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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE FREELANCE PLATFORMS DEVELOPMENT

ВПЛИВ ШТУЧНОГО ІНТЕЛЕКТУ НА РОЗВИТОК ФРИЛАНС-ПЛАТФОРМ

Abstract. Theoretical and practical aspects of the integration of artificial intelligence into freelance platforms have been examined. Key points of AI implementation, such as the emergence of GitHub Copilot and ChatGPT, have been analyzed. Trends in AI regulation and its perception by market participants – freelance platforms, clients, and freelancers – have been studied.

Keywords: artificial intelligence, freelance platform, freelancer, client, inequality.

Анотація. Розглянуто теоретичні та практичні аспекти інтеграції штучного інтелекту в діяльність фриланс-платформ. Проаналізовано ключові етапи впровадження ШІ, зокрема появу GitHub Copilot і ChatGPT. Досліджено тенденції регулювання ШІ та його сприйняття основними учасниками ринку: фриланс-платформами, замовниками та фрилансерами.

Ключові слова: штучний інтелект, фриланс-платформа, фрилансер, замовник, нерівність.

Artificial intelligence (AI) is becoming a key factor in the digital transformation of the economy, changing approaches to labor organization, process automation, and market participant interaction. The implementation of AI on freelance platforms creates a number of challenges, related to unequal access to technologies, the transformation of employment structures, and the need to adapt to new market conditions. Online platforms, despite their central role in shaping the platform economy, which integrates innovations in information technology and business, remain underexplored.

These digital ecosystems not only change traditional forms of employment but also offer new solutions to global economic challenges. During the war, online platforms facilitate the employment of Ukrainian specialists in international markets, providing them with stable income and reducing unemployment. They also contribute to the creation of new jobs and retraining of personnel, helping the Ukrainian economy adapt to crisis conditions, develop innovative entrepreneurship, and maintain competitiveness in the global market.

In this context, the interaction between artificial intelligence and freelance platforms presents a promising area of research, opening up new opportunities for analyzing the digital transformation of the labor market. The purpose of this study is to analyze the impact of AI on the development of freelance platforms and identify key areas for its integration.

The implementation of AI in the freelance environment has led to a number of key changes. Among the milestones in the development of the global freelance market associated with AI integration, the following can be highlighted:

- the release of GitHub Copilot as a subscription-based commercial product (public release – July 21, 2022, technical preview – July 29, 2021). Ukrainian freelance developers actively use GitHub and its new features, which help them remain competitive in the international market;
- the launch of ChatGPT (November 30, 2022). Research by Freelancehunt shows that almost 70% of Ukrainian freelancers are already using various AI tools in their work, and more than 56% believe that AI should be subject to legislative regulation [4].

The intersection of freelance platforms and artificial intelligence has generated significant academic interest. Research by O. Reshef analyzes the short-term effects of generative AI on employment in the online work sector, identifying both new opportunities and challenges. The results show that AI tools significantly increase the productivity of freelancers who use them, allowing them to increase the volume and quality of tasks performed. However, the study also points to the intensification of inequality: workers without access to AI face reduced opportunities and increased competition, which exacerbates income disparity [4].

The impact of AI varies depending on the industry: in fields based on routine tasks, automation leads to job reduction, while in creative and highly skilled professions, AI acts more as a tool for augmentation rather than replacement. The implementation of AI reduces the wage gap by standardizing work outcomes regardless of skill level. This can be beneficial for some workers but simultaneously diminishes the income advantage of highly skilled specialists. Thus, the research emphasizes the dual nature of AI's impact, highlighting the need to ensure equal access to technologies and skill enhancement for balanced labor market development.

The use of AI tools opens up new opportunities for employment, income growth, and productivity enhancement, but it may also contribute to increasing inequality in the labor market. Platforms play an important role in tracking market trends, helping to understand how AI will affect employment in the near future. In this context, the work of N. Dukh-Brown is interesting, noting the growing interest in professions related to AI [2]. Employers working with AI post relatively more projects than those who do not use these technologies, yet they receive significantly fewer applications for such tasks. The study also points to the high profitability of work related to AI.

Additionally, demand and supply in the AI labor market are analyzed. Data shows a significant excess of demand for AI specialists (from +1.4% to +4.1%) while simultaneously having a lower supply of such specialists (from -6.8% to -1.6%) compared to other employment sectors. Freelancers involved in AI-related projects earn 3.0–3.2% more than those working on non-AI tasks. These trends persist in 2024 on leading freelance platforms.

At the same time, research also points to other trends in the labor market: some professions are being replaced by AI, leading to a decrease in demand, while the wage levels and demand for other professions are rising [1]. This makes further research in this field particularly relevant. Some scientific works examine the issue of inequality related to AI use. For example, N. Otis's research shows that more educated entrepreneurs become even more successful through the use of AI [5]. Therefore, it can be concluded that the benefits of AI primarily go to those who possess the relevant knowledge and skills.

The key players in the freelance market are platforms, clients, and freelancers.

1. Platforms. Undoubtedly, the greatest interest lies in how online platforms use or plan to use artificial intelligence, as it enables them to evolve as companies and influence the freelance market as a whole. Artificial intelligence can be used (or is already being used) by freelance platforms to address tasks such as combating fraud and ensuring the platform's security; analyzing and forecasting the development of the freelance market; optimizing the matching of clients and freelancers, as well as creating personalized recommendations; automating customer service; using chatbots and virtual assistants; and automating translation to improve interaction between clients and freelancers from different countries.

Best practices for using artificial intelligence are demonstrated by platforms like Upwork, PeoplePerHour, and Toptal. For example, Upwork and PeoplePerHour use AI chatbots, including Tidio and Drift, for automated communication with clients and improving customer support. Meanwhile, Toptal and Upwork use AI recruitment tools (Pymetrics) to analyze freelancers, select the best candidates, and evaluate their skills and personal qualities.

An important task for many platforms is also to provide information and recommendations on acquiring new AI-related skills for completing tasks. The main policy principles in this area often include recommendations for working with texts, especially for copywriters.

2. Clients. For clients, the main advantage of using AI is the acceleration of task completion. In general, the active use of AI tools impacts the freelance market through the emergence of new categories of orders or the disappearance of existing ones. In 2024, leading innovative companies are changing market trends.

For example, on the Freelancehunt platform, the "AI and Machine Learning" category saw a 49.03% increase in the number of projects and a 159.97% increase in budgets, confirming the role of artificial intelligence as a key driver of the IT industry [3]. Moreover, clients are increasingly using AI to check the quality of completed tasks.

3. Freelancers. The results of 2024 show that Ukrainian freelancers are actively adapting to changes in technology, multimedia content, and global trends. Despite a decrease in activity in certain categories, such as teaser advertising and text services, new opportunities are emerging thanks to the rapid growth of video content, artificial intelligence, and innovative design solutions. The scope of artificial intelligence application is expanding. AI is affecting not only programming but also automating creative processes, creating new niches for freelancers. At the same time, competition in the freelance market is intensifying, especially among beginners. According to surveys on the Freelancehunt platform, while various AI tools are represented in every specialization, ChatGPT remains the clear leader in popularity, used by 73.1% of freelancers. Midjourney (7%), Copilot (5.3%), Gemini (4.1%), and others (10.3%) are also popular [3]. As of today, 97.49% of freelancers are satisfied with using AI tools in their professional activities, confirming the increased competitiveness of Ukrainian business and freelancing thanks to the integration of these technologies.

Most freelancers support the legislative regulation of AI: 19.48% advocate for full regulation, 36.66% support partial regulation, 24.89% do not consider it necessary to regulate AI, and 18.97% have no defined position on this issue [3]. Such practices positively impact the development of platforms and freelancing in Ukraine as a whole, and also ensure the necessary conditions for the successful integration of Ukrainian freelancing into the European digital space.

Further scientific research on this topic holds significant potential, particularly in the following areas: tracking the evolution of organizations that use the platform business model; analyzing the interaction of artificial intelligence as a new information technology and freelance platforms as a business model, as well as their mutual impact on the development of the digital economy; studying the problems of integrating AI into practice, its impact on demand and the structure of freelance services; examining the impact of AI on labor productivity and market inequalities. In the long term, such technologies will contribute to the recovery of Ukraine's economy, accelerating its integration into global markets and forming a competitive digital ecosystem.

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