

The Role of the Managerial Class in Transforming Personnel Administration Mechanisms in the Public Sector

O papel da classe dirigente na transformação dos mecanismos de gestão de pessoal no setor público

 **Oleh Sydorenko¹**
 **Hanna Panchenko²**
 **Ruslan Antoniuk³**
 **Vasyl Kuybida⁴**
 **Namig Damirov⁵**



Resumo

A integração de tecnologias digitais e práticas de gestão ecológica aumenta a eficiência administrativa e apoia o desenvolvimento sustentável. Os sistemas ERP e CRM são as ferramentas digitais mais comuns, utilizadas por 63,9% e 57,4% das organizações, respectivamente. As plataformas em nuvem (49%) e a análise de big data (44,8%) são amplamente implementadas, enquanto a adoção de IA (25,3%), IoT (28,3%) e blockchain (9,6%) permanece moderada. Na gestão ambiental, a eficiência energética (54,4%) e a redução de resíduos (46%) são iniciativas fundamentais. Apenas 27,7% das organizações integram totalmente as metas ambientais à estratégia, enquanto 30,2% as negligenciam. O estudo mostra que as práticas digitais e ecológicas estão cada vez mais presentes, mas enfrentam barreiras técnicas e institucionais. O reforço das competências digitais e o alinhamento das metas de sustentabilidade à estratégia são essenciais para uma gestão organizacional integrada e preparada para o futuro.

Palavras-chave: transformação digital, desenvolvimento sustentável das organizações, administração inovadora, soluções digitais ecológicas, liderança

Abstract

The integration of digital technologies and green management practices improves administrative efficiency and promotes sustainable development. ERP and CRM systems are the most common digital tools, used by 63.9% and 57.4% of organizations, respectively. Cloud platforms (49%) and big data analytics (44.8%) are widely adopted, while AI (25.3%), IoT (28.3%), and blockchain (9.6%) are used to a lesser extent. In environmental management, energy efficiency (54.4%) and waste reduction (46%) are key initiatives. Only 27.7% of organizations fully incorporate environmental goals into their strategy, whereas 30.2% overlook them. The study indicates that digital and green practices are increasingly prevalent but face technical and institutional barriers. Enhancing digital skills and aligning sustainability goals with organizational strategy are vital for building a future-ready, integrated management approach.

Keywords: digital transformation, sustainable development of organizations, innovative administration, ecological digital solutions, leadership

¹ samdiolet@gmail.com, Department of Public Administration and Regional Studies, Educational and Scientific Institute of Public Service and Management, National University Odessa Polytechnic [Ukraine]

² annapaalex@gmail.com, Department of Public Administration and Regional Studies, Educational and Scientific Institute of Public Service and Management, National University Odessa Polytechnic [Ukraine]

³ jerusalem1978@gmail.com, Faculty of Public Administration, Social and Natural Sciences, Public Higher Educational Establishment, Vinnytsia Academy of Continuing Education [Ukraine]

⁴ kuybida58@gmail.com, Department of Public Administration and Administrative Law, the V.M. Koretsky Institute of State and Law of the NAS of Ukraine [Ukraine]

⁵ znannia_ua@ukr.net, PhD in Public Management and Administration [Ukraine]

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Introduction

In the context of modern transformation across all levels of public administration and governance, the need to effectively reform the human resources management system is critical. This is due not only to the depletion of traditional sources of economic growth but also to the need to replace them with innovative, intellectually driven solutions. In this setting, the role of the managerial elite—those capable of shaping strategic directions in public administration, influencing the regulatory framework of government agencies, and driving qualitative changes in personnel policy—becomes vital. It is the managerial elite, as holders of professional competence, political resolve, and strategic vision, that can initiate and execute significant reforms in the public human resources management system, considering the challenges posed by digitalization, globalization, and socio-economic turbulence (Chen, 2024).

The importance of the issue stems from the urgent need to develop a new model of human resource management in the public sector that not only addresses modern challenges but also ensures the long-term sustainability of public institutions. Contemporary realities call for a shift from outdated administrative and bureaucratic methods to flexible, adaptive, and value-driven HRM systems based on the principles of openness, transparency, accountability, and efficiency (Quaresima, 2019).

In this approach, the managerial elite is seen not only as a managerial entity but also as a driving force for transformation, capable of creating institutional conditions for human resource development, implementing the latest models of employee performance evaluation, ensuring the principles of fairness and equal access to career growth, and fostering a culture of continuous learning and development (Sarker et al., 2023). Given global trends involving increased investment in human capital by the government, society, and the private sector, the issue of qualitatively renewing the human resource management system in public administration is of strategic importance.

Literature Review

In the scientific literature on reforming human resource management in the public sector, there is a growing emphasis on the role of the managerial elite as a key factor in determining the success of transformation processes, since it is their competence, strategic vision, and ability to innovate that influence the effectiveness of implementing new approaches to human resource assessment. These approaches differ from traditional methods that have largely focused on socioeconomic indicators, such as the cost of social security. As Alolayyan et al. (2021) and Demo et al. (2024) emphasize, traditional evaluation methods that do not consider a person as an active participant in organizational change are insufficient in the context of public administration. The authors highlight that the managerial elite plays a crucial role in shaping reform directions that require a personalized approach, using tools such as expert analysis to conduct a thorough study of the personal and professional profiles of the human resources involved in the public administration system.

According to scientific findings from Castelo and Gomes (2024), Holzer (2022), and Radzikhovskyi (2022), it can be stated that changes in the field of public administration help mobilize human resources, develop practices, and even create new generation public administration platforms where the managerial elite acts as a catalyst for systemic changes. They integrate management functions into personnel policy to

ensure strategic goals and integrity. Meanwhile, as noted by Le et al. (2024), the structure of human resources in public administration is diverse and divided by the level of suitability for different public institutions. Its value is limited to specific institutional contexts, making assessment difficult. Additionally, Yu and Lan (2024) distinguish between general human resources, formed through education, and specialized human resources, developed through professional activities. This requires the managerial elite to be flexible in choosing evaluation tools when reforming the human resources management system.

A certain versatility in human resources development and transformation, as highlighted by Haerah (2024), Liu et al. (2024), and Mousa and Arslan (2025), requires a multidisciplinary approach that considers physiological, cognitive, and social-behavioral traits, as well as motivation, leadership skills, and adaptability of employees. These elements are crucial to the effective functioning of public administration, and the managerial elite must ensure a balanced integration of these factors to achieve reform goals. In this context, Bryson and White (2024) and Grigorescu et al. (2021) stress the importance of including components such as health capital, intellectual, social, cultural, normative, and even brand capital in the structure of human resources, as these contribute to the complex profile of an individual. However, according to Harney and Gubbins (2024), none of these components alone fully captures the multidimensional nature of human resources, posing challenges for standardizing assessment, particularly as the managerial elite seeks to create a fair and adaptable governance system.

The complexity of human resources reform, as Jalan and Pednekar (2024) note, lies not only in technical aspects but also in ethical dilemmas about whether it is possible to reduce a person's multifaceted nature to a set of measurable indicators. This issue is particularly relevant in public administration. The managerial elite should consider employees' individual traits, aspirations for self-realization, moral values, and life experiences. According to Kuhlmann and Bogumil (2021) and Lielpēters (2019), these are key factors influencing the effectiveness of managerial decisions amid changes in the formation and development of human resources. Meanwhile and Lipovska (2023) and Waxin and Bateman (2009) highlight the importance of evaluating the competencies of public administration employees, which enable the managerial elite to provide a more flexible, objective, and accurate assessment of human resources at all levels—from local to central government.

The purpose of the article is to support the role of the managerial elite in the sustainable transformation of the management system of the current human resource base in public administration.

Research methodology

The study employs a synthetic methodological approach combining qualitative analysis based on system design with quantitative modeling of public administration processes. The qualitative part focuses on integrating national priorities into the labor market, education, and healthcare development through initiatives led by managerial elites at the organizational and regional levels. The quantitative part involves creating a comprehensive human resources assessment model comprising two subsystems: one for analyzing general (HR-general) personnel and another for specialized (HR-specific)

personnel, combined into Model 3. The assessment uses indicators such as physical, cognitive, socio-emotional, infrastructural, and cultural capital. In HR-general, indicator normalization is based on an average life expectancy of 72-73 years, whereas in HR-specific, the average length of service (~33 years) is used, with a coefficient of 0.45 for synthetic groups. Data were obtained from the State Employment Service of Ukraine, the State Statistics Committee of Ukraine, and verified electronic databases on healthcare, education, employment, and HR audits in public administration.

To minimize the effects of random fluctuations, the data were standardized by age group (5-year intervals) and level of professional experience. The main limitations of the model stem from the uneven composition of the sample: a high proportion of employees from central government agencies (37%) compared to regional offices (24%), and limited data on junior managers. To enhance the reliability of the results, a weighting coefficient for observations and stability testing of the model using the bootstrap method (1000 repetitions) were employed. The relationships between HR-general and HR-specific indicators were examined using Spearman's correlation coefficient, which indicated an overall positive association ($\rho = 0.63$; $p < 0.05$), confirming the internal consistency of the assessment system.

Results

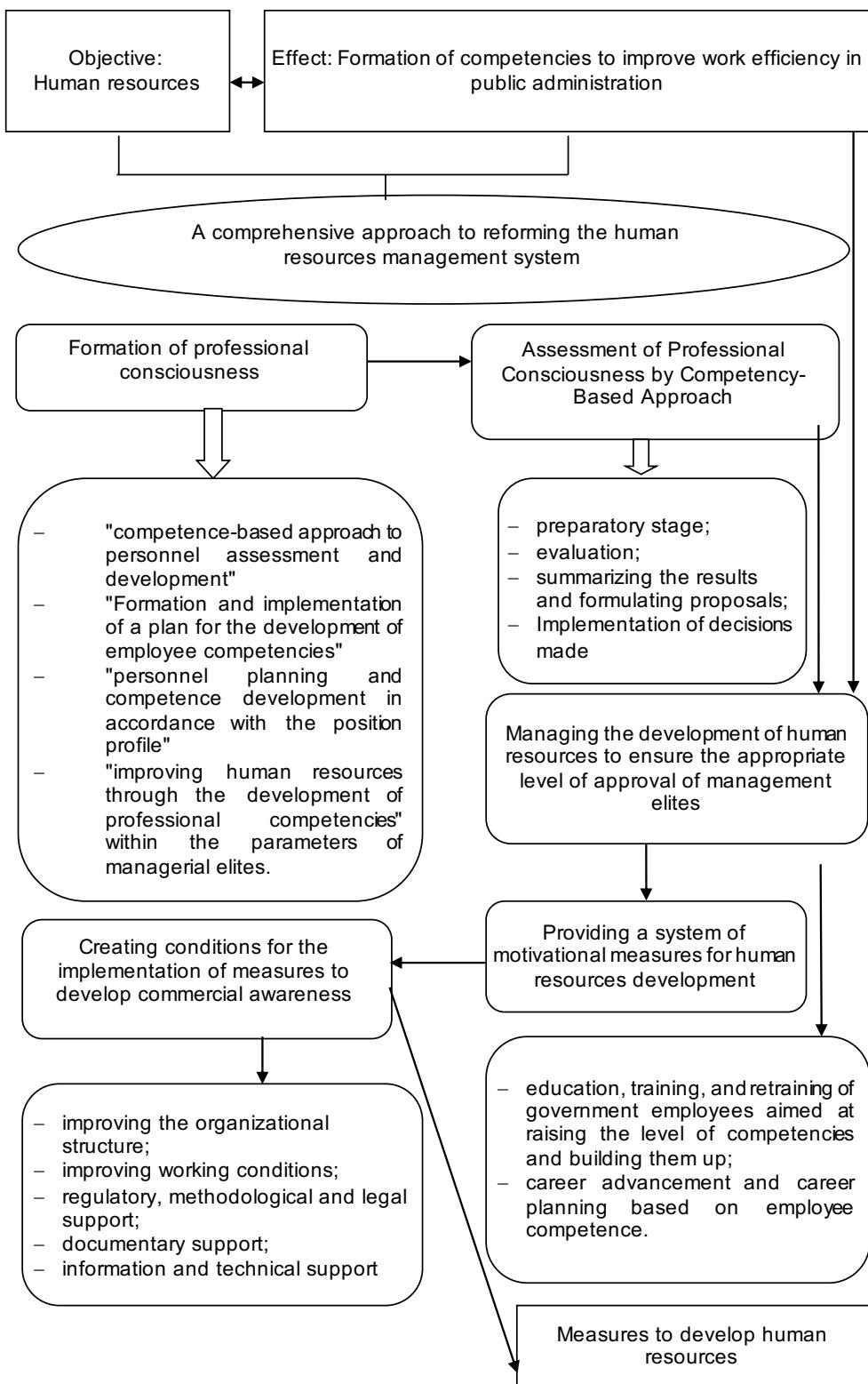
1. Coordination interaction of human resources and managerial elites in the field of public administration

One of the most challenging yet fundamentally important aspects of implementing strategic changes in the public administration system is the elite's ability to effectively coordinate the efforts of all stakeholders, integrate administrative, financial, human, and resource components into a single managed system with a clear focus on achieving socially significant results (Almeida de Figueiredo, 2024; Pajak et al., 2020). That is why the managerial elite should not only possess strategic planning skills but also ensure coherence among public authorities at different levels, involved partners, and civil society (Andelković, 2023).

The development of strategies at the meso-level (sectoral and regional) should be guided by a thorough analysis of policies related to demography, education, and health, as these factors underpin human potential, which, in turn, influences the effectiveness of public administration. However, to achieve a systemic impact, it is crucial that the objectives and principles outlined in strategic documents are not confined to higher-level policies but are effectively translated into specific structures within the national public sector, where reforms are carried out and where a personalized approach to human resource management becomes practical (Figure 1) (Goncharuk & Pyrohova, 2020).

Figure 1

Coherence of priority areas in the strategic reform of the human resources management system at different levels of public administration



Source: developed by the authors

When the human resource development strategy is harmoniously aligned with national priorities, including key guidelines of national-level strategic documents such as long-term sustainable development programs, the likelihood of successful implementation of management initiatives increases (Garengo & Sardi, 2021). This correspondence contributes to the formation of a synergistic effect, in which the interaction between the micro and macro levels not only enhances the effectiveness of reforms but also ensures the systematic integration of human resources into the public administration mechanism.

In this context, the concept of human-centeredness, which has become a key idea in many strategic development programs, can be effectively applied at the level of state institutions and public administration. Its implementation involves rethinking the role of a civil servant not only as an executor of instructions, but also as a carrier of initiative, a carrier of knowledge and a driver of change capable of bringing a public institution to a qualitatively new level of management (Table 1).

Table 1

Priority areas of reforming the human resource management system in the public administration under the influence of the managerial elite

Subsystem for the formation of human resources	Subsystem for the use of human resources	Human resources development subsystem
Analysis of the national labor market with regard to the strategic goals of public administration	Improving labor and remuneration legislation for the public sector	Development of the regional labor market for local public administration needs
Managing migration processes to ensure human resources	Establishment of an institution to promote the employment of civil servants	Development of the market of educational services for professional training of civil servants
Reforming the education system to train personnel to meet the needs of the public sector	Regulation of labor relations with a focus on efficiency and transparency	Improving the healthcare market to support the health of the workforce
Modernization of the healthcare system to support the workforce's performance	Implementation of targeted programs to support professions in demand in public administration	Establishment of regional institutes for analyzing and planning labor needs
Developing the institution of analysis and strategic planning of human resource needs	Development of human capacity building programs	Implementation of a competency assessment system for civil servants
Strategic planning of human resources needs for the public sector	Improvement of regional and sectoral legislation in the field of labor relations	Professional development and retraining of civil servants
Optimization of civil servants' recruitment and hiring processes	Ensuring regional employment through targeted programs	Organization of professional training in line with modern challenges
Adaptation of new employees to the organizational culture of public administration	Developing regional programs to support in-demand professions	Managing career growth and personal development
Rational placement of personnel in accordance with competencies	Audit and reengineering of HR processes to improve efficiency	Implementation of a professional development monitoring system

Subsystem for the formation of human resources	Subsystem for the use of human resources	Human resources development subsystem
Introduce flexible forms of employment (remote work, part-time work, etc.)	Motivating employees through transparent reward systems	Evaluation of employee performance to ensure the quality of management
Development of forecast models of public sector staffing	Implementation of modern HR management technologies	Creating a mentoring system for young professionals
Ensuring gender equality in the process of human resources development	Creating a culture of organizational responsibility	Development of psychological support programs for employees

Source: developed by the authors

The implementation of the state personnel policy relies on a normatively defined mechanism that encompasses a range of legal, managerial, organizational, scientific, and methodological tools. The primary objective of this mechanism is to enhance the quality of public administration by fully unlocking the human resources potential of the civil service and creating conditions for professional development and fulfillment for every employee within the system. The structure of the personnel policy formation and implementation mechanism consists of three key components: policy subjects (such as public administration institutions and the managerial elite who set the development direction), the personnel management process itself (including planning, recruitment, development, and evaluation), and policy objects, which are the groups of employees targeted by management influence (Maksimović & Jerotijević, 2023).

The internal structure of the personnel policy implementation consists of two main groups of mechanisms. The first is a set of policy-making mechanisms, which includes: regulatory consolidation of the powers of HR policy formulation subjects; creation of conceptual policy frameworks; defining the division of responsibilities at the federal subjects level; integrating HR policy into the international context; and institutionalizing policy through programs, projects, laws, and financial and economic mechanisms. The second group comprises mechanisms for implementing HR policy, which include civil service management tools, regulation of employees' legal status, ethical oversight of their activities, and regulation of personnel relations at all levels of public administration, from central to municipal (Pham et al., 2024)

The effectiveness of this system depends primarily on the levels of political culture, professional competence, legal awareness, managerial skills, and value orientations of both the subjects and the objects of HR policy. That is why public administration, which aims for qualitative renewal, should be supported by a consistent and flexible HR strategy that promotes capacity development not only within the current system but also in the context of its modernization. The primary task of public administration in modern conditions is to create conditions for the effective, socially oriented, and professional use of available human resources, taking into account labor market needs, demographic trends, and regional differences (Makedon et al., 2024a). Structural reform of employment becomes essential, involving not only the creation of new jobs but also the development of working conditions that foster motivation, fair pay, and opportunities for professional self-realization (Daniel, 2023).

In most European Union countries, especially in France and Germany, the formation of the public administration elite occurs through specialized educational

institutions (e.g., the École Nationale d'Administration in France), where future leaders undergo intensive training through programs that combine management theory, law, and practical internships in government agencies. In Ukraine, such mechanisms are only just being developed, and applying adapted international models could improve the effectiveness of management training. In the US, a talent-pool system is common in the public sector (Senior Executive Service), which involves selecting the most competent managers and rotating them among different agencies to gain broad experience (Vanivska & Shelonh, 2024). In Ukraine, such practices are still only partially implemented, mainly through integrity programs and competitive selection, but there is no systematic rotation model. In Scandinavian countries, significant emphasis is placed on ethical leadership and the principles of open governance, which help build public trust in personnel policy processes. For Ukraine, adopting these approaches could lead to greater transparency and stability within the managerial elite, especially during the post-war transformation of state institutions. Therefore, a key task is to develop a unified human resource management concept that harmonizes national and regional policies and promotes public welfare, productive employment, and social stability.

2. Assessment of the level of efficiency of human resource management in the context of the strategic vision of managerial elites

The effectiveness of HRM directly relies on the strategic vision of managerial elites, which shapes their development priorities, the formation of work relationships, and adaptation to external challenges. It is recommended to establish criteria for evaluating HRM effectiveness and examine the connection between the strategic orientations of managerial elites and the efficient utilization of human resources to support the functioning of the public sector.

Considering the developed approaches in HRM and the modern requirements of public administration, the proposed assessment model helps improve personnel policy by supporting informed strategic decisions through a multidimensional analysis of human resource potential in public administration. Its unique feature is its ability to integrate the human resource development strategy directly into the overall management strategy of public authorities. Using data from comprehensive assessments, a set of management practices is developed to achieve public administration goals, while considering the influence of aquatic management elites (Makedon et al., 2024b).

In reforming the public sector's human resource management system, the managerial elite plays a key role by strategizing, implementing innovative approaches, and coordinating complex organizational processes. These elements ensure the effective application of a comprehensive human resources assessment model, which includes the target direction, operating principles, implementation methods, a clear action algorithm, specialized management tools, and the subject-object structure of the assessment process. It also considers external factors, such as legislation and resources, as well as internal aspects like organizational structure, development strategy, and corporate culture of public administration institutions, which together create the conditions for modernizing HR policy. According to Burns (2022), the model enables a thorough evaluation of employees' knowledge, skills, and abilities without involving

external experts, allowing the management elite to make informed decisions on personnel promotion, professional training, and improvements to the management model, thereby enhancing the performance of public institutions.

The purpose of this system, according to Vanivska and Shelonh (2024), is to transform personnel policy in public authorities by gradually implementing a comprehensive evaluation model grounded in principles such as an individual approach to each public administration employee. The main methods for implementing this model include using questionnaires to collect primary data, applying mathematical modeling to analyze complex relationships, relying on expert assessments to maintain objectivity, conducting functional diagnostics to identify employees' strengths and weaknesses, and utilizing software to automate processes. With the support of the managerial elite, this approach ensures a systematic and accurate assessment.

The algorithm for implementing the model, which consists of several successive stages, each representing a specific aspect of standardizing the evaluation process, enables the managerial elite to achieve tangible results both at the micro level, such as within individual organizations where managerial, economic, and socio-emotional effects are evident, and at the meso level, impacting entire areas of public administration. This supports their adaptation to modern challenges and increases overall efficiency (Makedon et al., 2025).

- 1) Model 1: Assessment of general human resources (HR-general),
- 2) Model 2: Evaluation of specialized human resources (HR-specific), which the integrated model describes.

$$HR_{general} = (PhNC \times PhAC \times PhHC) \times (CCN \times CCA \times CCH) \times (SECN \times SECA \times SECH) \times (SECH \times CMMCI), \quad (1)$$

Parameters of Model 1:

- 1) HC is the cost of total human resources;
- 2) PhNC - the value of innate physical abilities (PhNC₁ - health level);
- 3) PhAC - the cost of acquired physical abilities (PhAC₁ - body mass index; PhAC₂ - costs of bad habits; PhAC₃ - age);
- 4) PhHC is the value of mixed physical abilities (PhHC₁ is the result of the TRP standards);
- 5) CCN is the cost of innate cognitive skills (CCN₁ is the cost of cognitive treatment);
- 6) CCA is the cost of acquired cognitive skills (CCA₁ - years of study; CCA₂ - education costs; CCA₃ - academic performance; CCA₄ - number of research and development projects; CCA₅ - number of CCDs; CCA₆ - foreign language skills; CCA₇ - computer skills);

- 7) CCH is the cost of mixed cognitive skills (CCH₁ - participation in R&D; CCH₂ - return on investment in HR; CCH₃ - age effect coefficient);
- 8) SECN is the cost of innate socio-emotional characteristics (SECN₁ is the cost of psychological treatment);
- 9) SECA - the value of acquired socio-emotional characteristics (SECA₁ - adaptability; SECA₂ - confidence; SECA₃ - motivation; SECA₄ - communication skills; SECA₅ - digital literacy; SECA₆ - state awards; SECA₇ - no criminal record; SECA₈ - number of children; SECA₉ - participation in community service);
- 10) SECH - mixed socio-emotional characteristics (SECH₁ - MBTI typology; SECH₂ - marital status);
- 11) c - synthetic and cultural-infrastructure sub-indices (CIC₁ - human development index; CIC₂ - health quality; CIC₃ - education quality; CIC₄ - digital skills; CIC₅ - creativity; CIC₆ - marital status; CIC₇ - civic engagement; CIC₈ - leadership);
- 12) CIMMCI is a generalized indicator of cultural and infrastructure capital (median income per capita, according to official statistics).

The explication of Model 1 is presented in Table 2. These indicators have been aligned with the multiplicative logic of the evaluation model and adapted to the needs of the state personnel policy implemented by the managerial elite through systemic transformations.

Table 2

Sub-dimensions of human resources qualities assessment in the course of transformations and changes in their use in the public administration

Group	Subgroup	Subdimension	Description	Weight
Ph	PhNC	PhNC1	Health category, medical examination	2
		PhAC1	Body mass index	2
		PhAC2	Costs of bad habits	2
	PhHC	PhAC3	Age	2
		PhHC1	Results of sports achievements	2
		CCN1	Costs of cognitive treatment	2
C	CCA	CCA1	Number of years of study	2
		CCA2	Expenditures on education	2
		CCA3	Successfulness	2
		CCA4	Number of R&D projects	2
		CCA5	Number of OCDs	2
		CCA6	Level of foreign language proficiency	2
		CCA7	Computer skills	2

Group	Subgroup	Subdimension	Description	Weight
CCH		CCH1	R&D continuity	2
		CCH2	Age-related return on investment in human resources	2
		CCH3	Age effect coefficient	2
SE	SECN	SECN1	Expenses for psychological treatment	2
		SECA1	Adaptability	2
		SECA2	Self-confidence	2
		SECA3	Motivation.	2
		SECA4	Communication skills	2
		SECA5	Digital literacy	2
		SECA6	Number of state awards	2
		SECA7	No criminal record	2
		SECA8	Number of children	2
CI	SECA	SECA9	Participation in community service	2
		SECH1	Dynamics of the professional compliance test	2
		SECH2	Marital status	2
		CIC1	Human development index	1
CIC	CIC	CIC2	Quality of health	1
		CIC3	Quality of education	1
		CIC4	Digital skills	1
		CIC5	Creativity	1
		CIC6	Marital status	1
		CIC7	Public activity	1
		CIC8	Leadership	1
		CIMMCI	Median per capita cash income in Ukraine in 2023	23570

Source: developed by the authors

The data of the sub-dimensions presented in Table 2 were formed as a result of a systematic analysis of the legal framework of Ukraine, statistical data of the State Employment Service, the State Statistics Service, electronic databases on healthcare, education, and employment, as well as practical materials on HR audit and surveys of public sector employees in 2022-2023. These indicators have been aligned with the multiplicative logic of the evaluation model and adapted to the needs of the state personnel policy implemented by the managerial elite through systemic transformations.

When reforming the human resource management system in the public sector, it is the managerial elite that has a "pushing" role in the implementation of a comprehensive assessment model that establishes the maximum permissible coefficients of sub-dimensions in the groups of physical (Ph) cognitive (C) and socio-emotional (SE) characteristics in the range from 1.25 to 2, due to the specificity of the multiplicative formula, which makes it impossible to multiply by zero, as this would lead to zeroing the total value of human resources, while the minimum value of 1.25, as noted by Zolak Poljasevic et al. (2025), increases the average coefficient and brings the results closer to international standards for calculating the value of human potential, contributing to the formation of a sound human resources policy. This model, under the guidance of the managerial elite, takes into account the synthetic sub-dimensions of the CI group, where a coefficient is applied that reflects the duration of the impact of these characteristics during the life cycle of an individual, conditionally estimated as a unit corresponding to the average life expectancy (72–73 years), thus ensuring an accurate assessment of the total human resources, taking into account their long-term value for public administration.

For specialized human resources (HS), which are evaluated under Model 2, the managerial elite ensures the use of an integral value indicator that takes into account individual coefficients adapted to the unique characteristics of these resources, allowing for high accuracy in assessing their contribution to reforms, which, in turn, allows for informed decisions on human resource development, optimization of professional competencies and strategic planning aimed at improving the efficiency of public sector institutions. Through this approach, the managerial elite not only promotes the implementation of a comprehensive evaluation model but also ensures its adaptation to the specific needs of public administration.

$$HR_{specific} = (PhNS \times PhAS \times PhHS) \times (CSN \times CSA \times CSH) \times (SESN \times SESA \times SESH) \times (CIS \times CIMASP). \quad (2)$$

Components of Model 2:

- 1) PhNS is the value of innate physical abilities (PhNS₁ is the actual time worked at the previous job);
- 2) PhAS is the value of acquired physical abilities (PhAS₁ is the actual time worked at the current job);
- 3) PhHS is the value of mixed physical abilities (PhHS₁ - results of standards in the workplace; PhHS₂ - pulse monitoring in the workplace; PhHS₃ - pressure in the workplace);
- 4) CSN is the value of innate cognitive skills (CSN₁ - training costs at the previous place of work; CSN₂ - work experience in the specialty; CSN₃ - level of education in the specialty);
- 5) CSA is the value of acquired cognitive skills (CSA₁ - training costs; CSA₂ - work experience in the current organization; CSA₃ - assessment of training

effectiveness by the manager; CSA₄ - labor productivity; CSA₅ - computer skills in the workplace; CSA₆ - time spent on training during the year);

- 6) CSH is the value of mixed cognitive skills (CSH₁ - continuity of learning; CSH₂ - participation in R&D; CSH₃ - economic impact of innovative proposals);
- 7) SESN - the value of innate behavioral characteristics (SESN₁ - satisfaction with working conditions at the previous place; SESN₂ - the number of comments, complaints, disciplinary actions);
- 8) SESA is the value of acquired behavioral characteristics (SESA₁ - digital literacy; SESA₂ - adaptability; SESA₃ - job satisfaction; SESA₄ - motivation; SESA₅ - teamwork; SESA₆ - career intentions; SESA₇ - number of labor discipline violations);
- 9) SESH - the cost of mixed behavioral characteristics (SESH₁ - the dynamics of disciplinary violations);
- 10) CIS - synthetic sub-dimensions related to the state of infrastructure and cultural capital (CIS₁ - human development index; CIS₂ - employee health; CIS₃ - level of professional education; CIS₄ - labor productivity; CIS₅ - economic efficiency; CIS₆ - loyalty index; CIS₇ - digital skills);
- ii) CIMASP is an integral indicator of infrastructure and cultural capital (CIMASP is the average salary received by an employee per year, calculated by the employer).

The explication of Model 2 is presented in Table 3.

Table 3

Sub-dimensions of the evaluation model in further reforming the human resource management system in the field of public administration

Group	Subgroup	Subdimension	Description.	Weight
Ph	PhNS	PhNS1	Actual time worked in the previous position in the public sector	2
	PhAS	PhAS1	Actual time worked in the current position in public administration	2
	PhHS	PhHS1	Physical fitness standards in the workplace	2
	PhHS	PhHS2	Pulse monitoring during the performance of official duties	2
C	CSN	PhHS3	Blood pressure readings in the workplace	2
		CSN1	Expenses for professional training in a previous position	2
		CSN2	Work experience in public administration by specialty	2
	CSN3	CSN3	Level of education that meets the requirements of the position	2

Group	Subgroup	Subdimension	Description.	Weight
CSA	CSA	CSA1	Professional training costs for the current position	2
		CSA2	Experience in the current position in the public sector	2
		CSA3	Evaluation of training effectiveness by the manager	2
		CSA4	Labor productivity in public administration	2
		CSA5	Computer skills in the workplace	2
		CSA6	Time spent on professional training during the year	2
CSH	CSH	CSH1	Continuity of professional training	2
		CSH2	Participation in research and development activities	2
		CSH3	Economic impact of innovative proposals in the public sector	2
SE	SESN	SESN1	Satisfaction with working conditions in the previous position	2
		SESN2	Number of disciplinary actions, complaints or penalties	2
	SESA	SESA1	Digital literacy in the performance of official duties	2
		SESA2	Adaptability to working conditions in public administration	2
		SESA3	Satisfaction with current position	2
		SESA4	Motivation to perform official duties	2
SESH	SESH	SESA5	Teamwork skills in the public sector	2
		SESA6	Career intentions in the public administration system	2
		SESA7	Number of violations of labor discipline	2
		SESH1	Dynamics of disciplinary violations	2
		CIS1	Employee human development index	1
		CIS2	Quality of employee health	0.45
		CIS3	Level of professional education	0.45
CI	CIS	CIS4	Labor productivity in the public sector	0.45
		CIS5	Economic efficiency of work	0.45
		CIS6	Index of loyalty to the organization	0.45

Group	Subgroup	Subdimension	Description.	Weight
	CIS7		Digital skills in the performance of official duties	0.45
CIMASP	CIMASP1		Average annual salary received by an employee in the public sector	-

Source: developed by the authors

The managerial elite and ensures the consistency and reliability of the assessment of human resources potential through the implementation of an integrated model that sets the maximum values of the coefficients of sub-dimensions in the groups of physical (Ph), cognitive (C) and socio-emotional (SE) characteristics in the range from 1.25 to 2, which, according to Murdiono et al. (2024), corresponds to the parameters applied to the assessment of general human resources, allowing not only to preserve the integrity of the assessment processes but also to ensure the validity of management decisions aimed at modernizing personnel policy in public institutions. As for the group of synthetic sub-dimensions of CI, the managerial elite ensures the use of coefficients that allow assessing the long-term impact of complex characteristics, while, unlike general human resources, the synthetic sub-dimensions of special human resources are limited to the period of active work, the average duration of which, according to statistics, is approximately 33 years, which corresponds to the coefficient of 0.45 used to take into account the partial contribution of these characteristics to the overall assessment structure, which allows clearly distinguishing. It should be noted that the levels of cognitive flexibility, stress resistance, and innovative thinking among civil servants peak in the middle of their professional lives and gradually decline after 30–35 years of career. This means that downward adjustment factors must be applied when modeling specialized human resources to avoid overestimating the later stages of professional activity. Second, in organizational sociology, there's a basis for thinking that the average length of an employee's "effective output" in a position is linked to the stages of their socialization, career mobility, and involvement in the management culture, which is usually limited to 30–35 years. This correlates with the estimated coefficient of 0.45. Third, we should emphasize that specialized skills have decreasing marginal returns over time, as technologies, regulatory requirements, and professional standards change rapidly. Therefore, the coefficient of 0.45 is interpreted as a factor that accounts for the depreciation of knowledge and competencies in public administration, thereby making the model more realistic and suitable for strategic planning of human resources policy. The proposed differentiation of weighting factors will allow the managerial elite to make informed decisions that account for the unique contribution of human resources to improving the efficiency of public administration, while ensuring the flexibility and adaptability of HR policy to the public sector's existing challenges.

Discussion

The study clearly demonstrates that the managerial elite plays a crucial role in transforming the human resource management system in the public sector, as its competencies and ability to initiate institutional changes directly affect the effectiveness of public HR policy. The data obtained are confirmed by modern theoretical concepts, in particular, by Castelo and Gomes (2024), who emphasize the

importance of strategic thinking of management to ensure sustainable organizational change, as well as by Holzer (2022), who emphasizes the rethinking of the role of civil servants as active participants in institutional development.

The scientific novelty of the work lies in the development of an integrated model for human resource assessment that goes beyond traditional formal indicators and covers a comprehensive analysis of physical, cognitive, socio-emotional, cultural and infrastructural aspects, which is consistent with the ideas of Grigorescu et al. (2021) on the need for a multidisciplinary approach to HRM, as well as the findings of Liu et al. (2024) on the importance of socially responsible management to improve the efficiency of already used human resources.

The key scientific contribution is the combination of system analysis and modeling, which creates opportunities not only to assess the level of effectiveness of HR strategies and transformations, but also to identify specific mechanisms of influence of the managerial elite on structural and procedural changes in the HRM system, thereby filling a gap in existing studies that have traditionally focused either on institutional aspects (Lipovska, 2023) or on the assessment of competencies without taking into account the strategic role of public administration (Demo et al., 2024).

The findings partially confirm the thesis of Sarker et al. (2023) on the systemic nature of reforms initiated by the managerial elite, detailing specific tools for their influence, such as the development of a regulatory framework, strategic programs, and performance indicators. At the same time, they contradict the conclusions of Kuhlmann and Bogumil (2021) about the lack of a link between centralization of decision-making and the effectiveness of HRM policy, since in the Ukrainian public sector, it is strategic coordination at the macro- and meso-levels that contributes to the effectiveness of HRM, which may be due to the peculiarities of the transitional management model. The practical value of the study lies in the fact that the proposed model can be integrated into the HR toolkit of public authorities to assess the current competencies of staff and to predict future needs, in particular in the context of digitalization and post-war recovery. In summary, the paper confirms that the managerial elite should be transformed from a passive administrator into an active strategist capable of innovation and long-term planning, which is in line with global trends in public administration (Goncharuk & Pyrohova, 2020; Zolak Poljasevic et al., 2025).

A comparative analysis has shown that institutional models of human resource management in EU countries, particularly in Poland, Estonia, and Slovenia, are characterized by more regulated competency assessment procedures, the presence of independent HR agencies, and the use of digital platforms for personnel analytics. While Ukrainian practice is still in its infancy, the integrated model proposed in the article demonstrates similar structural principles to European competency-based HRM approaches, which indicates its methodological compatibility with the EU public administration framework and its potential suitability for further harmonization of state personnel policy.

Conclusion

The study has established that effective interaction between the managerial elite and the human resource management system in public administration is a key factor in increasing public authorities' adaptability to changes in the socio-economic environment. The author analyzes the main institutional conditions faced by the managerial elite in reforming the personnel policy and considers conceptual approaches to its strategic renewal. Attention is paid to the need to harmonize human resource development strategies with national priorities for economic and social development, underscoring the importance of introducing human-centered management models into public service practice. A comprehensive model for transforming the personnel system has been developed, taking into account three key components: the formation, use, and development of human resources.

Based on a multi-factor analysis and the experience of other countries, a specialized human resources assessment mechanism has been created to integrate a comprehensive model into the strategies of government agencies. This mechanism is based on standardizing the stages of diagnostics, assessment, and personnel development. The research has shown that the use of HR-general and HR-specific models allows not only to assess the quantitative and qualitative characteristics of human resources, but also to design individual professional growth paths adapted to the challenges of modern public service.

The effectiveness of a six-step algorithm that combines expert assessments, functional diagnostics, questionnaires, and modeling for objective monitoring of civil servants' productivity is substantiated. It has been found that the use of threshold coefficients in the group of sub-dimensions (1.25 to 2 for the groups Ph, C, and SE, and 0.45 for CI) results in high assessment accuracy and validity in public administration. A methodology for distributing the impact of general and specialized sub-dimensions on the calculation of the human resource cost index is proposed, which accounts for the stages of a civil servant's professional life cycle and their contribution to institutional work. Thus, the study has confirmed the practical usefulness of the proposed model for creating an innovative, sustainable, and efficient human resource management system in the context of the civil service's transformation under the influence of the managerial elite.

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