

INNOVATIVE HUMAN CAPITAL MANAGEMENT PRACTICES IN THE SECURITY AND DEFENSE SECTOR: CHALLENGES FOR PUBLIC MANAGEMENT

OKSANA BASHTANNYK

DNIPRO UNIVERSITY OF TECHNOLOGY, DNIPRO, UKRAINE ORCID: 0000-0003-4067-3261

LIUDMYLA AKIMOVA

NATIONAL UNIVERSITY OF WATER AND ENVIRONMENTAL ENGINEERING, RIVNE, UKRAINE ORCID: 0000-0002-2747-2775

NINA PETRUKHA

KYIV NATIONAL UNIVERSITY OF CONSTRUCTION AND ARCHITECTURE, KYIV, UKRAINE ORCID: 0000-0002-3805-2215

DIANA ZAYATS

LVIV POLYTECHNIC NATIONAL UNIVERSITY, LVIV, UKRAINE ORCID: 0000-0003-0945-6971

BOHDAN HUDENKO

STATE EDUCATIONAL AND SCIENTIFIC INSTITUTION "ACADEMY OF FINANCIAL MANAGEMENT", KYIV, UKRAINE
ORCID: 0000-0003-2246-7130

OLEKSANDR AKIMOV

INTERREGIONAL ACADEMY OF PERSONNEL MANAGEMENT, KYIV UKRAINE / SCIENTIFIC AND METHODOLOGICAL CENTER FOR PERSONNEL POLICY OF THE MINISTRY OF DEFENSE OF UKRAINE ORCID: 0000-0002-9557-2276

Abstract

In today's environment, characterized by dynamic changes in the security and defense sector, as well as increasing competition for qualified personnel, innovative human capital management practices are becoming increasingly important. Effective human capital management is becoming a key success factor for organizations in these sectors, ensuring their ability to adapt to new challenges, implement innovations and perform their tasks at a high level. In this article, we examine the challenges defense (military) and national security organizations face today in terms of their HRM policies and the effect of the institutional environment and strategy on these policies. We start by providing a summary of how HRM has changed over time in certain industries, how it is now understood, and some broad theories within the HRM field. For instance, the internal and external environments of defense and security firms have changed in recent years, which presents significant issues for organizational fit and personnel policies. We outline the relevant prospects and vectors and talk about how defense and security businesses have responded to these problems.

Keywords: Security, Human Resource Management, Competences and Public Administration, Talent Management, Military Learning Organization.

INTRODUCTION

Correspondence concerning this article should be addressed to Oksana Bashtannyk, Doctor of Sciences in Public Administration, Associate Professor, Associate Professor, Department of History and Political Theory, Dnipro University of Technology, 19, Dmytra Yavornytskoho Ave., 49005 Dnipro, Ukraine, Bashtannyk0V@nmu.one

In the contemporary global environment, defense and security face several difficulties, such as managing complex systems, adjusting to changing threats, and dealing with resource limitations. The resurgence of major



power competition, the speed at which technology is developing, and the interdependence of global security all contribute to these difficulties. Due to the complexity of geopolitical processes and the growing number of stakeholders involved, rapidly changing hybrid threats, and the increasing unpredictability of armed conflicts occurring in different parts of the world, security and defense organizations must become more agile and efficient in their decision-making and action. This therefore necessitates giving the HRM system and staffing particular consideration.

Employees at national security and military agencies are essential in managing procedures, advising leadership, and making sure policies are carried out. Their contributions cover a wide range of topics, such as interagency collaboration, crisis management, and policy development — all of which are critical to preserving national security (Kurnia et al., 2023). Security and defense companies try to implement innovations in HRM procedures to make sure they are in line with the aforementioned environment.

In order to handle changing threats and technological breakthroughs, the defense industry's innovative human resource management (HRM) strategy aims to draw in, nurture, and keep top personnel while simultaneously encouraging a culture of creativity and adaptation. This entails making use of modern tools, encouraging inclusivity and diversity, and guaranteeing moral leadership.

In addition, an organization's HRM strategy should, at the very least, be somewhat in line with national standards and beliefs about the employer-employee relationship. In addition to determining which HR policy should be implemented, an organization's strategy also affects which HR policies are practical and which are not. There is no right or wrong course of action, according to the strategic fit; instead, each organization should think about what is best for itself. People's attitudes, actions, and thoughts must also change for the strategy to be effective. This calls for effective and adaptable personnel management, even in the military. For instance, the US military's HRM system in 1997 was primarily created to inspire staff members using traditional personnel management procedures (strong hierarchy, promotion selection, retention screening, evaluation, and primarily extrinsic individual rewards). In order to maximize the "fit," a study conducted in the USA showed that greater differentiation was required to respond and adjust to outside influences. As a result, it was advised that hierarchical authority not compromise the potent system of intrinsic rewards and motivation (Buijs & Olsthoom, 2024). Since many employees depart on a regular basis and there are many openings, it was recently discovered that the Netherlands' flexible HRM system is not very flexible when it comes to flexible working arrangements and retaining talented persons (Ministry of Defense, 2020). Given the current internal and external issues facing the military, the system is no longer an appropriate match.

Therefore, many future military scenarios have varying effects on HR policies and tools, including outsourcing, professionalization, development, and recruitment. The following factors should be taken into account: (1) the organization's public responsibilities and societal norms; (2) governmental pressure and expectations regarding HR policies; (3) the organization's legal responsibility and employee privileges; and (4) the local labor market situation, including the level of labor mobility and the potential of new hires on the labor market (e.g., Boselie, 2014). The question of what it means to be a publicly funded and politically controlled organization in terms of personnel policy looms large over all of this. According to Boselie (2014), a high-performance approach is one that emphasizes the significance of consistency in an organization's environment and strategy.

Thus, investigation of the state-of-the-art, best practices, effective patterns, failures and pitfalls in the field of innovative human capital management practices in the security and defense sector represent highly relevant task for public administration science and practice.

LITERATURE REVIEW

In essence, human resource development is the process of developing people as both an object (human resources) and a subject (human capital) of national development. For employees, value encompasses not only cash but also non-monetary rewards like identification, use value, and accomplishments (Meijerink & Bondarouk, 2018). Because human resources can be empowered with reason, sentiments, talents, skills, and knowledge that can develop sustainably, they are the most significant resource and the most decisive factor in civilizational evolution. The ability of a nation to transform its resources into useful military tools should always be connected to its capacity to increase its defensive forces. For a business to survive in this environment, it is crucial to comprehend human resource management in strategic agility (Ahammad et al., 2020), particularly when talking about the nation's military initiatives.

Researchers stress that creative solutions are needed to continuously adjust to opportunities and risks as the type and degree of dynamic environmental change develops (Weber & Tarba, 2014). Policies in human resource management can be adjusted to address threats when they arise, but crisis preparation is more successful when it is planned for (Williams et al., 2017).

Organizations and leadership that can adapt and accommodate changes, as well as a professional attitude reflected in a high level of proficiency supported by a highly selective recruitment system and a dynamic work environment, determine the effectiveness of defense resource management (Cutic, 2023).



According to the literature, the following elements are said to have an impact on the development of human resource competencies in defense: personal beliefs and values, attitudes toward oneself and others, competence-related skills, experiences, individual personality traits, motivations, intellectual prowess, and organizational culture (Setiawan, 2024). In addition to elements that support the nation's defense efforts, such as the function of mass media, communication systems, and optimized public information in supporting the implementation of social capabilities for the success of state defense efforts, social capabilities can be developed through education, health, disaster management, and legal compliance (Arifin & Tajudeen, 2020). In addition to being evident in the growth of human resources, the development of defense equipment also demonstrates an increase in professionalism. Three strategic factors must determine the availability of defense technology: a) the existence of threats; b) outdated, dangerous, damaged, or modernized defense equipment programs; and c) the foundation of long-term, macro-level plans for project funding and execution. The development of cutting-edge technology in accordance with the profession and for the sake of national defense enables reserve and supporting components to become more professional through increased competency. In order to establish an HR network that can be empowered for the benefit of national security, human resources, as actors in science, technology, and the defense sector, are required to be able to catalog all types of threats, both military and non-military.

Two major elements make up workforce capability, according to Australian academics. One essential element of capability is workforce "demand", which is the Defense Department's desire for particular numbers and competencies. For instance, the Strategic Workforce Planning Review acknowledges that the challenge is to shift the (demand side) distribution of people, components, and competences across the necessary capabilities (Nguyen, 2022). The civilianization of certain military jobs, the role of approximately 16,000 Defense Australian Public Servants (APS), and the use of private sector workers or Professional Service Providers to cover front-line positions in lieu of both APS and Australian Defense Force (ADF) personnel are among the issues. The impact of technology is also important; for instance, convergent technology may make projects more competitive for the same skills and personnel. These demand-side developments will affect workforce predictions, necessitate decisions in the Defense Capability Plan, and overwhelm any offsets that may result from decommissioning assets or enhancing capabilities.

The Skills Priority List for Australia includes a number of skill types identified by the National Skills Commission (2021). There is a nationwide scarcity of competent workers in Australia, particularly in industries like engineering, ICT security, and intelligence. In addition, there will be a high demand for these occupations in the future, thus Defense will always have to contend with rival companies for a relatively small pool of skilled workers.

These skill sets are transferable, even though the ADF, and the Army in particular, currently has a pool of competent experts in these fields. According to Groysberg et al. (2008), Gary Becker defines mobility as universal human capital that can be transferred to several employers. The defense industry, which is expected to continue to be a significant market competitor for the skill sets required to confront the future adversary, is frequently contracted to develop new sovereign capabilities.

The ability of businesses in the industry to offer possibly better value propositions than those offered by the ADF also poses a challenge to these labor economic concerns. Defense has been sluggish to react to industry practices, even while it recognizes the use of flexible work initiatives and the Total Workforce System to allow for increased workforce flexibility.

The ability to create and comprehend a competitive positioning strategy - which Boudreau and Ramstad (2007) define as the distinct value proposition offered to the market - is one of the ADF's main challenges. The demographic of the job pool that the ADF hires for makes it even more difficult to create and comprehend this value proposition (Abernethy, 2018).

Targeting and addressing the intrinsic motivators of the workforce is one way to provide relevant value propositions to both present and prospective service members. According to strategic workforce reporting and analysis (The State of Australia's Defence, 2022), there has been a 20% increase in separations over the past 12 months in certain categories, such captains, compared to the preceding three years. This poses serious problems for the Army and its future, especially if these patterns persist and the job market is still quite competitive.

McKinsey (2017) asserts that military organizations should employ a variety of strategies and tactics to find and hire qualified personnel. The first and most crucial step in the talent retention management process is hiring a talent pool. The applicants in the talent pool have the potential to be commanders and leaders of the command structure that will oversee military operations and battle. They uphold the necessary competitive criteria for state security provision and protection. Al Ariss (2014) asserts that there are two ways to cultivate talent: internally and externally. It is strongly advised that units and formations in military organizations use internal selections. The officers are already familiar with the organization's structure, operations, and culture (Baporikar, 2021). According to Joffrion and Wozny (2015), military groups operate in a variety of ways. Consequently, hiring from outside will necessitate spending money on training and development so that staff



members are familiar with the system. However, the fact that leaders do not recognize their potential will deter prospective officers. For instance, before an officer in the Namibia Defense Force can wear a uniform or carry out any military duties, they must be commissioned by the Chief in Command, who is the President of the nation (MOD, 2016). Before being commissioned, the individual will remain there for years if there are no training resources available.

Nowadays, a lot of academics stress the importance of using novel HRM practices from the corporate sector that have been shown to work (Badea et al., 2015; Mazilu, 2024). Talent management via talent marketplaces is one of the suitable vectors. There are already real-world examples. A significant breakthrough in the U.S. defense and security industry is the introduction of a platform driven by artificial intelligence to find and match talent throughout the combined force. One of the transformative projects of the Defense Innovation Unit is the GigEagle platform, which combines the phrase for a temporary employment opportunity with the eagle from the Defense Department's renowned heraldry. It matches Reserve and National Guard troops with jobs that best suit their whole skill set, including in-demand skills from civilian jobs. Such adoption is likely to continue, and much like the business sector adopted military-style management at the end of the 20th century, the defense and security sectors are now adopting and introducing HRM practices from commercial companies, which enhances their respective knowledge bases and efficiency in human capital management. Nevertheless, the studies within the field of human capital management in defense and security sectors are predominantly scattered and exclusively nation-specific, which necessitates further deepening of the research and application of systemic approach.

METHODS

In this work, the authors employed a descriptive method based on a literature study methodology. In both qualitative and quantitative research, literature reviews can shape one's mindset. Through narrative review, we employ qualitative literature review (Suárez et al., 2017). Data and relevant information regarding human resources in the defense and security domains are gathered as part of the literature study.

The fact that a narrative review, sometimes referred to as a traditional or literature review, is a kind of review article that synthesizes and summarizes previous research on a particular issue, frequently offering a more comprehensive overview and interpretation of the literature, dictates the approach choice. Narrative reviews may be more subjective in their analysis and synthesis and do not adhere to the same rigorous process as systematic reviews. One kind of knowledge synthesis is narrative reviews (Sukhera, 2022). A narrative review might incorporate a wide range of studies and offer an overall overview, along with interpretation and critique, whereas a systematic review typically concentrates on a single subject in a particular context and follows a predetermined procedure to synthesize data from related studies. Due to above-mentioned scattered and narrow-focusing nature of the studies within the field under consideration, narrative review was seen by us as the optimal tool for systematization of available provisions and findings.

The overall sample of literature sources chosen for analysis in ScienceDirect, Wiley, JSTOR databases, as well as RAND archive and direct search in Google search engine included 32 items.

RESULTS AND DISCUSSION

Historically, the military industry has relied heavily on innovation. Several disruptive technologies, like robotics, artificial intelligence (AI), and the internet of things, have increased this intensity throughout the past ten or so years. A severe lack of skills to keep up with these technical advancements is being caused by the rapid advancement of these technologies combined with young workers' generally low interest in the military industry (Andriyiv et al., 2022). Hence, it is necessary to concentrate on making the defense industry more dynamic, to encourage the development of particular technical and transversal skills in the present and future workforce to deal with the ongoing technological evolution, and to develop a strategic vision for future skills to comprehend how education and training can meet industry's demands for skilled human resources. The ASSETS+ project, introduced by the European Commission, aims to develop a strategy to reskill and upskill professionals as well as attract new talent to the defense sector (Popovych et al., 2022; Bashtannyk et al., 2024). This strategy includes designing and developing training programs that are in line with actual industry needs, based on the identification of the skills that the defense industry needs, and standardizing the priority job profiles related to the emerging technologies identified in the project (Semenets-Orlova et al., 2022; Arivazhagan et al., 2023). Aiming to create a sustainable supply of qualified human resources, this strategy for developing human resources (HR) for defense is a component of the ASSETs+ sector Skills Strategy. It gives defense companies access to qualified professionals who will help them overcome the challenges posed by technological evolution and demanding socio-economic contexts, such as those that Member States and industrial ecosystems across Europe are currently facing (Nogueira et al., n.d.).

Based on the findings of the analysis carried out under ASSETs+ Work Package 1 (WP1-Technology and Skill Analysis), ASSETs+ will create training programs to be included in a European Defense Qualification System (targeting students from Vocational Education and Training (VET), graduate and undergraduate



students from Higher Education (HE), and professionals seeking to upskill. These programs will be validated by important industry stakeholders to guarantee their alignment with the most recent developments in the defense sector.

The EDSP strategy (European Defense Skills Strategy 2020–2024), which is a collection of implementing activities and supporting actions that are in line with specific goals and address key defense gap drivers such as low defense investment, skills mismatches, and demographic challenges, will be expanded upon by the ASSETs+ strategy for Skills for Defense in order to match the supply and demand of skills. Additionally, it will be based on particular ASSETs+ findings (Nogueira et al., n.d.):

- a. Potential application domains are identified, technologies are mapped to those applications, and pertinent technologies are identified, scored, and categorized as part of the Defense Technology Roadmap (R1.2).
- b. The ASSETs+ project's three categories are identified by the Skill Blueprint (R1.3), which classifies technical, defense-related, and transversal skills according to qualitative and quantitative metrics pertaining to levels of specialization, knowledge, and labor market demand.
- c. Fiches (R1.6), which lists a number of initiatives, strategies, and best practices implemented at the national, regional, and European levels that may contribute to the advancement of skills for the defense sector.

In the meantime, as it increases production and innovation to tackle escalating security problems, the European military industry is facing an unprecedented need for talented labor. Despite supporting about 581,000 employments and generating €158.8 billion in revenue in 2023, industry executives caution that it is getting harder to meet the growing need for talent (Soler, 2025).

Both Europe and other regions continue to face these issues. After more than ten years of concentrating on updating doctrine and equipment, the Gulf Cooperation Council's (GCC) armed services in particular realize the need to focus on human capital development. Military human resources (HR) models that attract, retain, and train personnel to have the necessary capabilities during service and subsequently prepare them for retirement are necessary for GCC forces to benefit the most from this modernization (Borysenko et al., 2025; Berezniak et al., 2025). Rather, morale, motivation, and performance issues are currently plaguing GCC forces. Because it is more difficult to "buy" military human capital than military weapons, they lack individuals with the requisite capabilities (Modernising GCC military HR models, 2018). The governments of the GCC place a strong emphasis on the need to change military HR practices in order to draw in the best personnel, train them appropriately, make better use of them, and facilitate their reintegration into society after retirement. In addition to providing the skills needed in conditions of increased security and growing need for advanced capabilities, this will boost morale (Avedyan et al., 2023; Byrkovych et al., 2023). Military HR models that flexibly assign careers to boost productivity and efficiency, offer attractive pay scales linked to skills and responsibility, encourage mental and physical health, use more flexible recruitment, and guarantee that retirees are properly assimilated into civilian life are all necessary for GCC militaries to accomplish this (Gupta et al., 2024; Ferdman et al., 2025). These approaches aim to empower service members to take charge of their careers, promote professional and academic growth, and tie promotions to performance.

Military HR models are under unsustainable expectations due to geopolitical and military trends. Figure 1 illustrates the burden on GCC military human capital.

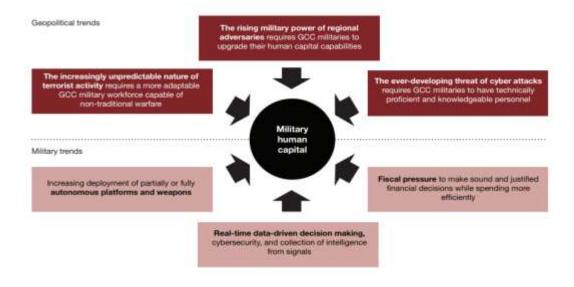


FIGURE 1 GCC MILITARY HUMAN CAPITAL CHALLENGES (MODERNIZING GCC MILITARY HR MODELS, 2018)



Meanwhile, the aforementioned GCC-context report's key finding is that military HR approaches from the past are unable to cope with operational demands. During a period of rather calm and stable conditions, GCC forces created their military human resources models. The speed of military operations and the speed at which technology is developing nowadays are too much for these models to handle. Actually, this applies to many nations, not just the GCC.

The life cycle of military personnel demonstrates the shortcomings of the military HR paradigm during peacetime. In addition to having a less appealing hiring process than civilian alternatives, the current military HR model fails to provide personnel with the professional skills necessary for their military careers, utilizes them to the fullest extent possible, and fails to adequately prepare them for their transition to civilian life upon retirement (Nekhai et al., 2024; Maidaniuk et al., 2025). Additionally, hiring is less tempting than in the private sector, and GCC military only hire entry-level workers who subsequently receive cadet training (Smolinska et al., 2024). When compared to the skills that businesses teach those entering the private sector, the standard military abilities provided by this initial training are unappealing (Kichurchak et al., 2024; Mykolaichuk et al., 2025). Over the course of a career, personnel either receive training for future specializations or do not receive any training at all. The U.S. military, on the other hand, hires entry-level staff and searches for prospective officer recruits who have college degrees in a variety of fields, so the intake is broad from the start.

The GCC defense and security sector must develop, carry out, and evaluate the implementation of a new military HR model. Every element of the new military HR approach incorporates long-term planning and data-driven performance management (Ortina et al., 2023). Every component of the defense industry, including the military, the ministry of defense, and the privately and publicly held defense sectors, will require a unique human resources strategy. Every organization in the military industry will need to create its own career pathways (see Figure 2).

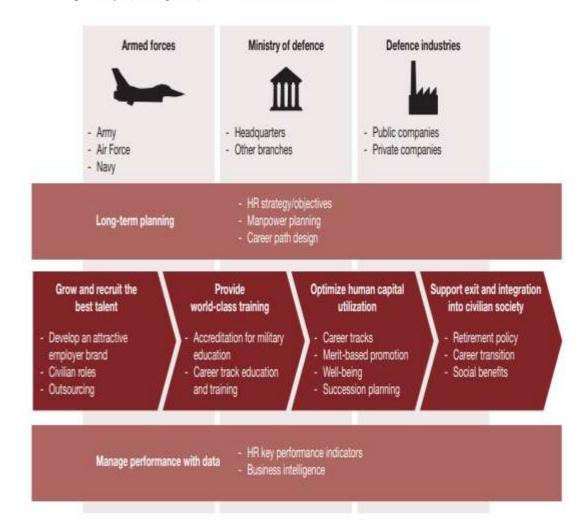


FIGURE 2 A NEW MILITARY HR MODEL SUGGESTED IN GCC (MODERNISING GCC MILITARY HR MODELS, 2018)



A new, four-step military HR model that develops defense human capital must be implemented by every department in the defense industry.

The contemporary geopolitical environment and battlefield necessitate the use of contemporary talent management solutions. Updating backend technologies is no longer the only aspect of modernizing HR administration; building a platform to support mission-critical readiness is also important.

Many public administration organizations in the defense and security sectors have been using separate or shared legacy human resource systems for far too long, which is unable to meet the needs of the modern digital environment (Pasichnyi et al., 2024; Pavlovskyi et al., 2024). These antiquated, one-dimensional systems frequently exist in disjointed silos. Sometimes they are unable to connect to linked agencies' systems. In addition to wasting resources and impeding interagency collaboration, this patchwork approach restricts an agency's ability to fully comprehend the skills of its workforce. Additionally, it makes it difficult to analyze trends throughout the government, standardize best practices, or share information effectively.

Agency leaders' capacity to identify, develop, and implement the skills they require is further hampered by the absence of standardization and the inability to compile vital HR data throughout the government (Panasiuk et al., 2020; Cherniaiev et al., 2024). The creation and implementation of integrated, shared service solutions are still hampered by outdated infrastructure and procedures, which also make it more difficult to properly utilize talent throughout the government.

On the other hand, real-time data and analytics are provided by contemporary, flexible, cloud-based systems, enabling agency leaders to make strategic decisions more quickly (Zilinska et al., 2022). AI-powered analytics are rapidly being added to those systems in order to uncover previously unknown labor trends, skills shortages, and performance indicators.

The necessity of more deliberately identifying, developing, and utilizing talent is another important change occurring in today's world. In today's competitive labor market, agencies increasingly face talent and skills mismatches that are made worse by traditional hiring procedures that are primarily focused on credentials and out-of-date job descriptions (Petrukha et al., 2023; Poliova et al., 2024). Agency leaders understand that in order to accomplish project and mission goals, they must deploy their staff in a skills-based manner that gives priority to the necessary competences and capabilities.

It is evident that matching skill to the task involves more than just "what you were or what you've done, but what you can do". For this reason, it is necessary to strategically evaluate talent by utilizing cutting-edge technologies like artificial intelligence.

Workday Government Cloud, for example, has been chosen by the Defense Intelligence Agency (DIA) to maximize talent, shorten time-to-hire, and proactively manage career trajectories. By integrating and directing the entire range of skills throughout the organization, time-to-hire will be shortened to less than 180 days, workforce retention will be improved, new e-learning opportunities will be provided to upskill staff, and people will be more efficiently matched to projects based on their skills, location, availability, language proficiency, and certifications.

By automating business and training procedures, a cutting-edge, AI-powered workforce management platform may significantly improve hiring procedures, speed up onboarding, and foster employee growth (Petrukha et al., 2015; Pyatnychuk et al., 2024). Leaders may improve their understanding of key workforce parameters, such as employee skill proficiency, experience, location, and availability, by utilizing integrated analytics. Better data-driven decision-making is made possible by this. Additionally, it allows agencies new methods to compete more successfully for top talent and show prospective and existing employees better career routes for promotion.

Talent management maximizes human performance and engagement by matching individual skills with the demands of the military (the best soldier at the right position at the right time). It incorporates tactics for employment, retention, growth, and acquisition (Ryzhakova et al., 2022; Ravlinko et al., 2023). By creating and carrying out training programs, offering coaching and mentoring, gathering feedback, and evaluating the performance of the organization's skilled employees, HR departments play a crucial role. The US Army's personnel system, for instance, offers a more individualized management structure that may assist retain and inspire youth and better equip them for leadership positions (Arnold, 2015). Additionally, a new HRM system that emphasizes talent management and takes into account employees' wants and abilities by providing career views on both internal and external labor markets is being gradually implemented by the Netherlands' armed forces (Ministry of Defense, 2022).

Military organizations used to be internal labor markets where employees received on-the-job training and internal training. However, a number of environmental factors have caused military organizations to shift their focus to an external labor market, making personnel management far more significant than it was previously. Additionally, it is more crucial than ever for personnel policies to reflect cultural norms (Buijs & Olsthoom, 2024). The old notion that a military profession is a lifetime career is no longer true in many countries, and this is especially crucial when dealing with soldiers who must leave the military organization



for whatever reason (Saik et al., 2023; Zayats et al., 2024). This is among the reasons why militaries are increasingly providing new recruits with the opportunity to get additional credentials beyond those required solely for military use. Today's analysts observe that the military profession is becoming more and more like other professions. The US and European militaries, in particular, understand the need of work-life balance and, as previously said, provide a range of initiatives to support their people (Sydorchuk et al., 2024; Serhieiev et al., 2025). These initiatives include leave policy, child care, counseling, and family support services. A positive work environment depends on the interactions between employees. With notable advancements in diversity and inclusivity in recent years, European military organizations have put in place regulations to encourage moral behavior, diversity, and inclusion (Reis & Menzenes 2019). Although the US military is dedicated to diversity and inclusion, it has trouble putting changes into practice, especially when it comes to sexual harassment and assault (Reis & Menzenes 2019; Yeung et al. 2017).

The internal marketing (IM) concept has become a central idea in marketing and human resource management (HRM) discussions about future developments during the past few decades. IM is the application of the external marketing concept within a business (Voronina et al., 2024; Zhumbei et al., 2025). The concept's use can be linked to broader HR procedures that have an impact on customers, employees, and organizations. The idea of a military learning organization should also be discussed in this context. An organization that promotes a culture of ongoing learning and adaptation is considered a military learning organization. This allows it to effectively respond to changing circumstances and difficulties, especially during times of conflict (Yermachenko et al., 2023). This includes creating an intellectual openness mindset, encouraging information sharing, and incorporating learning processes into the organization's structure and culture (Freeman & Calton, 2021). Such organizations are distinguished by their embrace of change, intellectual openness, knowledge management, systems thinking, team learning, shared vision, personal mastery, experiential learning, and adaptive leadership.

To summarize, the defense or security agency as a learning organization is not simply a theoretical concept, but a requirement for maintaining effectiveness in the face of changing threats and complexities. By adopting the ideas of continuous learning, adaptation, and intellectual openness, these organizations can improve their chances of success in the twenty-first century and beyond.

CONCLUSIONS

HRM strategies in military and security organizations are critical for fostering a productive and efficient organization. Given today's problems, military, defense, and security organizations must adopt innovative means of attracting and retaining staff. These firms must do considerably more to attract competent and engaged employees. To that purpose, a volunteer-based military group must compete with other (civilian) organizations to recruit a better and more qualified workforce. Given the significance of the organization's reputation, labor market communication is now more vital than it was previously. HR departments have a vital role in planning and implementing talent management programs, particularly those based on the talent marketplace concept and internal marketing tactics.

To strengthen the role of human resources in defense wars, cooperation is essential in the geographical arrangement of defense areas, national resource management, and defense area empowerment. Development should be coordinated and synchronized by stakeholders across areas, with a focus on national welfare and defense. Defense offices in each region are expected to act as a link between regional spatial planning, national resource empowerment, and regional empowerment, not only to benefit community welfare but also to aid national defense efforts.

REFERENCES

- 1. Abernethy, M. (2018, Jun 20). Tapping into the next generation successful for ADF recruitment. Australian Financial Review. https://www.afr.com/policy/foreign-affairs/tapping-into-the-next-generation-successful-for-adf-recruitment-20180619-h11lad
- 2. Ahammad, M., Glaister, K., & Gomes, E. (2020). Strategic agility and human resource management. Human Resource Management Review, 30(1), 100700. https://doi.org/10.1016/j.hrmr.2019.100700
- 3. Al Ariss, A. (2014). Global Talent Management: Challenges, Strategies, and Opportunities. Springer. https://www.researchgate.net/publication/271824403_Global_talent_management_in_knowledge_intensive_firms in and between Western Europe and India future research directions
- 4. Andriyiv, N., Pushak, H., Petrukha, N., Kokhan, V., & Shtangret, I. (2022). Transformation of Threats to Demographic Security and Sustainable Development of the Region Due to Increased Military Actions. International Journal of Sustainable Development and Planning, 17(7), 2221–2227. DOI: 10.18280/ijsdp.170722



- 5. Arifin, M., & Tajudeen, F. (2020). Impact of human resources information systems in the military environment. Asia Pacific Management Review, 25(4), 198-206. https://doi.org/10.1016/j.apmrv.2020.02.001 6. Arivazhagan, D., Patil, K., Dubey, C., & Mishra, P. (2023). An Assessment of Challenges of Digitalization
- of Agrarian Sector. Lecture Notes in Networks and Systems, 621 LNNS, 48-57.

 7. Arnold, M. J. (2015). Talent management in the Army. Review, comment, and recommendation on talent management models (White paper). Human Dimension Capabilities Development Task Force (HDCDTF).
- management models (White paper). Human Dimension Capabilities Development Task Force (HDCDTF). https://www.researchgate.net/publication/385331196_Talent_Management_A_Review
- 8. Avedyan, L., & Belyavtseva, V. (2023). The effectiveness of the development of territories in the state regional system politicians. Financial and Credit Activity Problems of Theory and Practice, 4(51), 333–344.
- 9. Badea, D., Mihaiu, N., & Iancu, D. (2015). Analysis of human resource management in the military organization from the perspective of Peter Drucker's vision. Revista Academiei Terestre, 2(78), 198-202. https://www.armyacademy.ro/reviste/rev2_2015/Badea.pdf
- 10. Baporikar, N. (2021). Talent Retention for Succession Planning in the Defence Forces. International Journal of Applied Management Sciences and Engineering, 8(2), 52-71. http://dx.doi.org/10.4018/IJAMSE.2021070104
- 11. Bashtannyk, V., Terkhanov, F., & Kravtsov, O. (2024). Integrating digitization into public administration: Impact on national security and the economy through spatial planning. Edelweiss Applied Science and Technology, 8(5), 747–759.
- 12. Berezniak, O., Mladetskyi, I., Berezniak, O., Dreshpak, O., Akimov, O. (2025). High-Frequency Demagnetization Of Magnetite Suspensions. Mining mineral depos. Volume 19 (2025), Issue 2, 132-140. https://doi.org/10.33271/mining19.02.132
- 13. Borysenko, M. V., Zolotov, A. V. & Rusetskyi, R. Yu. (2025). Recruitment Crisis in the North Atlantic Treaty Organization: Demographic and Regional Dimensions. Ukrainian Geographical Journal. No. 2(130): 3–11. DOI: https://doi.org/10.15407/ugz2025.02.003
- 14. Boudreau, J., & Ramstad, P. (2007). Beyond HR: The New Science of Human Capital. Harvard Business School Press.
- 15. Buijs, T., & Olsthoom, P. (2024). Human Resource Management for Military Organizations: Challenges and Trends. In: Handbook of Military Sciences (pp.1-26). http://dx.doi.org/10.1007/978-3-030-02866-4_68-1 16. Byrkovych, T., Humenchuk, A., & Kobyzcha, N. (2023). Economic Effectiveness of State Policy in Reforming Higher Library and Information Education in Ukraine. Economic Affairs (New Delhi), 68(1), 599-616
- 17. Cherniaiev, O., Anisimov, O., & Saik, P. (2024). Theoretical substantiation of water inflow into the mined-out space of quarries mining hard-rock building materials. Iop Conference Series Earth and Environmental Science, 2024, 1319(1), 012002
- 18. Cutic, D. (2023). Defense resource management and capabilities building. Proceedings of Interdisciplinary Management Research XVI, 2020. https://www.researchgate.net/publication/371314305_DEFENCE_RESOURCES_MANAGEMENT_ AND CAPABILITIES BUILDING
- 19. Ferdman, H., Kravets, O., & Symonenko, L. (2025). Matrix of Innovative competencies in public administration within the ecosystem of sustainable development, national security, and financial efficiency. Sapienza: International Journal of Interdisciplinary Studies, 6(2), e25022. https://doi.org/10.51798/sijis.v6i2.974
- 20. Freeman, T.E., & Calton, M.A. (2021). Building military learning organizations: many birds, one stone. The Learning Organization, 28(3), 257-269. https://doi.org/10.1108/TLO-12-2019-0181
- 21. Groysberg, B., Lee, L.-E., & Nanda, A. (2008). Can They Take It with Them? The Portability of Star Knowledge Workers' Performance: Myth or Reality. Management Science, 54(7), 1213-1230. https://www.hbs.edu/faculty/Pages/item.aspx?num=30726
- 22. Gupta, S.K., Nagar, N., & Srivastava, S. (2024). An Application of Structure Equation Modelling in Determinants of Customer Based Brand Equity (CBBE) in the Banking Area Studies in Systems, Decision and Control, 489, 399-411.
- 23. Joffrion, J., & Wozny, N. (2015). Military Retention Incentives: Evidence from the Air Force. Selective Reenlistment Bonus. https://doi.org/10.17848/wp15-226
- 24. Kichurchak, M., Mishchuk, H., & Bilan, Y. (2024). Examining Tertiary Education Amid the War in Ukraine: A Synthetic Control Approach. European Journal of Interdisciplinary Studies, 16(2). DOI: https://doi.org/10.24818/ejis.2024.13
- 25. Kurnia, R., Saputro, G., & Murtiana, S. (2023). Management of human resources in national defense depend on defense economics point of view. International Journal on Social Sciences, Economics and Arts, 13(1), 1-11.



- 26. Maidaniuk, S., Petrukha, N., & Makarevych, O. (2025). Circular Economic Concept: Contribution To Macroeconomic Growth. International Journal of Ecosystems and Ecology Science (IJEES). Vol. 15 (3): 127-136. DOI: https://doi.org/10.31407/ijees15.317
- 27. Mazilu, E.-A. (2024). The Necessity of the Process of Modernisation of the Human Resources of the Military System. Nemzet és Biztonság, 16(2), 90-99. http://dx.doi.org/10.32576/nb.2023.2.6
- 28. McKensey, M. (2017). Retention in the military: the role of harassment and discrimination in workplace satisfaction and perceived organisation support. Academic Press.
- 29. Meijerink, J., & Bondarouk, T. (2018). Uncovering configurations of HRM service provider intellectual capital and worker human capital for creating high HRM service value using fsQCA. Journal of Business Research, 82, 31-45.
- 30. Ministry of Defense (2020). Dienstplichtbrief voor het eerst ook naar vrouwen [Conscription letter also sent to women for the first time] Nieuwsbericht Defensie.nl. https://www.defensiebond.nl/defensie/dienstplichtbrief-voor-het-eerst-ook-naar-vrouwen/
- 31. Ministry of Defense (2022). Werken bij Defensie. [Working at Defense] Retrieved from: https:// WerkenbijDefensie.nlPraktische informatie over Werken bij Defensie WerkenbijDefensie.nl
- 32. MOD. (2016). Chief of staff's Human resources annual report. www.mod.gov.na
- 33. Modernising GCC military HR models: Improving morale, motivation, and performance (2018). Strategy&. https://www.strategyand.pwc.com/m1/en/reports/modernising-gcc-military-hr-models.pdf
- 34. Mykolaichuk, M., Petrukha, N., & Hudenko, B. (2025). Conceptual principles of analysis and forecasting threats to national security in modern conditions. Sapienza: International Journal of Interdisciplinary Studies, 6(2), e25029. https://doi.org/10.51798/sijis.v6i2.985
- 35. Nekhai, V., Melnyk, Y., & Bilyk, O. (2024). Economic Consequences of Geopolitical Conflicts for the Development of Territorial Communities in the Context of Economic and National Security of Ukraine. Economic Affairs (New Delh), 69 (1), 551-563.
- 36. Nguyen, A. (2022, August 10). Strategic Human Capital for the Future Ready Army. The Cove. https://cove.army.gov.au/article/strategic-human-capital
- 37. Nogueira, S., Baltina, L., Spada, I., Chiarello, F. (n.d.). Strategy for developing HR in the Defense Sector. The European Commission. https://assets-plus.eu/wp-content/uploads/2022/01/R4.2-Strategy-for-developing-HR-in-the-Defence-sector 2021-2nd-iteration.pdf
- 38. Ortina, G., Zayats, D., & Karpa, M. (2023). Economic Efficiency of Public Administration in the Field of Digital Development. Economic Affairs (New Delh), 68(3), 1543-1553.
- 39. Panasiuk, I., & Kuznietsova, O. (2020). Modelling and Simulation of the Thermal Performance of Metal Framed Walls. IEEE International Conference on Advanced Trends in Information Theory, ATIT 2019 Proceedings, 309–312.
- 40. Pasichnyi, R., Bykova, A., & Nekhai, V. (2024). International migration of human resources in the conditions of geo-economic transformations as the main influence on the components of sustainable development of Ukraine in the context of national security. Edelweiss Applied Science and Technology, 8(6), 1354–1365.
- 41. Pavlovskyi, O., Blikhar, M., & Karpa, M. (2024). International migration in the context of financial and economic security: The role of public administration in the development of national economy, education, and human capital. Edelweiss Applied Science and Technology, 8(6), 1492–1503.
- 42. Petrukha, N., Kushneruk, O., & Mazur, A. (2023). Social Imperatives Of Public Finance: War Adaptation And Principles Of Post-War Recovery. Financial and Credit Activity Problems of Theory and Practice, 2023, 3(50), 358–371.
- https://www.researchgate.net/publication/377231107_SOCIAL_IMPERATIVES_OF_PUBLIC_FINANCE_WAR_ADAPTATION_AND_PRINCIPLES_OF_POST-_WAR_RECOVERY
- 43. Petrukha, N.M., & Petrukha, S.V. (2015). Efficiency evaluation of investment innovative projects based on public-private partnership in the agrarian sector of Ukrainian economy. Actual Problems of Economics, 2015, 171(9), 141–148.
- 44. Poliova, N., Polova, L., & Stepanenko, S. (2024). Organizational and economic principles of financial monitoring of national business entities in the context of national security. Edelweiss Applied Science and Technology, 8(6), 1455–1466.
- 45. Popovych, I., Halian, I., Pavliuk, M., Kononenko, A., Hrys, A., & Tkachuk, T. (2022). Emotional quotient in the structure of mental burnout of athletes. Journal of Physical Education and Sport, 22(2), 337-345. https://www.researchgate.net/publication/358978073_Emotional_quotient_in_the_structure_of_mental_burno ut_of_athletes
- 46. Pyatnychuk, I., Vengerskyi, O., & Pershko, L. (2024). The economic and legal dimension of the migration of intellectual and human capital as a threat to national security: The role and possibilities of public administration. Edelweiss Applied Science and Technology, 8(6), 1481–1491.



- 47. Ravlinko, Z., Petrukha, N., & Pawera, R. (2023). Formation, development and use of human capital: aspects of personnel security in a military conflict. International Journal of Services Economics and Management, 2023, 14(4), 452–466. DOI: 10.1504/IJSEM.2023.134125
- 48. Reis, J., & Menezes, S. (2019). Gender inequalities in the military service: a systematic literature review. Sexuality & Culture, 24, 1004–1018.
- 49. Ryzhakova, G., Petrukha, S., & Krupelnytska, O. (2022). Agro-Food Value Added Chains: Methodology, Technique And Architecture. Financial and Credit Activity Problems of Theory and Practice, 2022, 4(45), 385–395
- 50. https://www.researchgate.net/publication/363283426_AGROPRODOVOLCI_LANCUGI_DODANOI_V ARTOSTI METODOLOGIA TEHNIKA TA ARHITEKTURA
- 51. Saik, P., Lozynskyi, V., & Mamaykin, O. (2023). Managing The Process of Underground Coal Gasification. Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu, 2023, (6), pp. 25–30.
- 52. Semenets-Orlova, I., Shevchuk, R., Plish, B., Moshnin, A., Chmyr, Y., Poliuliakh, R. Human-Centered Approach in New Development Tendencies of Value-Oriented Public Administration: Potential of Education (2022) Economic Affairs (New Delhi), 67 (5), pp. 899-906.

 https://www.researchgate.net/publication/367642012 Human-

Centered_Approach_in_New_Development_Tendencies_of_Value-

Oriented Public Administration Potential of Education

- 53. Serhieiev, V., Voronina, Y., & Akimov, O. (2025). Innovative competences within public administration landscape: sustainable development, financial efficiency and national security strengthening vectors. Sapienza: International Journal of Interdisciplinary Studies, 6(1), e25017. https://doi.org/10.51798/sijis.v6i1.947
- 54. Setiawan, B. (2024). Enhancing human resources competency in a defense university: Strategies and best practices. Al-Ishlah Jurnal Pendidikan, 16(3), 3101-3117. http://dx.doi.org/10.35445/alishlah.v16i3.5796
- 55. Smolinska, O., Koval, I., Pavliuk, M., Shulha, D. (2024). Research of Assertiveness in Organization of the Time Perspective of Degree-Seeking Students in Higher Education. Insight, pp. 222-237.
- 56. Soler, P. (2025, February 26). 'Skilled workers wanted': The EU's defence industry struggles to find the right talent. EuroNews. https://www.euronews.com/my-europe/2025/02/26/skilled-workers-wanted-the-eus-defence-industry-struggles-to-find-the-right-talent
- 57. Suarez, E., Calvo-Mora, A., Roldan, J., Perianez-Cristobal, R. (2017). Quantitative research on the EFQM excellence model: A systematic literature review (1991–2015). European Research on Management and Business Economics, 23(3), 147-156. https://doi.org/10.1016/j.iedeen.2017.05.002
- 58. Sukhera, J. (2022). Narrative reviews: Flexible, rigorous, and practical. Journal of Graduate Medical Education, 14(4), 414-417. https://doi.org/10.4300/JGME-D-22-00480.1
- 59. Sydorchuk, O., Kharechko, D., & Khomenko, H. (2024). Competencies for sustainable financial and economic management: Their impact on human capital development and national security. Edelweiss Applied Science and Technology, 8(6), 1445–1454.
- 60. The state of Australia's defence: A quick guide (2022). Parliament of Australia. https://www.aph.gov.au/About_Parliament/Parliamentary_departments/Parliamentary_Library/Research/Quic k Guides/2022-23/StateofAustraliasDefence
- 61. Voronina, Y., Lopushynskyi, I., & Grechanyk, B. (2024). Economic And Environmental Component In The Field Of Sustainable Development Management. Quality Access to Success. № 25 (201). 7–14. DOI: 10.47750/QAS/25.201.02
- 62. Weber, Y., & Tarba, S. Y. (2014). Strategic Agility: A State of the Art Introduction to the Special Section on Strategic Agility. California Management Review, 56(3), 5-12. https://doi.org/10.1525/cmr.2014.56.3.5
- 63. Williams, T., Gruber, D., Sutcliffe, K., Shepherd, D., Zhao, E. (2017). Organizational Response to Adversity: Fusing Crisis Management and Resilience Research Streams. Academy of Management Annals, 11(2). https://doi.org/10.5465/annals.2015.0134
- 64. Yermachenko, V., Bondarenko, D., & Kalashnyk, N. (2023). Theory and Practice of Public Management of Smart Infrastructure in the Conditions of the Digital Society' Development: Socio-economic Aspects. Economic Affairs (New Delh), 68(1), 617-633.
- 65. Yeung, D., Steiner, C. E., Hardison, C. M., Hanser, L., & Kamarc, K. N. (2017). RAND recruiting policies and practices for women in the military. Views from the field. Rand Corporation.
- 66. Zayats, D., Serohina, N., & Mazalov, A. (2024). Economic Aspects of Public Administration and Local Government in the Context of Ensuring National Security. Economic Affairs (New Delh), 69(2), 979-988.
- 67. Zhumbei M, Apelt H, & Tsymbal I. (2025). Leveraging Gamification to Sustain Student Motivation and Emotional Resilience in Higher Education During Wartime: Case Studies from Ukraine. LatIA [Internet]. [cited 2025 Jul. 15]; 3:345. DOI: https://doi.org/10.62486/latia2025345
- 68. Zilinska, A., Avedyan, L., & Kyrychenko, Y. (2022). Efficiency In The Context Of Ensuring Sustainable Territorial Development. Financial and Credit Activity: Problems of Theory and Practice, 4 (45), 234-243.

