

Revista de Cercetare si Interventie Sociala

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

INNOVATIVE APPROACHES TO STRATEGIC MANAGEMENT IN THE PUBLIC SECTOR: CHALLENGES OF GLOBAL TRANSFORMATIONS AND DIGITAL TECHNOLOGIES

Vadym TORICHNYI, Viktoria ANDRIYASH, Oleksandr TYTARENKO, Dmytro TKACHUK, Oleksandra TARASENKO

Revista de cercetare și intervenție socială, 2025, vol. 90, pp. 107-127

https://doi.org/10.33788/rcis.90.7

Published by: Expert Projects Publishing House



On behalf of: "Alexandru Ioan Cuza" University, Department of Sociology and Social Work and HoltIS Association

Innovative Approaches to Strategic Management in the Public Sector: Challenges of Global Transformations and Digital Technologies

Vadym TORICHNYI¹, Viktoria ANDRIYASH², Oleksandr TYTARENKO³, Dmytro TKACHUK⁴, Oleksandra TARASENKO⁵

Abstract

The article examines the advanced formats of strategic management in public administration in the context of the pressure of globalization and digitalization. The article examines the impact of digital technologies on the formation of strategic decisions in the public sector and their role in improving the efficiency of public services. The purpose of the article is to analyze the peculiarities of combining strategic and public management and to propose a methodological framework for assessing the effectiveness of their synergistic use. The author uses the methods of system analysis, synthesis, comparative analysis, generalization and grouping to study the institutional, personnel, technological and organizational aspects of

¹ Department of Management, Faculty of Professional Education and Leadership, Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine, Khmelnytskyi, UKRAINE. https://orcid.org/0000-0003-3336-6386; E-mail: thetorik@gmail.com

² Petro Mohyla Black Sea National University, Mykolaiv, UKRAINE; https://orcid.org/0000-0001-5294-7456. E-mail: andriyash v2017@ukr.net

³ Department of Regional Policy, Educational and Scientific Institute of Public Administration and Civil Service, Taras Shevchenko National University of Kyiv, Kyiv, UKRAINE. https://orcid.org/0000-0002-6437-8171; E-mail: oleksandr_tytarenko@knu.ua

⁴ Border Security Department, Bohdan Khmelnytskyi National Academy of the State Border Guard Service of Ukraine, Khmelnytskyi, UKRAINE. https://orcid.org/0009-0001-1127-5742; E-mail: tdv30041102@gmail.com

⁵ Department of Regional Policy, Educational and Scientific, Institute of Public Administration and Civil Service, Taras Shevchenko National University of Kyiv, Kyiv, UKRAINE. https://orcid.org/0009-0007-1198-9175; E-mail: tarasenko7oleksandra@gmail.com

digital transformation. It was proved that the strategy of innovative leadership has the greatest potential for the digital transformation of public administration, and it actively contributes to the development of high-quality and accessible public services. The scientific novelty lies in the development of an integrated index of strategic management implementation (ISMD) and a three-level scale for assessing the level of development of strategic management, which is the basis for the practice of quantifying the readiness of public administration systems for digital change and development. Further research could be aimed at improving the methods of integrating digital platforms into service-oriented management models. A separate direction is to analyze the impact of artificial intelligence on strategic decision-making in the public sector.

Keywords: strategic management; public administration; digitalization; digital leadership; integral index; service orientation.

Introduction

Strategic management for public administration has already become the basis for ensuring the effective operation of public authorities and local governments, as it allows not only to determine long-term development priorities, but also to adapt the management system to rapidly changing environments (Shpyha *et al.*, 2024). In the context of digitalization, when technological innovations radically change the forms, methods and means of providing public services, the ability of public authorities to formulate and implement strategic decisions based on forecasting, scenario analysis and modeling of possible management situations becomes increasingly important (Thabit *et al.*, 2025). The traditional approach to strategic planning in public administration is often limited to assessing the current state of the administrative system and existing procedures, which makes it difficult to respond in a timely manner to potential changes in the digital environment.

The relevance of the study is also shaped by the issue of forming structured systems for assessing the directions of public administration development, which involves the use of clearly defined criteria, effective sources of information and modern methods of its processing. Such systems should add to the potential for making informed decisions on the modernization of public administration mechanisms, the introduction of digital technologies and increasing the level of openness and transparency of management processes in this environment.

Literature Review

Scholars of the caliber of Arabchuk *et al.* (2025), Moore (2021), Singh (2024) emphasize that the use of strategic methods in government activities contributes to the growth of the adaptive capacity of government agencies in the process of

digital modernization, which covers the entire range of management procedures - from collecting and analyzing information to monitoring the implementation of government programs. Academic studies by Aghenitei (2022), Haug *et al.* (2024), Pietrzyk *et al.* (2023) show that the inclusion of digital solutions in strategic planning of public administration ensures not only the mechanization of individual operations, but also the creation of integrated management decision support systems based on the processing of data sets, predictive modeling, and alternative analysis. However, the aspect of effective implementation of such systems in the public sphere is becoming problematic, as most studies focus on technical aspects and do not take into account the peculiarities of the institutional context of public administration.

Romanenko and Isaieva (2024), Van der Waldt (2024) and Yordanova (2025) pay considerable attention to the concept of digital governance in the public sphere. Studies show that it includes not only the introduction of advanced technical solutions, but also the creation of a new managerial mentality focused on innovation, openness, and clarity. Scholars emphasize that effective digital governance is based on the ability of government leaders to respond quickly to environmental changes. At the same time, methodological concepts for assessing the level of digital governance in public administration are not sufficiently presented, in particular, there are no clearly defined indicators for measuring the effectiveness of management strategies in the digital space.

A separate area of research concerns service-centered models of public administration based on the integration of classical administrative tasks with the latest digital services. The results of scientific works by Gurnaša and Mazure (2025), Nelipa (2024), Sikalo (2025) demonstrate that the use of the service-centered concept can significantly improve the convenience and accessibility of public services, reduce the time of their provision, and make the process of communication between citizens and authorities more open. However, these works do not address the issue of creating universal standards for the implementation of service-centered strategies at the state level. There are no specific recommendations for the formation of a digital infrastructure architecture that would guarantee the interoperability of various service platforms and systems.

The study of institutional characteristics of strategic management in the public sector confirms the need to create a clear legislative framework for digital transformation. Scholars Araújo (2024), Manta and Mansi (2024) emphasize that legal support is a fundamental condition for the successful implementation of digital strategies, as it creates the basis for standardizing procedures, unifying information and establishing common criteria for information security. At the same time, little consideration is given to the impact of regulatory barriers on the speed and quality of digital transformation in the public sector.

The authors delete the achievements of Pendalchuk (2024), Sacchi and Scarano (2024), Tymchenko (2024), which refer to structural and functional transformations

in the public administration system under the influence of digitalization. Scholars note that digital modernization necessitates the reorganization of administrative procedures, optimization of management processes, and transition to more adaptive management models. However, the issues of harmonizing new organizational structures with existing institutional frameworks, as well as the problems of distributing competencies and responsibilities between different levels of public administration in the context of digitalization, remain not fully developed.

Thus, a critical review of scientific sources suggests that further interdisciplinary research is needed to combine technological, organizational, legal, and human resources aspects of the digital transformation of public administration. Particular attention should be paid to the creation of methodological tools for evaluating the effectiveness of digital strategies for public administration practice.

The aim of the article is to study the processes of combining strategic and public management and to develop a methodological approach to assessing the quality of their joint functioning.

Methodology

The methods of system analysis and synthesis were applied, which provided a comprehensive study of strategic management as a complex multilevel system with interrelated institutional, personnel, technical and organizational components integrated into the digital environment. System analysis was needed to identify the main problems of digital transformation and establish links between them, and synthesis ensured the formation of a holistic conceptual model for evaluating the results obtained. The comparative method was used to compare the methods, models, and strategic approaches of different public authorities in order to determine their advantages and disadvantages in the context of digitalization. The method of generalization was used to draw conclusions based on the study of national and foreign experience, which made it possible to propose strategic solutions adapted to Ukrainian conditions.

The grouping method was used to classify the factors influencing the development of strategic management in the digital era by dividing them into the main categories: institutional and regulatory, personnel and professional, technological and digital, infrastructure and logistics, financial and economic, and organizational and managerial. The integrated approach ensured the integration of the results of all research stages, creating a link between theoretical substantiation and practical proposals. The structural-functional approach served as a tool for describing the functions of each component of the strategic management system in public administration, especially in the process of introducing digital technologies.

Results

Combining strategic management and public administration

The fundamental processes that affect the effectiveness of strategic decisions in public administration are the speed of implementation of new digital tools and updates, when the emergence of an innovative solution is significantly ahead of the moment when the previous solution reaches its full effectiveness. In such conditions, innovative approaches can, on the one hand, accelerate the modernization of management processes, and on the other hand, complicate the sustainability of the results achieved, which requires taking this effect into account when assessing the impact of automation and digitalization on the chosen strategy for public administration (Makedon *et al.*, 2024b).

There are two fundamentally different approaches to choosing the optimal strategy: 1) building a matrix of correspondence between key factors and typical strategic decisions and 2) creating a multifactor model system in which an individual model is developed for each individual factor, which is then integrated into a comprehensive system. For the first approach, the authors propose to use program-targeted methods, while the second is more in line with the concept of forming a strategic portfolio of management decisions. Given that artificial intelligence and digital solutions can have a different impact on the effectiveness of public administration even under the same external conditions, it is advisable to use matrix models at the initial stages, while the accumulation of data and the growth of the analytical base will give advantages to portfolio models (Table 1) (Berman *et al.*, 2025).

Table 1. Matrix for assessing the feasibility of digital solutions in public administration strategies

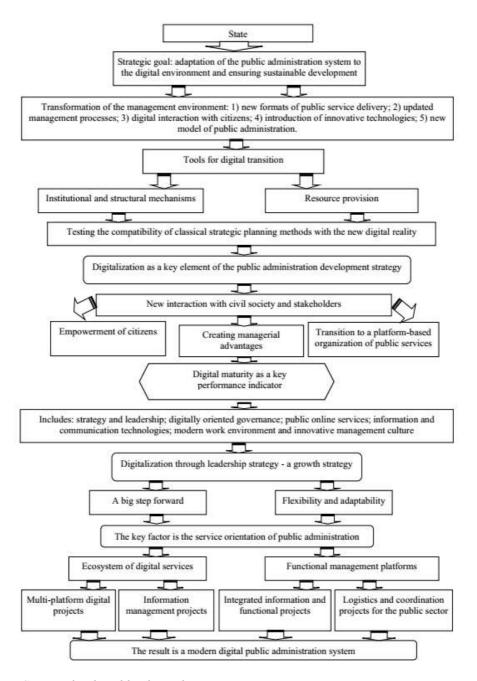
| Digital solutions or their | Development and | Process | Strategy of |
|------------------------------------|---------------------|--------------|-------------|
| consequences | modernization | optimization | innovative |
| | strategy | strategy | leadership |
| | 1. Digital tools: | | |
| - Unified databases. | + | + | - |
| - Data analysis algorithms | + | + | + |
| - High-speed 5G networks. | + | - | + |
| - Internet of things | + | + | + |
| 2. Digital | transformation of p | ersonnel: | |
| - Automation of management | - | + | - |
| processes | | | |
| - Implementation of algorithms | - | + | + |
| - Training in digital technologies | - | + | - |
| - Development of digital skills | + | - | + |

| 3. Digital administration: | | | | | | |
|---------------------------------------|---|---|---|--|--|--|
| - Platforms for interaction with | + | + | - | | | |
| citizens | | | | | | |
| - E-governance | + | + | + | | | |
| - Data openness. | + | - | + | | | |
| 4. Digital interaction with citizens: | | | | | | |
| - Personalized e-services. | + | - | + | | | |
| - Analysis of citizens' needs | + | - | - | | | |
| - Formation of public opinion | + | - | + | | | |
| - Online consultations + - + | | | | | | |
| - Augmented reality for | + | - | + | | | |
| interaction | | | | | | |

Source: developed by the authors

First of all, the authors note that in the environment of digital transformation, the greatest potential for public administration will be the strategy of innovative growth, which involves the intensive development of management systems, the active implementation of modern digital solutions, the use of intelligent technologies and the expansion of the functionality of state and local governments (Bryson & George, 2020). At the same time, it cannot be reasonably argued that a one-time introduction of even the most advanced intelligent tool will automatically ensure long-term resilience to change, as the speed of technological updates far exceeds the time required to achieve full benefits from already implemented solutions (Figure 1).

Thus, the authors note that the success of digital transformation depends not so much on the technologies themselves as on the organizational capacity of the public sector to integrate them into a comprehensive strategic management system (Profiroiu *et al.*, 2024). In this sense, the digital leadership strategy can be defined as the development of managerial capabilities that ensure the creation and implementation of innovative models of public administration, as well as the ability to reform the governance system in accordance with the principles of openness, transparency and focus on the needs of the country and society (Zhovnirchyk *et al.*, 2023).



Source: developed by the authors

Figure 1. Model of forming a digital leadership strategy in public administration in the context of digitalization

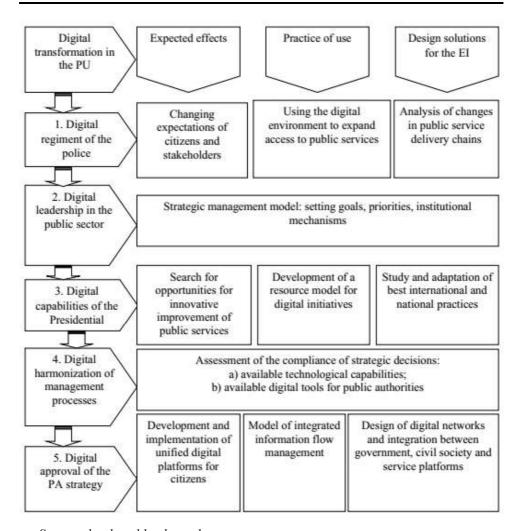
Service model and digitalization in the strategic management of public administration

Despite the growing popularity of digital solutions and technologies, it is their sustainable implementation in the field of public administration that requires the involvement of highly qualified specialists in the field of strategic management, especially in those sectors that are experiencing not the first wave of digitalization, but the second or even the third, when basic digital services have already been formed and there is a need for their deep integration and expansion of functionality. These areas include healthcare, education, infrastructure management, security and defense, where digitalization is moving from a basic level of automation to comprehensive intellectualization of management processes (Makedon *et al.*, 2024a).

Practice shows that an excessive focus on narrow tools, in particular those used only for local automation or digital communication, does not provide the proper effect for systemic improvement of public administration efficiency. Existing approaches to evaluating digital solutions do not yet allow for a complete picture of the possibilities of interaction between different platforms and artificial intelligence systems in the public sector, which can lead not only to a decrease in the effectiveness of digital strategies, but also to the risks of sensitive information leakage and data security breaches (Klausen, 2024).

In view of these problems, the authors propose to use a model of a clear and consistent roadmap for the digital transformation of public administration (PA), which integrates innovative technologies into strategic management processes, ensures their compatibility, security and efficiency, and increases the level of digital maturity of the entire management decision-making system (Figure 2).

An approach that involves not only the provision of basic administrative services, but also the expansion of their range through comprehensive service solutions integrated into a single digital infrastructure is gaining in importance. These principles are referred to as servitization, and in the public sector they mean the creation of an integrated system of public services that combine traditional management functions with new digital services, providing convenient, fast and personalized access to public services for citizens. Digitalization is the foundation, as modern technologies create the technical capability to integrate heterogeneous services, optimize management processes, automatically update data, and maintain continuity of service delivery (United Nations Department of Economic and Social Affairs, Division for Public Institutions and Digital Government, 2024). It allows not only to design more complex and functionally rich management services, but also to ensure their continuous improvement based on the analysis of data from users and other government systems.



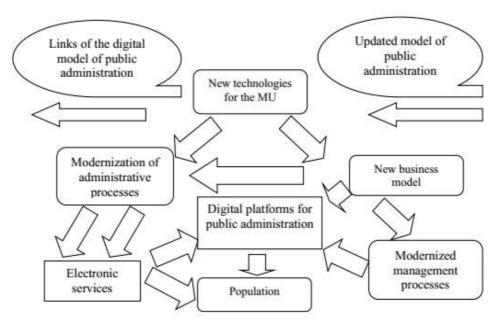
Source: developed by the authors

Figure 2. Stages of forming and implementing a digital leadership strategy in public administration

Within the framework of sustainable public administration practice, such a strategy should include a number of key areas: a) creating comprehensive offers that combine several interrelated services; b) building long-term relationships with citizens and institutions by improving the quality and convenience of services; c) strengthening trust in public authorities through transparency, speed and predictability of management decisions; d) ensuring the sustainability of services even in crisis conditions; regular updating and modernization of digital platforms.

The factor of digital platforms, which in public administration are becoming the integration core of the entire service delivery system, is also worthy of attention. They serve as a single point of access to public services, data storage and processing, and coordination of interaction between various authorities and citizens. In the absence of their own sectoral or national platforms, public authorities are forced to use external platform solutions, which can limit their independence and create additional risks to information security (Christensen & Lægreid, 2025).

While digital platforms have generally become a common tool in public administration for the implementation of administrative and socially important services, the processes of adapting them to service-oriented public sector strategies remain a challenge that requires a comprehensive solution. The main difficulty lies in the preservation of traditional management approaches and outdated administrative models, which are often not flexible enough to integrate new digital services and work effectively in the context of digitalization (Mykhalchenko, *et al.*, 2020). The authors believe that public authorities should make efforts to reorient existing administrative mechanisms, modernize them, and align them with the strategic priorities of digital transformation (Figure 3).



Source: developed by the authors

Figure 3. Integration model of digital transformation and service-oriented development of public administration

In order to build an effective public service platform, it is necessary to clearly understand how to transform the existing organizational system to support a new service strategy, as well as how to manage this updated management model in the context of integrated digital platforms. At the same time, it is important to take into account the contours of the future digital infrastructure architecture, which should combine institutional, technological and organizational innovations into a single logical system (Febiri, *et al.*, 2024).

Methodological approach to assessing the level of development of strategic management to improve the quality of public administration under the influence of digital trends

The assumption of the study is that the regions of Ukraine have different institutional, organizational, personnel and digital formats for the implementation of strategic management decisions in the field of public administration, which can be quantified by developing an integrated index of strategic management development (I_{smd}) , which will take into account the following components: 1) institutional and legal potential, 2) human and professional potential, 3) technological and digital potential, 4) infrastructure and logistics resources, 5) financial and economic capacity, and 6) organizational and managerial competencies. For a professional verification of the implementation of the strategic management development index (I_{smd}) , the authors will use the measures of state policy development of the Ministry of Community and Territorial Development of Ukraine, in particular, the Department of Regional Development Programs Implementation, which can use this indicator (Table 2) (Volkova, 2023).

Table 2. Evaluation of the possibilities of strategic management development based on digitalization for the Department of Regional Development Programs Implementation (Ministry of Communities and Territories Development of Ukraine)

| No. of items | Assessment parameters | Evaluation criteria | Score | Max point score | Weight (wi) |
|--------------|---|---|-------|-----------------------|----------------|
| | Institutio | nal and legal capacity (ILC) | | | |
| 1. | Availability of an up-to- date regional strategy for the development of | There is an approved strategy that is harmonized with national documents The strategy is in the process | 1 | 4 | 0,20 |
| | public administration | of development or updating No strategy in place | 0 | | |
| | Availability of regional regulations governing | Full package of documents is in place | 2 | | |
| | , , , | Partial regulatory support | 1 | | |
| | the digitalization of governance | There are no regulations in place | 0 | | |

| | Technological and digit | tal potential (TDC) | | | |
|----------|---|--|---|---|----------|
| 2. | Development of digital | There are integrated systems of electronic document management and online services | 2 | 4 | 0,25 |
| | infrastructure of public authorities | Basic digital services are available | 1 | | |
| | | There is no digital infrastructure | 0 | | |
| | High-speed internet is available in all | Internet is available and stable | 2 | | |
| | administrative centers | Internet is partially available No or unstable access | 0 | | |
| | Infrastructur | re and logistics potential (ILP) | | | |
| 3. | Transport accessibility to | There are modern road and rail connections | 2 | 4 | 0,10 |
| | the administrative centers of the region | There is only one type of transportation | 1 | | |
| | | There is no or critically limited connection | 0 | | |
| | Logistical accessibility of | There is an extensive network | 2 | | |
| | digital services (access | Limited number of access points | 1 | | |
| | points, service centers) | There are no access points | 0 | 1 | |
| | Human resource | s and professional capacity (HRI | | | 1 |
| 4. | | There is a sufficient number of specialists with specialized education | 2 | 4 | 0,15 |
| | Availability of qualified specialists in the field of public administration | There are specialists with higher education, retraining is possible | 1 | | |
| | | There are not enough qualified personnel | 0 | | |
| | System of professional | It is constantly functioning | 2 | | |
| | development of civil | It is carried out occasionally | 1 | | |
| | servants | It is absent | 0 | _ | <u> </u> |
| <u> </u> | | nomic potential (FEP) | | 4 | 0,10 |
| 5. | Amount of financing | > 100 | 2 | | |
| | for the development of managerial innovations, | 10-100 | 1 | | |
| | Manageriai innovations, UAH million/year | < 10 | 0 | | |
| | Availability of special | There are existing programs | 2 | | |
| | financial support programs for digitalization | There are no programs | 0 | | |

| | Information and communication potential (ICP) | | | 4 | 0,10 |
|----|--|-------------------------------|---|---|------|
| 6. | Availability of official There is full and regular | | 2 | | |
| | online resources with | access | | | |
| | data on the activities of | The resource is absent or not | 0 | | |
| | the authorities | updated | | | |
| | Organizational and managerial capacity (OMC) | | | | 0,10 |
| 7. | Existence of a regional | There is a functioning agency | 2 | | |
| | development agency or | There is no agency | 0 | | |
| | investment agency | | | | |
| | Existence of a system | The system operates on a | 2 | | |
| | for monitoring the | permanent basis | | | |
| | effectiveness of The system is absent | | 0 | | |
| | management decisions | | | | |

Source: compiled by the authors

Upon completion of the stage of collecting the necessary statistical and analytical data, a comprehensive assessment of each parameter of strategic management development in the field of public administration is carried out in accordance with the defined criteria, with points assigned on a scale from 0 to 2 depending on the actual level of compliance of the parameter with the benchmark requirements. The next step is to calculate the relative indicator for each digitalization parameter, which is defined as the ratio of the actual value of the criterion to its maximum (reference) value, which allows unifying the assessment of various characteristics (Sundström & Svärdsten, 2025):

$$t_i = \frac{x_{fact}}{x_{\text{max}}} \tag{1}$$

where:

 $t_{(i)}$ is the parameter of the process digitalization element;

 x_{fact} is the actual value of the parameter criterion;

 x_{max} is the maximum (reference) value of the parameter criterion.

After that, the integral indicator of each element of the digital development of strategic management in public administration is calculated by the formula:

$$I_j = \frac{\sum_{n=1}^{i-1} t_j}{n_j} \tag{2}$$

where:

 $I_{(j)}$ is the integral indicator of the potential element; t_j is the calculated parameter of the potential element; n_j is the number of parameters in the element.

For the purposes of the study, authors used a methodology adapted to the analysis of 10 parameters. In the process of reducing the number of indicators, the maximum values of the elements and the weighting coefficients obtained from the results of expert evaluation were proportionally adjusted:

Institutional and legal capacity (ILC): 3 parameters (max 6 points), wi=0.30; Technological and digital potential (TDP): 3 parameters (max 6 points), wi=0.35; Infrastructure and logistics potential (ILP): 1 parameter (max. 2 points), wi=0.10;

Human resources and professional potential (HRP): 1 parameter (max. 2 points), wi=0.10;

Financial and economic potential (FEP): 1 parameter (max. 2 points), wi=0.10; Organizational and management potential (OMP): 1 parameter (max. 2 points), wi=0.05.

It is proposed to define the integral indicator of strategic management development (I_{smd}) as the weighted arithmetic mean of all assessment elements, taking into account the individual weighting coefficients:

$$I_{smd} = \sum_{n}^{i-1} (I_i \times w_i) \tag{3}$$

To assess the level of stability of the obtained estimates and identify the level of variability of the elements of the potential for the development of strategic management on the basis of circular changes, the variance (δ^2) and standard deviation (λ) are additionally calculated using statistical data processing tools, which allows to determine the homogeneity of indicators and confirm the correctness of the weighted average approach in calculating the integral index (Table 3).

Table 3. Variance and standard deviation of the elements of the potential for the development of strategic management in public administration

| Indicators | (PPI) | (TPD) | (ILP) | (CPP) | (FEP) | (FEP) | Mean value |
|----------------|-------|-------|-------|-------|-------|-------|------------|
| Total variance | 0.001 | 0.001 | 0.000 | 0.005 | 0.000 | 0.000 | 0.001 |
| Standard | 0.036 | 0.025 | 0.013 | 0.067 | 0.020 | 0.000 | 0.033 |
| deviation | | | | | | | |

Source: compiled by the authors

The next stage of the study is to determine the optimal number of intervals for classifying the values of the potential for the development of strategic management in the field of public administration. Such a division allows for a structured analysis of regional differences and the establishment of groups of regions according to the level of formation of key elements of management potential. To select the number of intervals, authors propose to use the following statistical models:

The Sturgis model is a classical method for determining the number of intervals based on the logarithmic dependence on the sample size and provides an optimal balance between detailing and generalizing the results.

$$k = \log 2 \times n + 1 \tag{4}$$

where:

k is the number of intervals;

n - the number of research results that participated in the study).

2. Brooks and Karruser model:

$$k = 5 \lg \times n \tag{5}$$

Heinhold and Hayedi valuation model:

$$k = \sqrt{n} \tag{6}$$

Using formula (7), authors determine the step of each of the selected approaches.

$$x = \frac{\max - \min}{k} \tag{7}$$

Table 4 shows the results of comparing different approaches to determining the number of intervals by analyzing the distribution of values by levels of development of strategic management in the field of public administration.

Table 4. Quantitative assessment of cases included in the calculated intervals of strategic management development

| Level of strategic | Sturgis model | Brooks and Carruthers | Heinhold and |
|--------------------|---------------|-----------------------|--------------|
| management | k = 6 (5,22) | model | Hayedi model |
| development | | k = 7 (6,31) | k = 5 (4,32) |
| No development | 0 | 1 | 0 |
| Low level of | 1 | 1 | 2 |
| development | | | |
| Below average | 2 | 1 | 0 |
| Average level | 1 | 3 | 1 |
| Above average | 3 | 2 | 4 |
| High level | 4 | 5 | 3 |
| Very high level | 7 | 5 | 8 |

Source: compiled by the author

The resulting quantitative assessment allows us to identify intervals that remain empty or insufficiently filled, which reduces the expressiveness and analytical value of the results. The use of overly detailed scales with 5-7 intervals leads to the division of results of similar significance into several levels, the distinction of which is methodologically inappropriate at this stage of the study. The authors also consider it unacceptable to separate the category Lack of strategic development potential, since even the least developed governance systems have a certain basic level of organizational, institutional and human resources capacities. In view of the above, it is advisable to abandon unnecessary intermediate levels and apply a simplified three-level assessment scale: ow, medium, high (Table 5). The proposed gradation of levels of development of strategic management in public administration is as follows.

Table 5. Gradation of levels of strategic management development in public administration

| Assessment | (PPI) | (TKP) | (ILP) | (CPP) | (FEP) | (FEP) | l _{smd} |
|--------------|----------|----------|----------|----------|----------|----------|------------------|
| / Indicators | | | | | | | |
| max | 0,21 | 0,23 | 0,11 | 0,16 | 0,11 | 0,11 | 0,96 |
| min | 0,04 | 0,15 | 0,06 | 0,05 | 0,05 | 0,10 | 0,53 |
| pitch | 0,06 | 0,03 | 0,02 | 0,04 | 0,02 | 0,01 | 0,14 |
| Low level | 0,04 ≤ X | 0,15 ≤ X | 0,06 ≤ X | 0,05 ≤ X | 0,05 ≤ X | 0,10 ≤ X | 0,53 ≤ X |
| | ≤ 0,10 | ≤ 0,18 | ≤ 0,08 | ≤ 0,09 | ≤ 0,07 | ≤ 0,11 | ≤ 0,67 |
| Average | 0,10 ≤ X | 0,18 ≤ X | 0,08 ≤ X | 0,09 ≤ X | 0,07 ≤ X | 0,10 ≤ X | 0,67 ≤ X |
| level | ≤ 0,16 | ≤ 0,21 | ≤ 0,10 | ≤ 0,12 | ≤ 0,09 | ≤ 0,11 | ≤ 0,82 |
| High level | 0,16 ≤ X | 0,21 ≤ X | 0,10 ≤ X | 0,12 ≤ X | 0,09 ≤ X | 0,10 ≤ X | 0,82 ≤ X |
| | ≤ 0,21 | ≤ 0,23 | ≤ 0,11 | ≤ 0,16 | ≤ 0,11 | ≤ 0,11 | ≤ 1,00 |

Source: compiled by the author

In view of the above, it is advisable to abandon unnecessary intermediate levels and apply a simplified three-level assessment scale: low, medium, high (Table 5). The proposed gradation of levels of development of strategic management in public administration is as follows: (1) 0 to 0.69 - low level; (2) from 0.7 to 0.79 - medium level; (3) from 0.8 to 1.0 - high level.

The proposed approach to assessing the level of development of strategic management in the field of public administration involves the use of a three-level scale (low, medium, high), which avoids excessive detail and increases the clarity of interpretation of the results. Such a classification provides an opportunity for effective monitoring, comparison and planning of management decisions aimed at improving the institutional, human resources and organizational capacity of public administration in relation to the conditions of digitalization.

Discussion

The findings of the study generally correlate with the scientific positions of leading theorists in the field of strategic management of the public sphere, including the work of Arabchuk *et al.* (2025), Moore (2021) and Singh (2024). This group of researchers emphasizes the close relationship between the effectiveness of strategic planning and the ability of public institutions to adapt to the challenges of digital transformation. However, the integral index of strategic management development proposed in this study, together with a three-level gradation for assessing the degree of its formation, creates a more structured and mathematically sound mechanism for determining the level of readiness of management structures for digital transformation. This is significantly different from the vast majority of existing methodologies, which are based mainly on qualitative and descriptive analysis.

In contrast to Haug et al. (2024) and Pietrzyk et al. (2023), who focus on the technological component of integration into strategic planning, our study shows that the success of digital modernization is determined not only by the presence of modern technological solutions, but also by institutional capacity, human resources, and organizational maturity for their comprehensive implementation. Our findings confirm the expert statements of Yordanova (2025) and Van der Waldt (2024) on the fundamental importance of digital leadership, while specifying methods for measuring it through the developed index, which creates opportunities for comparative analysis of different territorial units and identification of strategic directions for reform. The innovativeness of the proposed approach is manifested in the synthesis of the conceptual foundations of digital leadership and serviceoriented management with a quantitative assessment of their practical effectiveness in the public sector. This fundamentally separates this work from the studies of Gurnaša and Mazūre (2025), Sikalo (2025), which are limited to the study of individual cases of service models without developing a formalized methodology for assessing their impact on the strategic development of organizations.

Conclusion

It has been established that digital transformation in the field of public administration is a strategic driver of systemic change, which requires deep integration of strategic management principles with advanced forecasting and scenario analysis tools. It is found that the introduction of modern digital technologies significantly transforms the paradigm of strategic planning, shifting the emphasis from traditional linear models to flexible, adaptive systems that can quickly respond to rapid technological changes.

It is estimated that the use of matrix and portfolio models allows for a more reasonable determination of the priority areas of public sector digitalization, taking into account various scenarios of future development. It is proved that the strategy of innovative development in the context of digital transformation contributes to improving the quality of public services, expanding their accessibility and personalizing interaction with citizens. A conceptual model of digital leadership in public administration has been developed, based on a systematic approach to the modernization of management processes, integration of artificial intelligence technologies, and ensuring transparency and openness in decision-making. The author proposes to use indicative monitoring to continuously evaluate the effectiveness of digital strategies, which makes it possible to adjust management decisions in real time, ensuring flexibility and adaptability of public administration.

The study shows that a service-oriented approach based on the use of digital technologies is becoming one of the most effective mechanisms for improving the quality of administrative and social services. This approach allows for the integration of classical management functions with innovative digital services, the main purpose of which is to meet the needs and expectations of citizens. It is found that digital platforms, which are the core of the service model, create a single digital space for the provision of public services, ensuring their personalized customization, automatic updating and continuous improvement.

The proposed Strategic Management Development Index (SMD) standardizes the process of assessing key components of management potential, including the institutional and legal framework, professional level of personnel, state of digital infrastructure, and organizational abilities using clearly defined criteria and weighting factors. The principles of introducing the practice of systematic monitoring of the $I_{(smd)}$ index as an effective tool for strategic planning, assessing the progress of reforms and identifying problem areas are substantiated. A universal methodological model of assessment has been developed that can be adapted to the specifics of different regions and used as a national mechanism for formulating digital transformation strategies for the field of public management.

References

Aghenitei, M. (2022). Strategic management in public administration. *Journal of Danubian Studies and Research*, 12(1), 432-448

Arabchuk, Y., Dzvinchuk, D., Lopushynskyi, I., & Petrenko, V. (2025). The concept of strategic management in public administration by Paul C. Nutt and Robert W. Backoff: Ukrainian context. *Coordinates of Public Administration*, 2, 55-71; https://doi.org/10.62664/cpa.2024.02.03

Araújo, B. (2024). Digital transformation in public administration: 5 essential technologies. *Sydle*. https://www.sydle.com/blog/digital-transformation-in-public-administration-62a9e7ad73f2f35ffe1290e2

- Berman, E. M., Prasojo, E., Fathurrahman, R., Samartini, A., Plimmer, G., Sabharwal, M., Neiva, V., Syarien, M. I. A., Hariyati, D., Puspasari, D., Wijayanti, F. W., & Ferdiansyah, J. (2025). Strategic program management: Performance accountability driving use in national governments. *Public Administration Review*, 85(3), 862-884; https://doi.org/10.1111/puar.13892
- Bryson, J. M., & George, B. (2020). Strategic management in public administration. In Oxford Research Encyclopedia of Politics (pp. 1-26). Oxford University Press; https://doi.org/10.1093/acrefore/9780190228637.013.139
- Christensen, T., & Lægreid, P. (2025). Future directions of public administration research—Addressing fundamental issues and questions. International *Journal of Public Administration*, 48(5-6), 299-305; https://doi.org/10.1080/01900692.2025.2470006
- Febiri, F., Gariba, M. I., Hub, M., & Provazníková, R. (2024). The synergy between human factors, public digitalization and public administration in the European context. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(4), 100424; https://doi.org/10.1016/j.joitmc.2024.100424
- Gurnaša, L., & Mazūre, G. (2025). Unlocking the power of process management in public administration: A theoretical perspective on implementation benefits. *Environment. Technology. Resources*, 1, 221-227; https://doi.org/10.17770/etr2025vol1.8676
- Haug, N., Dan, S., & Mergel, I. (2024). Digitallyinduced change in the public sector: A systematic review and research agenda. *Public Management Review*, 26(7), 1963-1987; https://doi.org/10.1080/14719037.2023.2234917
- Klausen, K. K. (2024). Crises management as strategic coping. Scandinavian Journal of Public Administration, 28(1), 25-42; https://doi.org/10.58235/sjpa.2023.12580
- Makedon, V., Trachova, D., Myronchuk, V., Opalchuk, R., & Davydenko, O. (2024a). The development and characteristics of sustainable finance. In A. Hamdan (Ed.), *Achieving sustainable business through AI, technology education and computer science* (Studies in Big Data, Vol. 163, pp. 373-382). Springer; https://doi.org/10.1007/978-3-031-73632-2 31
- Makedon, V., Budko, O., Salyga, K., Myachin, V., & Fisunenko, N. (2024b). Improving Strategic Planning and Ensuring the Development of Enterprises Based on Relational Strategies. *Theoretical And Practical Research In Economic Fields*, 15(4), 798-811; https://doi.org/10.14505/tpref.v15.4(32).02
- Manta, O., & Mansi, E. (2024). The impact of globalization on innovative public procurement: Challenges and opportunities. *Administrative Sciences*, 14(4), 80; https://doi.org/10.3390/admsci14040080
- Moore, M. H. (2021). Commentaries on "Public Value is Unknowable": Valuing the dimensions of public choices. *Administration & Society*, 53(10), 1603-1609; https://doi.org/10.1177/00953997211052596
- Mykhalchenko, H., Lukianykhin, V., Zviahintseva, O., Turiianska, M., & Soloviov, I. (2024). The role of strategic management in the modernization of public administration in Ukraine. *Pacific Business Review (International)*, 17(1), 126-142.
- Nelipa, D. (2024). Strategic management in the public and private sectors: Features and approaches to performance evaluation. *Law & Public Administration*, 2, Article 2.23; https://doi.org/10.32782/pdu.2024.2.23

- Pendalchuk, T. (2024). Strategic management in the field of public administration. *Modern Scientific Journal*, 3(3), 114-123; https://doi.org/10.36994/278690082024315
- Pietrzyk, S., Gołębiowska, E., & Dąbrowski, P. J. (2023). Innovative process management in the public sector. *European Research Studies Journal*, *26*(2), 185-196; https://doi.org/10.35808/ersj/3161
- Profiroiu, C. M., Negoiță, C. I., & Costea, A. V. (2024). Digitalization of public administration in EU member states in times of crisis: The contributions of the national recovery and resilience plans. *International Review of Administrative Sciences*, 90(2), 336-352; https://doi.org/10.1177/00208523231177554
- Romanenko, K., & Isaieva, S. (2024). Role of strategic management in the transformation of the social sphere as a mechanism of public administration. *Dnipie Academy of Continuing Education Herald. Series: Public Management and Administration*, 2(2), 8-14; https://doi.org/10.54891/2786-6998-2024-2-2
- Sacchi, S., & Scarano, G. (2024). Digital transformation of public employment services in the postpandemic era: Evidence from Italy as a latecomer country. *Australian Journal of Social Issues*, 60(2), 456-472; https://doi.org/10.1002/ajs4.385
- Shpyha, P., Kachmarskyi, Y., & Karpenko, Y. (2024). Features of conducting the SWOT analysis of the strategy for reforming public administration in Ukraine (2022-2025). *University Scientific Notes*, 2(98), 14-24; https://doi.org/10.37491/UNZ.98.2
- Sikalo, M. (2025). Conceptual framework for public governance of socioeconomic systems: From instrumental to substantional understanding of digital transformation. *Pressing Problems of Public Administration*, 1(66), 67-87.
- Singh, S. (2024). Strategic management in the era of digital transformation: Challenges and opportunities. *Darpan International Research Analysis*, 12(3), 212-217; https://doi.org/10.36676/dira.v12.i3.68
- Sundström, A., & Svärdsten, F. (2025). Modes of strategic control: Shifting dynamics between planning and control tools in strategy implementation. *Public Management Review; https://doi.org/*10.1080/14719037.2025.2492299
- Thabit, S., Sancino, A., & Mora, L. (2025). Strategic public value(s) governance: A systematic literature review and framework for analysis. *Public Administration Review*, 85(3), 885-906; https://doi.org/10.1111/puar.13877
- Tymchenko, M. (2024). Main indicators of digitalization of public administration: International practice. *Public Administration and Regional Development*, 24, 400-421; https://doi.org/10.34132/pard2024.24.04
- United Nations Department of Economic and Social Affairs, Division for Public Institutions and Digital Government. (2024). United Nations EGovernment Survey 2024: Accelerating digital transformation for sustainable development: With addendum on artificial intelligence [PDF]. United Nations. https://publicadministration.un.org/egovkb/en-us/Reports/UNEGovernmentSurvey2024
- Van der Waldt, G. (2024). Global and transnational governance: Implications for public administration teaching. Teaching Public Administration. Advance online publication, 1-22; https://doi.org/10.1177/01447394241229173

- Volkova, N. (2023). Strategic management of public service personnel in the context of European integration. Dnipro Academy of Continuing Education Herald. Series: Public Management and Administration, 2(2), 17-21; https://doi.org/10.54891/2786698X202323
- Yordanova, D. (2025). Strategic guidelines for the management of state administration in Bulgaria. In *Proceedings of the 19th International Conference on Business Excellence 2025 (Vol. 19, Issue 1, pp. 2330-2339)*. Sciendo; https://doi.org/10.2478/picbe-2025-0180
- Zhovnirchyk, Y., Chernov, S., Larina, N., Lukashuk, M., Antonova, L. (2023). Strategic planning for the sustainable development of territorial communities. *International Journal of Sustainable Development and Planning*, 18, 7, 2097-2105; https://doi.org/10.18280/ijsdp.180712