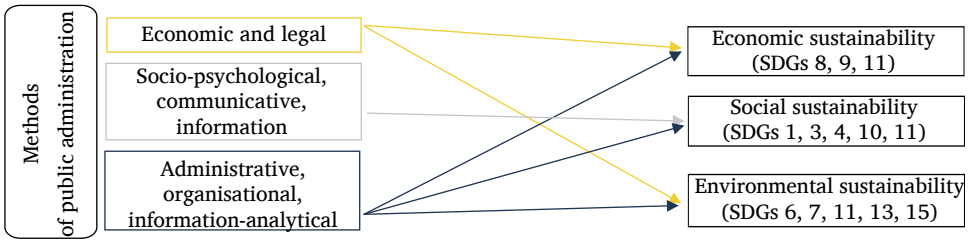


***Figure 2.*** *Scheme for aligning public administration methods with sustainable development goals in the smart city system*
***Note:*** *SDGs – Sustainable Development Goals. The numbers in brackets correspond to goal numbers: 1 – no poverty; 3 – good health and well-being; 4 – quality education; 6 – clean water and sanitation; 7 – affordable and clean energy; 8 – decent work and economic growth; 9 – industry, innovation, and infrastructure; 10 – reduced inequalities; 11 – sustainable cities and communities; 13 – climate action; 15 – life on land*
***Source:*** *developed by the author on the basis of United Nations (2015), L. Brzeziński & M.K. Wyrwicka (2022), I. Dunayev et al. (2023)*

The presented scheme reflects the alignment of the main groups of public administration methods with the economic, social and environmental dimensions of sustainable development in the smart city system. It demonstrates the multi-vector nature of managerial influence, whereby individual methods simultaneously contribute to achieving several Sustainable Development Goals, ensuring the complexity of managerial decisions. Economic and legal methods are oriented mainly towards economic sustainability, sociopsychological, communicative and information methods towards social sustainability, whereas administrative, organisational and information-analytical methods form the basis of environmental sustainability, which collectively confirms the integrated nature of public administration in the Smart City context.

In order to deepen the above generalisation, the composition and substantive characteristics of the relevant

groups of public administration methods in the context of sustainable urban development and the Smart City were specified. The specific features of the implementation in the smart city system are also revealed (Table 2). This approach made it possible to show the specific nature of applying individual methods, taking into account digital "layering", institutional changes and data-driven governance practices.

***Table 2.*** *Groups of public administration methods in the context of sustainable urban development and the smart city*

| Group of methods | Content and specific features of implementation in the Smart City | Examples / emphases |
|---|---|---|
| Administrative | Authoritative and directive decisions, regulations, supervision and permitting procedures; in the Smart City, these are supplemented by the regulation of digital platforms, data access procedures, sensor networks and digital services | Introduction of "smart" video-surveillance systems with the designation of responsible persons, access regimes and data retention procedures |
| Legal | Normative framework (norms, procedures, rights and obligations, liability), in particular in the spheres of e-services, personal data, cybersecurity, open data and e-democracy; adaptation of procedures in crisis and reconstruction conditions | Regulation of digital public services while maintaining standards of rights protection |
| Economic | Budgetary, tax, tariff, and investment instruments that form incentives for modernisation and resource saving; in the Smart City, these instruments are implemented through digital payment services and consumer "cabinets" | Transparent digital payment services, more precise calibration of incentives |
| Sociopsychological | Information, persuasion, engagement, formation of trust and responsible behaviour; strengthened by digital communication channels and e-participation | Mobile applications, personalised messages, instruments of electronic participation |
| Organisational | Building structures and processes (coordination, regulations, teams, working groups); in the Smart City – digital transformation units, operation centres, project offices | City operation centres, inter-municipal mechanisms for agglomerations |
| Information and analytical | Collection, analysis, visualisation and monitoring of data to support management decisions; transition to data-driven governance | Analytical dashboards, systems for monitoring urban services |
| Communicative and innovation-project | Consultations, co-creation of policies (co-production), participation platforms; project-oriented implementation of changes, pilots and "living laboratories" | Participation platforms, pilot projects, scaling of innovations |

***Source:*** *developed by the author on the basis of H. Chourabi et al. (2012), O. Bobrovska (2020), B. Zablotskyi et al. (2021)*

The proposed classification of groups of public administration methods reflects the multidimensional nature of managerial influence in the context of sustainable urban development and the functioning of Smart City systems. It creates an analytical basis for comparing the proposed approach with existing scientific concepts and management models that dominate the contemporary discourse on digital governance. A detailed comparative analysis of the integrated classification of public administration methods with the approaches presented in current research on Smart City and digital governance showed that, in a significant proportion of academic works, attention was focused mainly on the technological and institutional components of governance, whereas the methods of managerial influence as such were considered indirectly or fragmentarily. Thus, in the works of H. Chourabi *et al.* (2012) the Smart City was conceptualised as a multidimensional system combining technological infrastructure, organisational processes, governance institutions and social interactions. At the same time, public administration methods in these studies were not singled out as an independent analytical object, but rather appeared as derivatives of the architecture of digital platforms or institutional decisions. Against this background, the results of this study make it possible to broaden the analytical framework by bringing the methods of managerial influence into a separate dimension and considering these methods as a connecting link between the institutional structure of the Smart City and the practical implementation of public policy.

In OECD (2015) studies, attention was focused on the concept of smart government, within which the key factor of effectiveness is recognised as the ability of public authorities to integrate data, digital tools and management innovations. The authors stressed that digital technologies do not transform public governance without changes in decision-making mechanisms and interaction with stakeholders. The obtained results are consistent with this position, while at the same time detailing it through the identification of information and analytical as well as communicative methods as independent groups of managerial influence rather than merely technical tools for decision support.

A comparison with works in which the Smart City is considered as an instrument of sustainable urban development and digital transformation of public governance showed that the scientific discourse is dominated by the issue of fragmented governance and the gap between digital initiatives and the strategic development goals of cities. In particular, B. Zablotskyi *et al.* (2021) pointed to the risk of a "project-based approach", in which digital solutions are implemented in isolation from the overall logic of public policy. In this context, the results of the article correspond to the above criticism while at the same time offering an alternative framework of interpretation – through aligning groups of public administration methods within a unified system of principles and goals of sustainable development.

Analytical materials of the World Bank Group (n.d.) and the European Union (2020) focused on the institutional preconditions for the successful implementation of the

Smart City, in particular on the ability of local public authorities to combine regulatory, financial and investment instruments. In these studies, economic methods were considered primarily as mechanisms for stimulating innovation and engaging the private sector. The obtained results broaden this interpretation, demonstrating that, under conditions of digital transformation, economic methods are increasingly implemented through digital services and integrated with information and analytical instruments, which changes the nature of the managerial influence.

In the report of the United Nations Human Settlements Programme (2024) emphasis is placed on the social dimension of the Smart City, in particular on the role of citizen participation, inclusiveness and improving quality of life. At the same time, management methods in these materials are presented rather as general principles or recommendations. The results of this study make it possible to refine this approach by differentiating sociopsychological and communicative methods of public administration and showing the distinct functional role in the processes of citizen engagement and the formation of trust in public authorities.

A separate dimension for comparison is formed by approaches that focus on e-governance and digital factors in the implementation of the Smart City (Kuzior *et al.*, 2023). Unlike approaches that focus on outcomes and indicators, the results of this article concentrate on the managerial mechanisms for achieving such outcomes. This makes it possible to consider public administration methods as a precondition for the implementation of institutional and technological solutions rather than as a derivative element of monitoring.

In the study by H. Komarnytska (2025), devoted to the implementation of the Smart City concept in the system of open data and e-governance, the importance of the institutional capacity of local self-government bodies for the effective digital transformation of managerial processes is emphasised. The author highlighted managerial risks associated with the fragmentation of digital solutions, asymmetry of access to data and insufficient coordination between public authorities. A comparison with the results obtained here makes it possible to broaden this approach by showing that the systematisation of public administration methods can serve as an instrument for reducing such risks through the alignment of organisational, legal and information-analytical methods within a single managerial logic.

In academic research devoted to the digital transformation of public governance, for a long time the dominant approach linked the development of the Smart City primarily with the introduction of electronic services and the technological modernisation of management processes. In particular, in the works of T. Mamatova & O. Kravtsov (2021), emphasis is placed on ensuring the quality of public services under conditions of digital transformation, where digital tools are regarded as means of increasing the effectiveness of administrative activity. In comparison with such approaches, contemporary Smart City concepts, as well as the results of this study, demonstrate the evolution of scientific discourse from technologically-oriented solutions to management-oriented models in which digital tools are integrated into a broader system of public administration methods.

Thus, the comparison of the results obtained with contemporary academic and analytical sources indicates different approaches to understanding the Smart City – from indicator-based and technological to institutional and managerial. The logic of the integrated consideration of public administration methods proposed in the article makes it possible to embed managerial instruments into the broader context of sustainable development and digital transformation, which distinguishes it from most existing approaches focused on individual dimensions of the “smart city”.

## Conclusion

As a result of the conducted study, it has been established that, in the context of sustainable development and the implementation of the Smart City concept, public administration methods should be interpreted as a holistic, multidimensional system of managerial influence rather than as a set of isolated instruments. The transformation of public governance driven by the digitalisation of management processes, urbanisation changes and the growing role of civic participation has objectively broadened the content and functional purpose of public administration methods and complicated the logic of the application.

The study has substantiated that traditional approaches to the classification of methods, formed within the framework of the hierarchical-bureaucratic model of governance, do not fully reflect the current managerial realities of digital transformation and Smart City development. Under these conditions, administrative, legal, economic, sociopsychological and organisational methods undergo digital “layering” and are supplemented by information and analytical, communicative and innovation-project components, which determines the feasibility of applying an integrated classification of public administration methods taking into account technological, institutional and behavioural aspects of governance. It has been proved that the effectiveness of applying public administration methods is determined not by individual managerial instruments but by the level of the coherence and the correspondence to a system of principles oriented towards legality, systemic character, openness and transparency, accountability, scientific validity and evidence-based practice, citizen participation, the digital by default principle and adaptability. Fundamentally well-grounded use of methods in this context ensures a transition from a formally-procedural model of governance to a results-oriented system of public administration based on data, participation, and innovation.

Therefore, in the Smart City environment, public administration methods take on the character of an integration mechanism that combines the strategic goals of sustainable development with practical instruments for implementing public policy and ensures the transformation of programme-normative guidelines into measurable outcomes for the development of urban territories. The comprehensive application forms a managerial basis for

strengthening the institutional capacity of public authorities and local self-government and at the same time reinforces the theoretical and methodological foundations of research in the field of public governance and administration. Prospects for further research are connected with the operationalisation of the proposed integrated classification through the development of a system of indicators and criteria for assessing the effectiveness of applying individual groups of public administration methods in urban governance practice, particularly under conditions of digital "layering". This will make it possible to carry out empirical verification of the effects of managerial decisions and to increase the reproducibility and comparability of the practices of local self-government bodies in sustainable development and Smart City projects.

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## Conflict of Interest

None.

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## Сутність та класифікація методів публічного адміністрування в контексті розвитку концепції Smart City

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**Анотація.** В умовах цифрової трансформації публічної влади, посилення ролі міських територій у забезпеченні сталого розвитку та зростання запитів суспільства на прозорість, підзвітність і участь громадян особливої актуальності набуває переосмислення методів публічного адміністрування крізь призму розвитку концепції Smart City. Метою дослідження було концептуальне обґрунтування та систематизація підходів до розуміння методів публічного адміністрування в умовах цифровізації управлінських процесів і впровадження смарт-орієнтованих моделей розвитку міст. У статті здійснено теоретико-методологічний аналіз сутності методів публічного адміністрування в умовах трансформації системи публічного управління під впливом цифровізації та розвитку концепції Smart City. Розкрито еволюцію наукових підходів до трактування методів публічного адміністрування – від класичної раціонально-правової моделі до сучасних концепцій належного врядування, результатоорієнтованого управління та цифрового врядування. Обґрунтовано, що в середовищі Smart City методи публічного адміністрування набувають інтегративного характеру, поєднуючи правові регулятори, адміністративні та організаційні процедури, економічні стимули й комунікативні інструменти з цифровими платформами, аналітикою даних, електронними сервісами та механізмами участі громадян. Показано, що традиційні класифікації методів, сформовані в межах ієрархічної моделі управління, не повною мірою відповідають викликам мережевої взаємодії, інтероперабельності, «digital by default» та зростання ролі data-driven governance. Запропоновано узагальнену класифікацію методів публічного адміністрування в контексті розвитку Smart City, яка враховує організаційні, економічні, цифрові та соціальні аспекти управління і відображає їх функціональне призначення у системі «цілі – функції – методи – інструменти – результати» сталого розвитку міських територій. Практична цінність дослідження полягає у можливості використання запропонованої класифікації методів публічного адміністрування в діяльності органів місцевого самоврядування для підвищення ефективності управлінських рішень та адаптації європейських підходів Smart City до національних умов

**Ключові слова:** цифровізація публічної влади; data-driven governance; електронні сервіси; участь громадян; сталий розвиток територій; публічне управління