HYBRID EMPLOYMENT IN UKRAINIAN IT COMPANIES: IMPACT ON PERSONNEL POTENTIAL AND PRODUCTIVITY

ГІБРИДНА ЗАЙНЯТІСТЬ В УКРАЇНСЬКИХ IT-КОМПАНІЯХ: ВПЛИВ НА КАДРОВИЙ ПОТЕНЦІАЛ ТА ПРОДУКТИВНІСТЬ

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The authors provided a theoretical analysis of the impact of hybrid employment on personnel capacity and productivity in Ukrainian IT companies. The article analyzed features of hybrid work's short-term and long-term effects under both pandemic and wartime conditions. The study argues that, when supported by strategic management, this form of employment can enhance organizational resilience, reduce employees turnover, and improve the efficiency of team interaction. A conceptual framework for assessing hybrid work effectiveness is proposed, covering three key dimensions: productivity, personnel capacity, and business performance. The authors recommended implementing OKR systems, HR analytics, and regular employee feedback mechanisms to improve the quality of human resource management in hybrid settings.

Keywords: hybrid employment, hybrid work, personnel capacity, productivity, employees, HR management.

У статті здійснено теоретичний аналіз впливу гібридної зайнятості на кадровий потенціал та продуктивність праці в українських IT-компаніях в умовах пандемії та повномасштабної війни, що зумовлено актуальністю обраного напряму дослідження. Метою дослідження є обґрунтування ролі гібридної форми роботи як інструменту збереження кадрового потенціалу, підтримання продуктивності, забезпечення стійкості бізнес-процесів та підвищення результативності діяльності IT-компаній в умовах нестабільного зовнішнього середовища. Методи дослідження охоплюють аналіз і синтез, порівняльний аналіз і систематизацію. У статті автори доводять, що гібридна форма організації праці за умови стратегічного управління здатна зменшити плинність кадрів, зміцнити командну взаємодію та підтримати інноваційний потенціал. Виявлено та проаналізовано короткострокові та довгострокові ефекти гібридної роботи, зокрема, ризики вигорання працівників, розмиття меж між роботою та особистим життям, а також переваги, пов'язані з гнучкістю, відчуттям безпеки, збереженням продуктивності та мобільності кадрів у кризових умовах. Запропоновано концептуальну систему оцінювання ефективності гібридної роботи, що охоплює три ключові виміри: продуктивність праці, кадровий потенціал та бізнес-результати компанії. Система передбачає використання інструментів OKR, HR-аналітики, регулярних опитувань працівників і аналізу таких показників, як плинність персоналу, рівень лояльності, індекс абсентеїзму, темпи професійного розвитку, задоволеність клієнтів і швидкість виведення нових продуктів на ринок. Підкреслено, що при використанні в управлінні персоналом гібридної форми роботи доцільно чітко розмежовувати завдання для онлайн- та офлайн-форматів взаємодії, впроваджувати централізовану цифрову комунікацію, дотримуватись ритмів праці персоналу, розвивати емоційний капітал персоналу завдяки регулярним оффлайн заходам. Перспективи подальших досліджень охоплюють поглиблений аналіз впливу управління гібридною роботою персоналу на інноваційну діяльність IT-компаній.

Ключові слова: гібридна зайнятість, гібридна робота, кадровий потенціал, продуктивність, працівники, управління персоналом.

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Statement of the problem. Hybrid employment in the IT sector have become a standard expectation for candidates applying for positions within companies. We observed that the past six years have evidenced a shift in scientific and practical discussions from the problems of whether to use a hybrid employment model to an analysis of cases concerning which type of hybrid model is best to choose for the specific operating conditions of an IT company. Many scholarly publications note that the consequences of the COVID-19 pandemic's impact on the IT industry were a catalyst for the widespread acceptance of hybrid employment models.

However, a deeper examination of this issue reveals that, in fact, a greater influence on the popularity of hybrid models was exerted by personnel expectations for more comfortable working conditions and new technological capabilities of IT companies for combining the offline work of personnel with remote work, especially concerning the communication aspect of their collaboration. This assertion is confirmed by survey results, according to which there have been cardinal changes in personnel expectations – "whereas in 2019, 60% of personnel worked exclusively offline, in 2023, 54% of personnel whose work allowed for a remote format expected and preferred a hybrid employment model" [9].

The connection of this scientific problem with the practical aspects of HR policy within IT companies is exceptionally relevant. Currently, the IT sector is an industry that demonstrates resilience and serves as a reliable pillar for the economy of Ukraine during wartime. Therefore, the stability and future development of this industry directly depend on its ability to effectively manage its human resource and innovative potentials.

Although many domestic IT companies are actively utilizing the hybrid employment in their HR management, a scientifically substantiated analysis of its long-term impact on personnel capacity and productivity, specifically under the challenging conditions of war, remains insufficiently researched by scholars. Consequently, there is a clear need to study these effects in order to develop practical recommendations and management strategies. Such strategies will enable Ukrainian IT companies to adapt to the new reality and transform this enforced flexibility into a sustainable competitive advantage.

Analysis of recent research and publications. "Analytical thinking remains the most in-demand core skill among employers, with seven out of ten companies considering it critically important for 2025" [10, p. 6]. Moreover, the evolution of hybrid employment models in the IT sector highlights the need to cultivate competencies such as "resilience, flexibility, agility, leadership, and social influence among personnel" [10, p. 6].

Dmytrenko M. identified "the advantages of hybrid work – including flexibility, autonomy, and increased productivity – as well as its drawbacks, such as weakened team dynamics and feedback processes" [3]. She recommends "organizing hybrid employment in a way that remote work is designated for employees engaged in focused individual tasks, while in-person work is reserved for effective team interaction and the collaborative resolution of complex problems" [3].

Lipych L., Kushnir M., and Khilukha O. argue that "the advantages of hybrid work include reduced stress, increased employee productivity due to the elimination of time waste and workplace distractions, and an enhanced sense of security, particularly under wartime conditions" [7].

Korostashovets A. emphasized, "in addition to flexibility and location independence, the technological dimension of hybrid employment, including video conferencing software, online collaboration platforms, and project management tools" [6].

Huo, Yuan, Xie, and Deng found that "work-related use of information and communication technologies after-hours can lead to negative effects such as employees' emotional exhaustion and cheating behaviors by causing workplace ostracism" [5, p. 49].

Alsaad A., Abubakar A. M., and Dasuki S. noted that "software and IT industry managers should consider assigning tasks based on well-defined priorities and deadlines, which would mitigate work overloading" [1, p. 9].

Griva, A., Chandra Kruse, L., Hattinger, M., Högberg, K., Pappas, I. O., and Conboy, K. concluded that "managers should consider more than just speed and synchronisation of hybrid work - they should consider rhythm, event-driven organisation, temporal personalities, and many other temporal concepts in the design of their hybrid work" [4, p. 636].

Deschênes A. A. identified "positive effect of the use of collaborative technologies on perceived social proximity in the hybrid work environment" [2, p. 6].

Meluso J., Johnson S., Bagrow J. sorted out that "one of the goals of a hybrid workplace is to

take the best of what leaders and team members like about working together in the office and combine it with the best of what leaders and team members like about working remotely" [8, p. 68].

Zamani E. D., Watson-Manheim M. B., Abbott P., and Lin A. concluded that "approaching hybrid employment via the fusion of virtuality and materiality is critical, and Information systems have a central role in hybrid work as they facilitate the creation of hybridworkspaces" [11, p. 714].

The conducted literature review substantiates the conclusion that hybrid employment in the IT sector reshapes workforce dynamics by combining flexibility, digital tools, and new competency demands with challenges to team cohesion and well-being. Its impact on personnel capacity and productivity depends on strategic task allocation, technological integration, and adaptive HR management.

Highlighting previously unresolved parts of the overall problem. Although hybrid employment has become widespread in the IT sector, the long-term effects of this model on personnel capacity and productivity in crisis environment remain insufficiently explored. In particular, there is a lack of integrated research on how hybrid work influences team performance, employee well-being, and innovation capacity in wartime settings.

Formation of the objectives of the article (task statement). The study aims to provide a theoretical analysis of the impact of hybrid employment in Ukrainian IT companies on employees' human capital and productivity.

Key questions have been formulated for the article to provide a comprehensive analysis:

1) what is the short-term, and long-term impacts of hybrid employment on personnel capacity and productivity specifically in the context of the ongoing war in Ukrainian IT companies?

2) what are the effective strategies for enhancing team dynamics and communication within hybrid work settings?

3) how can IT companies effectively measure the success of hybrid work?

The research methods include analysis and synthesis, comparative analysis, and systematization. All of these contribute to achieving the article's intended aims.

Summary of the main research material. The active introduction of hybrid work in the Ukrainian IT sector is due to the COVID-19 pandemic and the full-scale war, which directly impacted human resource management and the productivity of IT specialists. It is appropriate to consider hybrid employment in the IT sector in two aspects: short-term, aimed at adapting to crisis conditions, and long-term, focused on developing companies. The short-term period covers the period from the pandemic's beginning to the end of 2024. Its boundaries are due to the high uncertainty associated with threats to life and health. They are deepened by the challenges of the second year of the war – mass relocations of companies, destruction of infrastructure, and long-term power outages, which made it impossible to do business under usual conditions. In these conditions, remote and hybrid work has turned from a form of labor organization into a means of ensuring business viability.

The primary focus of IT companies during this period was ensuring employee safety, maintaining operational work, and optimizing business processes. The flexibility of the hybrid model was positive, allowing companies to preserve and develop human potential by moving personnel to safe locations. Such mobility became a determining factor in preserving teamwork and minimizing the loss of human potential. However, despite ensuring safe conditions, hybrid work during wartime also revealed several shortcomings. We are talking about the blurring of the boundaries between professional and personal life combined with a high level of psychological stress, which together provoked an increase in emotional exhaustion. Excessive use of communication technologies outside of working hours, due to the need to coordinate between different locations and time zones, increased employee stress, contributed to professional burnout, and an increase in the level of anxiety among employees, which, in turn, affected the increase in the number of work conflicts within the team.

We agree with Lipych L. et al. that "hybrid employment allows for the easy implementation of flexible employee schedules, supports remote work during air raid alerts, and helps reduce transportation and infrastructure costs, which is particularly important during wartime. It contributes to company productivity and retaining qualified employees in the short-term period" [7].

In the long term, hybrid work has big advantages and significant disadvantages. For example, studies by Griva et al. [4] and Zamani et al. [11] emphasize the need to implement hybrid work models that consider employees' temporal rhythms and actively foster social interaction in offline and online environments. Such an

approach enables companies to optimize personnel capacity, and sustain employee productivity, develop their emotional capital, and promote well-being.

On the other hand, scholars such as Huo et al. [5] have proved that employees' prolonged use of information and communication technologies after working hours leads to emotional exhaustion and diminished motivation, particularly in cases where HR managers fail to oversee work processes adequately. This can result in a company's personnel capacity deterioration due to burnout and the rise of unethical behavior within teams.

Continuous upskilling of IT company personnel in the use of digital tools, time management, and communication significantly reduces workplace conflicts, thereby strengthening personnel capacity and enhancing team productivity. It is recommended that HR managers clearly define the scope of online and offline work within hybrid work policies. For example, offline work can focus on brainstorming, social interaction, and collaborative hard problem-solving, while online work is more suited for perosnnel assignments. Our observations indicate that regular monthly offline meetings foster team cohesion, employee engagement, and developing emotional capital, which are important for minimizing conflict and sustaining long-term productivity.

In the context of online hybrid interaction, centralized communication such as through MS Teams with access to recorded meetings – ensures information transparency and accessibility. Additionally, IT-companies must to set initial prioritize the cybersecurity of cloud-based communication tools to maintain the integrity and safety of remote operations.

Supervisors must set clear and precise assignments with defined deadlines and measurable outcomes, when give to employees an autonomy. Establishing in HR management the workday duration in hybrid settings is equally important, particularly for remote work. In practice, IT employees often face the "phenomenon of work intensification" [1, p. 2], where the boundaries of the workday become blurred, and constant connectivity leads to working beyond 8–12 hours a day due to the absence of clear work start and end times. This results in physical strain from prolonged screen time and emotional burnout, as continuous engagement is undervalued. Nevertheless, any absence may be judged or cause tension within the team, ultimately undermining productivity. Such conditions increase the risk of absenteeism, disengagement, and other counterproductive behaviors.

In IT-company, "trust is an important resource to reduce uncertainty. The uncertainty can be mitigated through collaborative technologies, such as shared document platforms or project management tools, which allow employees to observe their colleagues' real-time activities" [2, p. 3]. These tools "enhance communication processes, foster personnel capacity development, and improve labor productivity" [2, p. 4]. Therefore, collaboration technologies support communication and identification mechanisms that strengthen the perception of social proximity.

Measuring the effectiveness of hybrid work requires a comprehensive system of indicators that integrates assessments of personnel capacity, productivity, and business performance of IT companies. We design a conceptual framework of indicator groups for evaluating hybrid work effectiveness, as presented in Table 1.

Measuring productivity in a hybrid work environment should be "outcome- and quality-oriented rather than based on simplistic indicators such as work speed, number of meetings, or time spent in online sessions" [4].

Table 1

Scorecard for measuring the effectiveness of hybrid work of IT company employees

Indicator group	Key indicators	Data sources
Productivity	OKR fulfillment, product quality, customer satisfaction	Project Management System, CRM system, customer loyalty index
Personnel potential	Staff turnover, employees loyalty, employees absenteeism, employees well-being and burnout, employees professional development	Employee surveys, HR analytics
Business performance	Profit growth rate, market share, launch speed new products to market	Financial Statements, Market Analysis Report

Source: created by authors

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We recommend IT companies implement the OKR (Objectives and Key Results) management system to enhance productivity. This approach enables the establishment of transparent and measurable goals at both team and individual levels, assessing hybrid work effectiveness in terms of employee productivity more objectively and quantifiably. When combined with product quality and customer satisfaction analysis, it offers a comprehensive framework for performance assessment.

Focusing exclusively on achieving key results (KPI) enables IT employees to allocate their time more efficiently and avoid distractions from tasks that fall outside defined priorities. This targeted approach enhances goal alignment, reduces time waste, and supports consistent performance within hybrid teams.

Conducting regular anonymous employee surveys and applying HR analytics enables the assessment of personnel capacity in the context of hybrid work effectiveness. This analysis should include indicators such as employee turnover rate, employee loyalty index, absenteeism rate, levels of well-being and burnout among employees, and the pace of their professional development. Research shows that "the flexibility and autonomy provided by hybrid work positively correlate with job satisfaction" [1, p. 6]. Well-structured hybrid work also helps "minimize emotional burnout and feelings of detachment that may result from blurred boundaries between personal and professional life" [7, p. 2]. Furthermore, effective hybrid work promotes "equal opportunities for career advancement and reduces adaptation challenges for new employees" [7, p. 2].

Assessing the effectiveness of hybrid work in HR management requires analyzing the business performance of IT companies, particularly in direction of profit growth, market share, and launch speed of new products to the market before and after the set of hybrid work. Such analysis provides insight into whether this form of work organization supports the company's strategic goals. Profitability demonstrates the overall productivity of business processes, including the effectiveness of team collaboration, goal achievement, consistency of communication, and the ability to respond quickly to changes. Market share indicates the company's competitiveness and, by extension, the efficiency of human capital utilization. The time required for developing and launching IT products reflects employees' flexibility and their innovative capacity, which is directly influenced by the quality of team collaboration in a hybrid work environment.

An integrated assessment of productivity, personnel capacity, and business performance provides HR managers and company leadership with an objective answer to determine whether hybrid work enhances internal efficiency and improves the company's market performance. This approach also helps identify potential areas for improving the effectiveness of hybrid work arrangements.

Conclusions. Hybrid employment in Ukraine's IT sector has proven effectiveness in the pandemic and wartime. It has maintained business resilience, team cohesion, and operational continuity, allowing companies to move employees to safer locations and support key project workflows. However, increased stress levels, blurred boundaries between work and personal life, and excessive involvement in work after work hours have led to employee burnout, reduced motivation, and, in some cases, reduced team productivity.

In the long term, the success of hybrid work in HR management depends on strategic coordination: clear division of online and offline tasks, development of digital skills, alignment with employee work rhythms, and support for social interaction. Implementing HR analytics, OKR systems, regular employees surveys, and digital communication channels is required. These measures strengthen personnel capacity, reduce team conflict, and enhance project performance.

A comprehensive assessment of hybrid work effectiveness should includes three dimensions: productivity, personnel capacity, and business performance. This enables management to objectively evaluate whether hybrid work supports strategic goals, profit growth, competitiveness, and innovation. With systematic management and adaptation to external challenges, hybrid employment can become a long-term advantage tool for IT companies.

Future research prospects entail a comprehensive analysis of hybrid work's long-term effects on IT-companies innovation activity.

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