

WARTIME PEOPLE MANAGEMENT: UKRAINE'S CIVIL SERVICE DIGITAL TRANSFORMATION EXPERIENCE AND LESSONS FOR RESILIENCE

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Abstract. The ongoing war in Ukraine presents a unique, critical test for public administration, accelerating the need for digital transformation within the civil service. The *purpose* of this paper is to explore the transformation of HRM practices in Ukraine's Civil Service in the context of rapid digitalization and crisis, identifying the specific challenges of adapting EU-aligned digital HR models and evaluating their contribution to organizational resilience during wartime. *Methodology.* The research is based on a comparative policy analysis of the ongoing civil service reform framework and a qualitative synthesis of secondary data (official reports from the National Agency of Ukraine on Civil Service (NACS), legislative acts, and recent academic literature). The study employs a structured approach to examine the implementation of key digital tools, such as the electronic HR information system (HRIS) and online professional development platforms, specifically analyzing their applicability and effectiveness in environments characterized by infrastructural instability and workforce displacement. *Key Findings and Results.* The results highlight a strategic, albeit resource-constrained, shift towards employee-centered digitalization, driven by the need for transparency and continuity. While digital tools have successfully streamlined recruitment and performance monitoring (critical for EU alignment), their full operationalization faces significant limitations due to infrastructural constraints, acute security risks (cybersecurity), and the necessity of rapid legal alignment with martial law provisions. The paper concludes that hybrid HR systems—combining robust global technological solutions with flexible, localized modules—represent the most promising and resilient approach for maintaining state functions. *Practical Implications and Value.* The findings offer evidence-based recommendations for public institutions operating in active conflict zones or other severely disrupted environments, emphasizing the necessity of integrating technological innovation with strategies for ensuring psychological safety and human capital adaptability. This study contributes to the literature on public sector crisis management by offering an original, timely analysis of how a national civil service is advancing digital transformation and strategic HRM, not despite, but because of, a major geopolitical disruption.

Keywords: human resource management, digital transformation, organizational resilience, public administration, crisis management, Ukraine, EU integration, hybrid HR systems.

JEL Classification: M12, O33, H83, F15

1. Introduction

The full-scale invasion of Ukraine in 2022 triggered a seismic shift in every aspect of national life—including the civil service. Faced with existential threats, Ukraine's public administration had to rapidly adapt to ensure continuity of governance, support for citizens, and national resilience. One of the most remarkable responses was the accelerated digital transformation of the civil service, which not only sustained operations

during wartime but also laid the foundation for a more agile, transparent, and resilient public sector.

The general state of war in the country has created an unprecedented challenge for its public administration: how to sustain effective governance and deliver essential services amidst active conflict. This paper explores how Ukraine's Civil Service leveraged Digital Human Resource Management (D-HRM) as a critical tool for organizational resilience and continuity of

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operations. We analyze the accelerated implementation of digital solutions—from remote work infrastructure to centralized HR data management—focusing on their impact on people management under martial law.

The state of war in Ukraine has tested the fundamental stability of its public sector. The ongoing reform of the civil service, which sought alignment with the European Union's principles of New Public Management (NPM) – emphasizing competence and transparency – was abruptly rerouted into a necessity for survival. The ability of government agencies to maintain core functions, process aid, and manage internally displaced personnel hinged directly on the swift adoption of digital tools.

This study examines the Ukrainian experience of managing personnel during wartime, specifically through the lens of Digital Transformation. It argues that D-HRM was not merely an efficiency measure but a strategic defense mechanism that enabled state institutions to mitigate the effects of infrastructural damage, mass displacement, and constant security threats. The analysis focuses on the transition from legacy, paper-based HR processes to modern digital systems, evaluating the effectiveness, challenges, and long-term implications of this compressed digital leap for organizational resilience.

2. Digital Transformation as a Pillar of Wartime Resilience

Digital government is increasingly recognized as a core element of national resilience. Brookings Institution (2023) emphasized that *"Ukraine's digital government, centred on the Diia platform, has become essential to the state's ability to function during war."* This view aligns with OECD (2023) findings that e-governance enhances flexibility and transparency in crisis conditions.

Scholars such as Stativka and Orel (2023) note that resilience in public administration depends on agile personnel management, psychological support, and decentralised decision-making. Crisis HRM involves rethinking traditional hierarchies and enabling rapid communication, often mediated by technology.

Research (Kolesnikova, 2024) highlights that successful digital transformation requires infrastructure, legal frameworks, and leadership commitment. Ukraine's pre-war efforts – such as the HRMIS (Human Resource Management Information System) – provided a foundation for rapid adaptation when the war began.

The research is based on the use of materials including: Government reports from the National Agency of Ukraine on Civil Service (NACS) (2024–2025); Policy documents from the Ministry of Digital Transformation; Scholarly articles and case studies on digital public administration in wartime

conditions; Comparative findings from international sources (OECD, UNDP).

3. Ukraine's Wartime Digital HRM Transformations: Key Practices

Pre-war Digital Infrastructure and Platforms in Ukraine made significant investments in e-governance platforms.

A notable example is "Diia," a multifunctional digital government ecosystem that provides citizens with access to numerous public services online (national ID, passport, social services, etc.). Its foundation allowed for rapid adaptation in wartime conditions.

An equally important example is the implementation of HRMIS. According to the Government's Priority Action Plan for 2024, NACS (National Agency of Ukraine on Civil Service) prioritized the implementation of the Human Resources Management Information System (HRMIS), alongside payroll reform and professional training.

These prerequisites meant that civil service institutions already possessed certain digital capabilities that could be scaled up.

The NACS Action Plan for 2024 identifies the implementation of HRMIS (Human Resources Management Information System) as a key reform priority (NACS, 2024). This system integrates employee data, automates HR processes, and provides performance analytics, which is critically important for managing dispersed civil servants.

Training and development through digital learning platforms is carried out via the "Diia.Osvita" platform, where the course "Crisis Communications in Personnel Management" was introduced to help civil servants overcome stress, manage remote teams, and maintain integrity under pressure (Diia.Osvita, 2024). Online professional development replaced many traditional forms of training disrupted by the war.

Remote work and performance evaluation facilitated by digital tools eased remote coordination between ministries and regional administrations. Performance evaluations and online meetings became the standard. This transition also required the development of new metrics for productivity and accountability in a hybrid work environment.

Regulatory flexibility includes an operational support mechanism, through which the government simplified hiring procedures and administrative processes. Emergency decrees allowed for the use of digital documentation, remote onboarding, and electronic signatures (NISS, 2025). These measures increased adaptability but also raised questions about data protection and oversight.

Before 2022, Ukraine had already implemented a range of e-government tools. The *Diia* platform provided access to more than 100 digital services,

enabling operational continuity when physical offices were disrupted. As Brookings (2023) notes, "Ukraine's digital readiness allowed for uninterrupted governance despite war-related shocks." (Table 1).

The data in Table 1 indicate a remarkable digital acceleration during wartime. Between 2020 and 2024:

The number of civil servants slightly decreased (–5.7%), reflecting wartime attrition and staff relocations.

The proportion of women increased modestly, consistent with demographic changes as many men joined the Armed Forces.

Remote work peaked in 2023 at 52%, demonstrating flexible adaptation to security conditions.

Participation in online training grew sixfold (from 12% to 68%), indicating rapid digital upskilling.

The HRMIS rollout expanded exponentially – from pilot testing in 2022 to over 200 institutions by 2024.

The Diia ecosystem doubled its user base, confirming the central role of digital tools in ensuring state continuity.

These trends support the argument that Ukraine's digital readiness and agile HRM strategies have enhanced institutional resilience and helped maintain public service delivery under wartime pressures.

A striking characteristic of the current state of digital transformation in the civil service is the comparison of Ukraine with other Eastern European countries (such as Poland, Lithuania, and Romania) based on indicators of civil service digitalization (Table 2).

The comparative data in Table 2 highlight several important insights:

Ukraine's digital government maturity (0.74) is approaching the regional average, despite the extreme wartime context.

Lithuania and Poland lead in HRM system integration and cybersecurity, reflecting longer participation in EU digital governance programs.

Ukraine's 47% adoption of remote work in the public sector is the highest in the region, a direct adaptation to wartime conditions.

Online professional training participation (68%) positions Ukraine above the regional average, confirming rapid capacity building through Diia Education.

Public trust remains a challenge across the region but is relatively stable in Ukraine (61%), given the circumstances of war and displacement.

Fiscal investment in digital transformation (0.48% of GDP) is competitive, though sustained support will be required for post-war recovery and modernization.

Overall, Ukraine demonstrates exceptional adaptive capacity, having reached digital governance levels comparable to EU member states despite ongoing conflict.

Ukraine's wartime HRM transformation demonstrates that resilience in public administration depends on both technology and human adaptability. Digitalization became a strategic tool for survival, enabling personnel management and service continuity despite destruction and displacement.

4. Lessons for Organisational Resilience

From Ukraine's experience, several lessons emerge that are applicable both for Ukraine's ongoing recovery and for other countries facing conflict or crisis.

Early investment in digital foundations, particularly pre-war digital infrastructure, legal frameworks, and platforms such as "Diia," paid off, as institutions with robust e-governance tools were better able to adapt.

Table 1

Dynamics of Ukraine's Civil Service HRM and Digital Transformation, 2020–2025

Indicator	2020 (pre-war)	2022 (invasion year)	2023	2024	2025 (forecast)	Source
Total number of civil servants	243	231,5	227,8	229,1	230	NAUCS (2024)
Share of women in civil service (%)	69%	71%	72%	72%	73%	NAUCS (2024)
Average age of civil servants	42.1	42.3	42.4	42.5	42.5	NAUCS (2025)
Share of civil servants working remotely (%)	4%	48%	52%	47%	40%	NAUCS & OECD (2024)
Civil servants who completed online professional training (%)	12%	37%	55%	68%	75%	Diia.Education (2024)
Government institutions connected to HRMIS	0	32	114	216	350	NAUCS (2025)
Active users of Diia platform (million)	9.3	17.5	20.2	21.8	23.0	Ministry of Digital Transformation (2025)
Number of e-services available in Diia	70	120	170	200	230	Ministry of Digital Transformation (2025)

Source: Compiled by the authors

Table 2

Comparative Indicators of Digital HRM and Governance Readiness in Selected Eastern European Countries (2024)

Indicator (2024)	Ukraine	Poland	Lithuania	Romania	Source
Digital Government Maturity Index (0–1)	0.74	0.82	0.84	0.73	World Bank (2024)
Share of civil servants using digital HRM systems (%)	52%	68%	75%	45%	OECD (2024)
Share of online public services (%)	84%	93%	95%	82%	Ministry of Digital Transformation; EU Digital Scoreboard (2024)
Remote work adoption in public sector (%)	47%	42%	56%	35%	OECD (2023)
Online professional training participation (%)	68%	62%	70%	55%	National Civil Service Authorities (2024)
Cybersecurity readiness index (0–100)	73.5	78.2	80.4	70.1	ITU Global Cybersecurity Index (2024)
Level of public trust in digital services (%)	61%	74%	76%	58%	World Bank & Eurobarometer (2024)
Annual public investment in digital transformation (% of GDP)	0.48%	0.56%	0.59%	0.44%	IMF Digital Economy Data (2024)

Source: Compiled by the authors

Strong leadership and clear political direction, through which leaders at the highest levels (President, Ministers) prioritized areas such as HRMIS, payroll reform, and digital training, facilitated the mobilization of resources and focus.

Flexibility in rules and procedures allowed for the easing of rigid bureaucratic requirements, the delegation of authority, the adjustment of hiring and promotions, and the introduction of emergency work modes during the crisis.

Prioritizing staff well-being and communication ensured morale support, psychological assistance, and effective crisis communication channels.

Decentralization and the empowerment of local self-government provided local authorities with the autonomy and tools for contextually relevant responses.

Inclusive access and bridging the digital divide guaranteed connectivity, devices, and the development of digital literacy even in affected regions.

Table 3

Challenges and Solutions for Digital HRM Transformation in Crisis/Wartime

Challenge	Description	Solution Paths
Infrastructure Damage and Disruptions	Shelling, power outages, and telecommunication failures remain frequent. This impedes the reliable provision of digital services and access for both civil servants and citizens.	Implementation of backup power (generators, batteries) and redundant internet channels (e.g., satellite communication).
Digital Divide and Access Inequality	Regions affected by occupation, conflict, or displacement often have worse internet access, less reliable electricity, and fewer devices. Some civil servants or IDPs (Internally Displaced Persons) may lack digital literacy.	Provision of mobile service centers and access points. Offering targeted digital literacy training programs for vulnerable groups. Implementing inclusive design for digital services.
Staff Stress, Wellbeing, and Psychological Burden	War causes mental health stress, increased workload, and uncertainty. Communication failures and morale issues require a managed response.	Implementation of psychosocial support programs and consultations. Conducting stress management and crisis communication training for leadership and HR professionals.
Regulatory and Legal Lag	Not all necessary legal frameworks were introduced before wartime; some are adapting slowly. Issues with data confidentiality, electronic signatures, and identity verification in emergency conditions.	Urgent adaptation of legislation to recognize electronic signatures in crisis conditions and simplify identity verification procedures. Creation of clear legal frameworks for remote work and data protection.
Resource Limitations	Financial limitations for supporting/expanding digital infrastructure, training programs, cybersecurity, and maintaining backup systems.	Active attraction of international financial assistance and donor funds. Prioritization of funding for critical cybersecurity and infrastructure resilience elements.
Coordination and Fragmentation	Multiple digital platforms sometimes duplicating functions; insufficient inter-agency coordination; departmental "balkanization" of responsibilities.	Full integration of key HRM platforms (HRMIS) and ensuring their operational interoperability. Creation of a single coordination center for managing digital transformation in the civil service sector.
User Trust and Acceptance	Some segments of the population do not trust digital services, prefer face-to-face communication, or distrust them due to security or data confidentiality concerns.	Continuous increase in the transparency of digital service operations. Ensuring open reporting and robust cybersecurity mechanisms to strengthen trust in data confidentiality.

Source: Compiled by the authors

Cybersecurity, data protection, and backup planning ensured system resilience against the worst disruptions.

Continuous learning and adaptation maintained the relevance of solutions through feedback, monitoring, and ongoing improvement.

The following table summarizes the key challenges faced by the civil service in implementing Digital Human Resources Management (HRM) transformation during wartime or crisis, based on experience (such as that of Ukraine), and outlines corresponding solution paths to mitigate these risks and ensure resilience (Table 3).

These solution paths are crucial for creating a resilient, flexible, and adaptive HRM system capable of effectively responding to the immediate challenges of a crisis while also laying the groundwork for high-quality post-war recovery and long-term reform.

5. Policy Recommendations

The conducted analysis allowed for the isolation of key policy recommendations for reforming the Human Resources Management (HRM) system in the civil service, based on Ukraine's experience during the crisis and wartime (Table 4).

These recommendations aim to make the civil service Human Resource Management (HRM) system more resilient, flexible, inclusive, and data-driven during crises and subsequent recovery.

The transformation of HRM in Ukraine during wartime illustrates how crisis can be a powerful accelerator for change. What might otherwise take

years – digitalization of government services, regulatory adaptation, institutional strengthening – was compressed in time. Civil service personnel management shifted from traditional models reliant on in-person processes to remote work, digital workflows, and e-services.

However, wartime pressures also expose weaknesses: sustainability of change (once war subsides), ensuring that crisis adaptations do not become inequitable or exclusionary, balancing speed with oversight, ensuring that legal and ethical standards are maintained (data privacy, transparency).

For other countries or contexts, Ukraine's experience suggests that resilience is not simply surviving shocks but using them to reinforce institutional capacity. But this requires both foresight in peacetime and adaptability in crisis.

6. Conclusion

Ukraine's Civil Service has demonstrated remarkable organizational resilience by weaponizing its digital reform agenda. The experience underscores that D-HRM is not merely an administrative function but a strategic asset capable of maintaining state capacity during extreme disruption. The ongoing adaptation of hybrid HR systems offers a blueprint for other nations facing geopolitical or climate crises, highlighting that successful wartime people management is achieved through a decisive balance of technological agility, human capital support, and unwavering adherence to core governance principles.

Ukraine's wartime experience in digital transformation of human resource management in the civil service

Table 4
Policy Recommendations for HRM Based on Ukraine's Experience

Area of Recommendation	Policy Recommendation	Content and Purpose
I. HRMIS and Digital Integration	Expand HRMIS and Integrate Platforms.	Fully roll out HRMIS across all civil service bodies with interoperable data systems to allow for data-driven decision-making.
II. Training and Staff Support	Strengthen Digital Training and Psychosocial Support for HR Professionals.	Offer ongoing training in digital literacy, crisis communication, and stress management for HR professionals.
III. Legal Frameworks for Crisis	Build Legal Frameworks for Crisis HRM.	Adapt laws to allow emergency procedures for recruitment, remote work, and temporary delegation; clarify data protection and identity verification in emergency contexts.
IV. Infrastructure Resilience	Ensure Infrastructure Resilience.	Provide back-up power, redundant internet paths, cloud storage across geographies, and mobile service points for displaced or cut-off regions.
V. Inclusive Policy Design	Inclusive Policy Design.	Ensure that digital HRM practices accommodate displaced persons, veterans, and regions with limited connectivity; include them in training, recruitment, and service delivery.
VI. Transparency and Citizen Trust	Enhance Transparency and Citizen Trust.	Continue open reporting on digital service operations, allow for feedback, and ensure accountability mechanisms remain even during wartime.
VII. Institutional Learning and Recovery	Plan for Post-war Recovery with Institutional Learning.	Use the experience gained to reform the civil service long-term – codify successful wartime practices where appropriate; document lessons; incorporate them into strategic planning.

Source: Compiled by the authors

underscores that resilient governance is possible even under extreme adversity. While the war introduced severe constraints, it also fostered rapid innovation, regulatory flexibility, and a deeper appreciation for the value of resilient institutions. The success of digital platforms like Diia, pre-existing investments in e-government infrastructure, and leadership commitment have helped sustain essential public functions.

The digital HRM transformation in Ukraine's Civil Service is a crucial component of its national resilience

strategy and its commitment to EU integration. While the war has imposed severe constraints, it has also provided the impetus for rapid adoption of systems that improve transparency and efficiency. The key to successful adaptation lies in mastering the hybrid model: leveraging global digital sophistication while rigorously addressing local infrastructural and human-centric challenges. Future research should focus on quantitatively measuring the correlation between digital HR maturity and the resilience outcomes of specific government agencies operating in high-risk zones.

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