

THE LABOR MARKET OF UKRAINE: CHALLENGES, TRENDS, AND BUSINESS ADAPTATION

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Abstract: The full-scale invasion of Ukraine has significantly disrupted the country's labor market, causing substantial shifts in workforce availability due to migration, military mobilization, and economic instability. These disruptions have created severe labor shortages, posing challenges for business continuity and economic recovery. This study examines the evolving labor market trends in Ukraine, the challenges businesses face, and the adaptive strategies they can employ to sustain operations and drive long-term resilience. The research utilizes open-source data, including statistics from the United Nations and Opendatabot, to assess the number of people who left Ukraine, changes in the number of active military personnel, and fluctuations in the working-age population before and after the full-scale invasion. A quantitative estimation of the remaining labor force is provided to illustrate the extent of labor shortages. The study also incorporates official statements from policymakers and business representatives to contextualize the labor market dynamics. The empirical analysis reveals a significant contraction of the labor force, with a substantial portion of the working-age population either leaving the country or being engaged in national defense efforts. The demand for skilled and unskilled labor is increasing, prompting businesses to seek new strategies for workforce adaptation. The findings highlight that companies can partially mitigate labor shortages through the implementation of modern digital communication tools, employee reskilling programs, and structured onboarding processes for unskilled workers. The results underscore the urgent need for businesses to adjust their human resource strategies to address workforce shortages and ensure operational stability. Policies promoting flexible employment, digital workforce integration, and targeted vocational training can enhance business resilience. The study provides actionable recommendations for enterprises across various sectors, emphasizing the role of adaptive labor management in sustaining Ukraine's economic recovery amid ongoing conflict.

Keywords: labor market, Ukraine during martial law, business resilience, economy, external influences on Ukraine's business, modern communication technologies.

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1. Introduction. The stability and resilience of a nation's economy are deeply interconnected with the sustainability of its business sector. In times of economic and geopolitical instability, businesses must adapt to maintain profitability and operational efficiency. In Ukraine, the full-scale invasion has triggered profound transformations in the labor market, leading to significant workforce reductions due to migration, military mobilization, and disruptions in business activities. These changes have created critical challenges for enterprises, affecting labor availability, production capacities, and overall economic stability. The ability of businesses to navigate these challenges is essential for the country's economic recovery and long-term development.

This study focuses on analyzing the impact of labor market disruptions on business operations in Ukraine and the strategies companies employ to adapt. Specifically, it examines workforce shortages caused by demographic shifts, the role of diversification in ensuring business stability, and policy implications for economic resilience. Prior studies on business resilience in crisis situations provide a theoretical foundation for understanding these dynamics. Research by Chakrabarti, Singh, and Mahmood (2007) emphasizes that the impact of diversification varies across institutional environments, with adverse effects in highly developed economies and stabilizing effects in less developed ones. Guthrie (1997), in his study on China's economic transition, highlights how companies often turn to the service sector as a low-risk diversification strategy during periods of instability. These insights are particularly relevant in the Ukrainian context, where businesses are exploring adaptive measures to counteract labor shortages.

The urgency of addressing labor market disruptions is underscored by recent migration and employment data. According to the United Nations, as of October 10, 2023, approximately 6.2 million Ukrainians had fled the country (Ukraine Refugee Situation, 2023). Opendatabot data indicate that between January 2022 and June 2023, 26.36 million people left Ukraine, while 23.66 million returned, resulting in a net outflow of 2.7 million individuals (Opendatabot, 2023). Additionally, military mobilization has drawn a substantial portion of the working-age population into national defense. A public statement by Oleksiy Danilov, Secretary of the National Security and Defense Council of Ukraine, estimated that approximately one million Ukrainians were engaged in defense efforts as of July 6, 2022 (Danilov, 2022). Pre-war estimates indicated that Ukraine's armed forces consisted of 246,445 personnel (Legal Hundred, 2021), suggesting that approximately 750,000 additional individuals have been mobilized since the start of the full-scale invasion. These demographic shifts have profoundly affected labor availability, reducing the active workforce from 17.4 million in 2021 (Ukrstat, 2021) to an estimated 9.15–12.65 million, depending on the data source. Furthermore, approximately 1.3 million working-age individuals remain in temporarily occupied territories, further restricting labor market participation (Confederation of Employers of Ukraine, 2023).

The objective of this research is to assess how Ukrainian businesses are responding to labor shortages and identify the most effective adaptation strategies. The study seeks to answer the following questions: How have workforce shortages affected business operations in Ukraine? What strategies have businesses implemented to mitigate labor market disruptions? How does diversification contribute to business resilience in the current economic climate? What policy measures can support labor market recovery and business sustainability?

To address these questions, the study integrates quantitative and qualitative data analysis. Open-source datasets, including labor force statistics from Opendatabot, the United Nations, and national employment agencies, provide empirical insights into labor market trends. Additionally, business surveys conducted by the European Business Association (2023) offer qualitative perspectives on workforce challenges and employer adaptation strategies.

This paper is structured as follows: Section 2 reviews existing literature on labor market disruptions, economic resilience, and business adaptation strategies. Section 3 presents the methodology used for data collection and analysis. Section 4 discusses the findings, highlighting key trends in workforce shortages and business responses. Section 5 provides policy recommendations for strengthening labor market resilience. Finally, Section 6 concludes with reflections on future research directions and potential long-term implications for Ukraine's economic stability.

2. Literature Review.

The labor market plays a critical role in shaping economic stability and business performance. In the context of Ukraine, the ongoing geopolitical crisis and economic instability have led to significant disruptions in workforce availability, affecting businesses across various sectors. Existing literature highlights the importance of labor market flexibility, digital transformation, and policy interventions in mitigating these disruptions (Ambrogio et al., 2022; Kwilinski et al., 2024; Anderson, 2024). This literature review explores key themes related to workforce shortages, business adaptation strategies, the role of digital transformation, and policy measures that can support labor market recovery.

Workforce shortages have been extensively studied in labor economics, particularly in crisis-affected economies. Kwilinski A., Lyulyov O., Pimonenko T., Dzwigol H., Abazov R. and Pudryk D. (Kwilinski et al., 2022) argue that labor shortages arise due to demographic shifts, skill mismatches, and migration trends, all of which contribute to hiring difficulties and reduced business productivity. The impact of migration has been

particularly evident in Ukraine, where the outflow of skilled professionals has created a structural imbalance between labor supply and demand (Kwilinski et al., 2022).

Previous studies indicate that workforce shortages are exacerbated by inefficiencies in recruitment, limited workforce mobility, and insufficient vocational training programs. Duval M. R. A., Duval R., Ji Y., Li L., Oikonomou M., Pizzinelli C. and Tavares M. M. (Duval et al., 2022) argue that labor market rigidities further hinder business adaptability. In Ukraine, small and medium-sized enterprises (SMEs) face disproportionate challenges in attracting and retaining employees due to financial constraints and an inability to offer competitive wages (Diia.Business, 2023).

The ability of businesses to adapt to labor market constraints is crucial for economic resilience. Research on organizational adaptation suggests that companies respond to labor shortages through automation, restructuring, training programs, and remote workforce management (Koutroukis et al., 2022). A study by Trenerry B., Chng S., Wang Y., Suhaila Z. S., Lim S. S., Lu H. Y. and Oh P. H. (Trenerry et al., 2021) emphasizes the role of digital transformation in mitigating workforce shortages, noting that businesses investing in technology are better positioned to optimize labor productivity.

In Ukraine, businesses have increasingly relied on hiring less-experienced workers and implementing internal training programs to compensate for skill shortages (Work.ua, 2023). Studies on workforce development suggest that companies investing in employee upskilling tend to experience higher retention rates and long-term productivity gains (Vranceanu & Sutan, 2023; Li, 2024). This aligns with Ukrainian employer surveys, which indicate a growing trend of on-the-job training as a response to hiring difficulties (Institute for Economic Research and Policy Consulting, 2023).

The integration of digital technologies in business operations has become a critical strategy for workforce optimization. Studies by Faqih A. and Miah S. J. (Faqih & Miah, 2020), Zubair S. (Zubair, 2024) highlight the increasing adoption of automation, AI-driven workforce management systems, and cloud-based collaboration tools as solutions for labor shortages. In particular, digital communication platforms have proven effective in enhancing workforce coordination, improving employee engagement, and reducing operational inefficiencies (Diia.Business, 2023).

Research on remote work and digital workforce management also underscores the potential benefits of leveraging cloud-based systems for tracking employee performance and optimizing workflow (Trofymentko et al., 2023; Gavkalova et al., 2023; Oklander et al., 2024). In Ukraine, the adoption of digital communication tools such as Viber, Telegram, and WhatsApp has facilitated more flexible workforce management, yet survey data suggest that many businesses still underutilize digital workforce solutions (Diia.Business, 2023).

Government policies play a vital role in addressing labor market imbalances and supporting business resilience. Research by Brunello G., Ruckert D. and Wruuck P. (Brunello et al., 2019) suggests that labor market policies focusing on workforce reskilling, employment incentives, and tax relief for businesses can help mitigate workforce shortages. Vocational education and retraining programs have been identified as critical mechanisms for bridging the skill gap and improving labor market efficiency (Kwilinski et al., 2023; Szczepanska-Woszczyna et al., 2024).

In the Ukrainian context, the Ministry of Economy has projected an increasing demand for specialists and skilled professionals, emphasizing the importance of aligning education and vocational training with labor market needs (Pudryk et al., 2023). Studies suggest that government-supported workforce development initiatives, including wage subsidies for apprenticeships and tax incentives for hiring, could enhance business adaptability in the current economic climate (Al Shukaili et al., 2023; Amore et al., 2024).

While the existing literature provides valuable insights into workforce shortages and business adaptation, several gaps remain. First, most studies focus on developed economies and do not fully capture the unique challenges faced by businesses in post-conflict or crisis-affected economies such as Ukraine. Additionally, there is limited research on sector-specific workforce challenges, which could help policymakers tailor interventions to industries most affected by labor shortages.

3. Methodology and research methods.

The research follows a descriptive and exploratory design, aiming to identify labor market disruptions, business responses, and policy implications. Data collection relies on secondary sources, including labor market reports, business sentiment surveys, and government workforce projections. Labor market trends were analyzed using data from job search platforms such as work.ua and robota.ua, which provide insights into the availability of workers and the duration of unfilled vacancies. Business sentiment surveys from the National Bank of Ukraine and the Institute for Economic Research and Policy Consulting were used to evaluate employer expectations, workforce challenges, and hiring trends. Reports from the Ministry of Economy of Ukraine helped assess projected workforce demand and the anticipated need for vocational training through 2027. Additionally, industry surveys conducted by the Center for Innovation Development, the Office for Entrepreneurship and Export Development, and Advanter Group provided further evidence on labor shortages, employer hiring strategies, and digital workforce management practices.

The study applies quantitative and qualitative analysis techniques to interpret labor market trends and business adaptation strategies. Descriptive statistical analysis was used to assess job vacancy patterns and labor availability, highlighting disparities in labor demand and supply. Comparative analysis helped examine

differences in hiring challenges across business sizes and sectors, revealing how micro-enterprises struggle more with recruiting skilled professionals compared to larger companies. Thematic analysis was applied to evaluate employer strategies, with a focus on workforce training, hiring flexibility, and the integration of digital tools for workforce coordination. Additionally, trend analysis of policy reports and economic studies provided insights into how government strategies address labor shortages and support business resilience.

4. Results.

Data from the job search platform *work.ua*, published on the *Opendatabot* portal, reveal that a significant number of vacancies remain unfilled for an extended period. In contrast, the percentage of newly posted vacancies is considerably lower (Opendatabot, 2023). This trend highlights a structural imbalance between labor supply and demand, where businesses struggle to attract and retain qualified personnel (Figure 1).

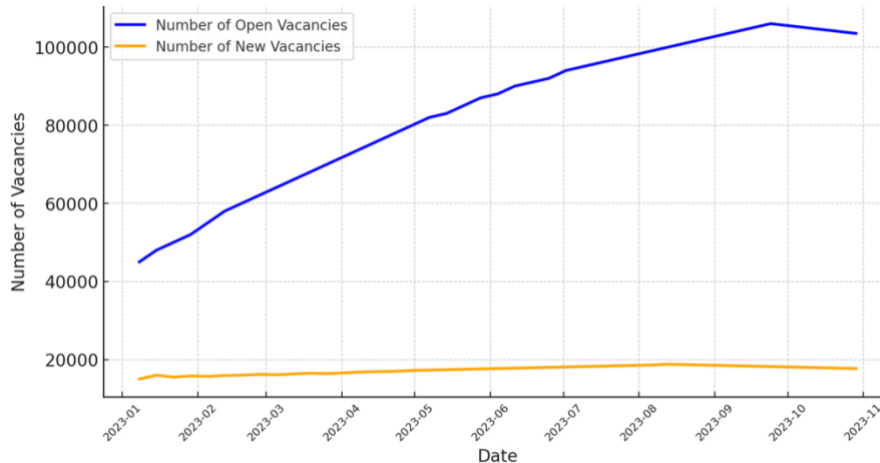


Figure 1. Dynamics of Long-Term Open and New Job Vacancies on Work.ua
Sources: Opendatabot, 2023

Figure 1 illustrates the dynamics of open and new job vacancies in Ukraine over time, highlighting the increasing gap between labor demand and supply. The blue line represents the total number of open vacancies, while the orange line shows the number of newly posted vacancies. Over the observed period, the total number of open vacancies has demonstrated a steady upward trajectory, indicating that many positions remain unfilled for an extended duration. At the same time, the number of new vacancies has remained relatively stable, with minor fluctuations but no significant increase. The widening gap between open and new vacancies suggests growing challenges in workforce recruitment. While businesses continue to seek employees, the pace of new job creation does not match the accumulation of unfilled positions. This pattern indicates a labor market imbalance, where positions remain vacant due to hiring inefficiencies, skill mismatches, or a lack of available candidates with the required qualifications. The long-term increase in open vacancies reflects the ongoing difficulty in filling essential roles, particularly in industries requiring specialized skills. This trend points to potential structural challenges in the labor market, such as inefficiencies in recruitment processes, workforce shortages in key sectors, or barriers preventing job seekers from transitioning into available roles. The inability to fill these vacancies may limit business operations and economic growth, reinforcing the need for workforce adaptation strategies.

Survey findings from the National Bank of Ukraine (2023) present a complex outlook on business expectations, reflecting both optimism about economic recovery and persistent challenges in the labor market. Many businesses foresee improvements in operational conditions, supported by increasing market stability and the gradual restoration of supply chains. As consumer demand rebounds, companies expect sales volumes to rise, contributing to overall business growth. Investor confidence is also showing signs of improvement, encouraging enterprises to pursue expansion strategies and allocate resources toward long-term development. In particular, higher investment in equipment and infrastructure signals a commitment to modernization, with businesses aiming to enhance efficiency and competitiveness in the evolving economic landscape.

Despite these positive projections, significant challenges remain, particularly in workforce management and cost efficiency. The declining availability of workers, largely influenced by demographic shifts and labor migration, continues to pressure businesses (National Bank of Ukraine, 2023). The shortage of skilled professionals has become a growing constraint, limiting productivity and slowing down expansion efforts across multiple industries. In response to difficulties in attracting and retaining employees, businesses are experiencing an upward trend in labor costs, as competitive salaries and additional benefits become necessary to secure a qualified workforce (Figure 2). These increasing financial burdens pose additional risks, especially for small and medium-sized enterprises that already operate with limited resources.

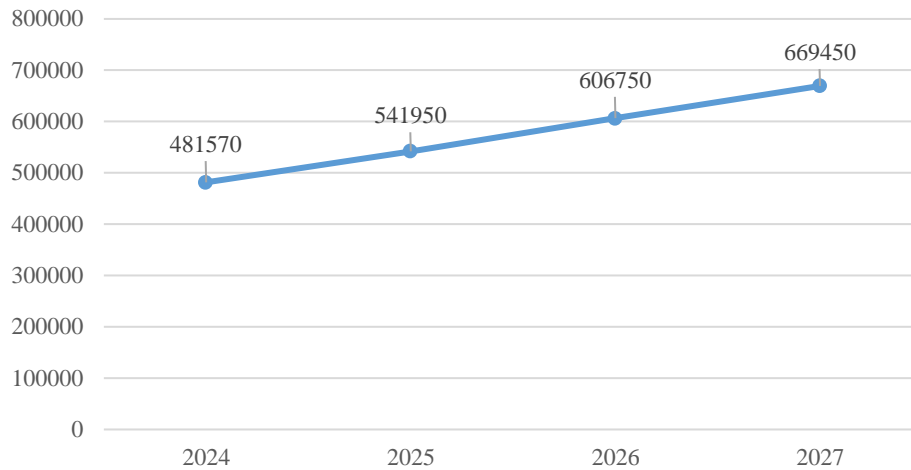


Figure 2. Demand for Specialists and Skilled Workers

Sources: Opendatabot, 2023

A parallel study conducted by the Center for Innovation Development, the Office for Entrepreneurship and Export Development, and Advanter Group (Dii.Business, 2023) reinforces concerns about economic unpredictability. Many businesses express uncertainty about Ukraine's long-term economic trajectory, which complicates strategic planning and investment decisions. The ongoing shortage of qualified professionals continues to be a primary obstacle, raising concerns about sustainability in key sectors. Additionally, growing competition and declining profitability further constrain business operations, making it increasingly difficult for enterprises to maintain financial stability.

Despite ongoing labor market challenges, businesses are actively adjusting their hiring and workforce management approaches to mitigate workforce shortages. A survey conducted by work.ua at the Kyiv Economic Forum in October 2023 highlights how employers are responding to recruitment difficulties. While only a small fraction of businesses report no labor shortages, the majority are adapting by modifying hiring criteria. Many employers are now more willing to hire candidates with less experience, recognizing the necessity of expanding the talent pool. To compensate for skill gaps, a significant portion of companies are investing in employee training and upskilling initiatives, aiming to enhance the capabilities of their workforce through internal development programs (Work.ua, 2023).

Further insights from the Institute for Economic Research and Policy Consulting suggest that employment contraction is gradually slowing, with hiring rates showing signs of improvement over the past three months. While difficulties in recruitment persist, businesses are finding it slightly easier to fill positions, particularly those requiring unskilled labor. However, micro-enterprises continue to face the greatest challenges in securing qualified professionals, whereas small businesses report relatively fewer difficulties in hiring for lower-skilled roles. These findings underscore the uneven distribution of hiring challenges across different business sizes, further emphasizing the need for tailored workforce policies and strategic hiring approaches (Institute for Economic Research and Policy Consulting, 2023).

Recognizing the urgency of labor shortages, the Ministry of Economy of Ukraine (2023) has projected workforce needs through 2027, emphasizing the increasing demand for specialists and skilled professionals. These forecasts highlight the necessity of expanding vocational training programs and workforce development initiatives to bridge the gap between labor supply and demand. As industries continue to face employment challenges, ensuring that educational institutions and training programs align with labor market requirements remains a key priority.

Figure 3 illustrates the projected workforce demand in Ukraine from 2023 to 2027, reflecting the need for a skilled labor force across multiple industries. This projection underscores the importance of long-term planning in workforce development to support economic stability and business resilience.

Despite persistent labor shortages, job seeker data indicate the availability of potential candidates. As of November 6, 2023, work.ua recorded 360,569 active resumes, while robota.ua listed 341,455 resumes submitted in the past month. However, the distribution of job seekers across different industries and regions remains uneven, posing challenges for businesses attempting to fill vacancies. The hiring process is further complicated by mismatches between employer requirements and candidate qualifications, making it difficult for companies to secure the right talent.

To address these labor shortages, businesses are implementing a range of adaptation strategies. Many companies are investing in on-the-job training programs, enabling them to recruit unskilled workers and develop their competencies internally. Others are optimizing processes and automating routine tasks to reduce reliance on manual labor, thereby improving efficiency and reducing the impact of workforce shortages. Additionally, some enterprises are restructuring their business models, incorporating service diversification and operational adjustments to remain competitive in a constrained labor market.

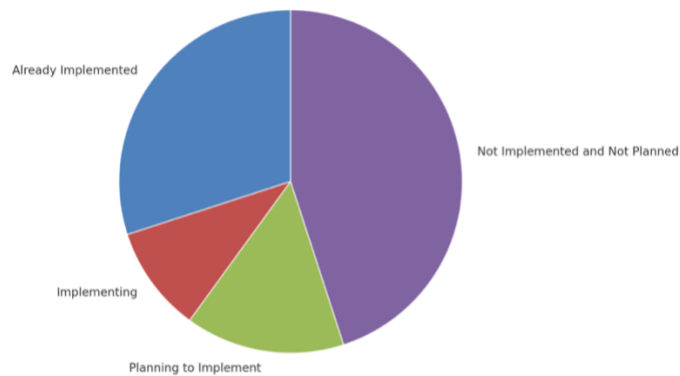


Figure 3. Projected Workforce Demand in Ukraine (2023–2027)

Sources: Ministry of Economy of Ukraine, 2023

As businesses navigate ongoing labor shortages, many are adopting structured approaches to workforce integration and optimization. One of the key strategies involves implementing onboarding programs that minimize reliance on past work experience. By introducing step-by-step work instructions, businesses can accelerate the adaptation of new employees, streamline training processes, and reduce skill gaps. These measures help organizations maintain operational efficiency despite limited access to highly experienced personnel. Figure 4 illustrates the adoption of digital communication tools in business operations, highlighting varying levels of integration across enterprises. While many businesses have successfully implemented digital communication strategies, a significant portion either remains in the early stages of adoption or has yet to consider such tools as a core element of workforce management (Diia.Business, 2023).

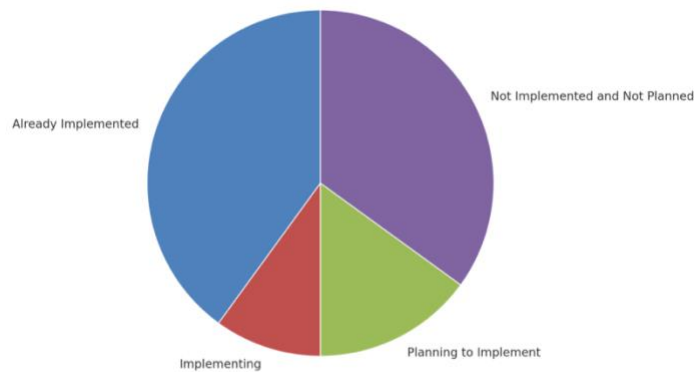


Figure 4. Adoption of Digital Communication in Business Operations

Sources: Diia.Business, 2023

Expanding the use of digital communication platforms has become an effective solution for improving workforce coordination. Many businesses are incorporating Viber, Telegram, and WhatsApp into their internal communication structures, enabling real-time updates and enhancing employee engagement. However, survey data indicate that nearly half of businesses have yet to fully integrate digital solutions for managing personnel and workflow processes (Diia.Business, 2023).

The adoption of cloud-based workforce management tools further enhances operational efficiency. Businesses leveraging such systems benefit from improved tracking of labor productivity, enhanced data-sharing capabilities, and more effective decision-making. The ability to monitor workforce performance in real-time and adjust operations accordingly provides companies with greater flexibility in responding to labor market fluctuations.

By redefining hiring criteria, prioritizing adaptability and willingness to learn, and establishing internal training programs, businesses can mitigate workforce shortages while fostering a more resilient and responsive organizational structure. The integration of automation tools and structured digital communication systems ensures that companies remain competitive in an evolving labor market, enabling them to optimize resources and sustain long-term growth.

5. Discussion

This study highlights the persistent workforce shortages in Ukraine and their significant impact on business operations. Data from job search platforms and employer surveys reveal a structural imbalance in labor supply and demand, with vacancies remaining unfilled for extended periods while new job postings remain

relatively stable. Business sentiment surveys indicate that while firms are optimistic about economic recovery, labor shortages, skill mismatches, and rising employment costs continue to pose serious challenges. In response, companies have adopted various workforce adaptation strategies, including hiring less-experienced candidates, investing in employee training, automating processes, and restructuring their operations to remain competitive. Furthermore, the study underscores the increasing role of digital communication and workforce management tools in improving operational efficiency amid workforce shortages. The findings suggest that Ukraine's labor market struggles are not solely due to a lack of available workers but are also shaped by skill mismatches, migration patterns, and business adaptation limitations. The growing number of long-term open vacancies, despite relatively stable new job postings, suggests inefficiencies in the hiring process and difficulties in attracting talent with the required qualifications. These trends align with broader economic theories on labor market frictions, where employment gaps persist despite demand due to mismatches in skills, geographical location, or wage expectations.

Moreover, businesses are responding to workforce shortages with a mix of traditional and innovative strategies. While many firms are shifting toward hiring candidates with lower qualifications and providing in-house training, others are leveraging digital transformation to optimize operations. The adoption of automation and workforce management technologies reflects a broader global trend in labor market adaptation, where businesses invest in digital solutions to enhance productivity and compensate for labor shortages. The shift toward digital workforce tools and remote collaboration platforms further aligns with international studies on labor market resilience, particularly in crisis-affected economies.

Another important aspect of the findings is the sectoral and business-size disparity in hiring challenges. While larger firms may have the resources to offer higher wages, invest in automation, or attract skilled professionals, micro-enterprises and small businesses struggle the most with workforce shortages. These firms often lack the financial capacity to compete for top talent, forcing them to adopt less structured hiring and training methods. This dynamic highlights the need for targeted policy interventions to support small businesses in overcoming labor constraints.

The results of this study hold several critical implications for business leaders, policymakers, and workforce development initiatives. Firstly, they emphasize the urgency of expanding vocational training and reskilling programs to reduce skill mismatches and improve labor market fluidity. While businesses are attempting to fill workforce gaps through internal training programs, broader systemic efforts are needed to align educational curricula with labor market demands. Secondly, businesses must accelerate the adoption of digital tools for workforce management. The findings suggest that while many firms recognize the benefits of automation and digital collaboration, a significant portion still lacks structured digital workforce integration. Given the ongoing workforce challenges, businesses that invest in automation, streamlined hiring processes, and structured training programs are likely to gain a competitive advantage in the evolving labor market. From a policy perspective, the results highlight the need for targeted labor market interventions. Government programs that provide incentives for hiring and training employees, tax benefits for workforce development initiatives, and support for small businesses in adopting digital transformation could help mitigate labor shortages. Additionally, migration policies and remote work facilitation should be explored as potential solutions to attract skilled professionals and optimize labor distribution across industries. Finally, the study underscores the broader economic implications of prolonged workforce shortages. If labor constraints persist, they could slow economic recovery, reduce business competitiveness, and limit investment in key sectors. Addressing these issues requires a coordinated effort between businesses, educational institutions, and government agencies to develop a labor market that is both adaptable and resilient to external shocks.

6. Conclusions.

This study examines several key constraints faced by businesses in Ukraine and the strategies they employ to overcome them. While the identified challenges are not the only factors influencing business operations, they are among the most critical for ensuring stability and growth. In addition to labor market issues, business success depends on access to modern tools, strategic location, transportation infrastructure, competition intensity, and the economic conditions of the region in which the enterprise operates. However, the findings of recent research and surveys consistently emphasize that labor shortages – particularly the lack of qualified professionals – remain one of the most pressing concerns for Ukrainian businesses.

To address these workforce limitations, companies must expand employee training opportunities and consider structured approaches to upskilling existing workers. Providing job-specific training, developing step-by-step operational guidelines, and implementing internal entrepreneurship programs can help businesses optimize productivity. Clear instructions and standardized procedures enable employees to perform tasks efficiently, even in cases where they lack specialized experience. Additionally, maintaining effective communication channels within organizations allows businesses to gain real-time feedback from employees, ensuring operational improvements align with workforce needs.

Achieving economic resilience in challenging times requires businesses to adopt innovative management strategies that enhance efficiency. The ongoing full-scale war in Ukraine has forced companies to adjust rapidly to disruptions in workforce availability and operational capacity. As labor shortages persist, optimizing business processes has become a necessity, particularly for firms operating with fewer employees or a higher

proportion of unskilled workers. Survey findings indicate that businesses are experiencing a growing demand for both skilled and unskilled workers, reinforcing the urgency of adopting new workforce strategies. Given the evolving economic environment, companies must implement adaptive solutions that enable them to operate effectively despite workforce shortages. This includes automating processes, redesigning job roles, restructuring business operations, and leveraging digital tools for workforce coordination. By making strategic adjustments, Ukrainian businesses can mitigate labor shortages, sustain productivity, and position themselves for long-term growth despite external challenges.

Although this research provides valuable insights into labor market trends and business adaptation strategies, it is subject to several limitations. The study relies primarily on publicly available labor market reports, employer surveys, and government projections. While these sources provide extensive insights, they may not capture the full scope of workforce challenges faced by smaller, less-documented enterprises or informal employment sectors. The findings present general trends across industries but do not delve deeply into how specific sectors (e.g., manufacturing, IT, agriculture) experience and respond to workforce shortages differently. Future research should provide a more granular analysis of industry-specific challenges. The Ukrainian labor market is highly dynamic, particularly given the ongoing war. Fluctuations in migration, workforce availability, and policy interventions may alter business adaptation strategies over time, requiring continuous updates to workforce studies. This study primarily evaluates business perspectives on labor shortages, but worker experiences, job seeker preferences, and barriers to employment remain underexplored. Investigating employee motivations and career decision-making could provide a more comprehensive understanding of workforce challenges. To build on the findings of this study, future research should explore several key areas. Conducting long-term investigations into labor market adjustments can help track changes in hiring patterns, business resilience strategies, and the effectiveness of workforce development policies. Examining how different industries are affected by labor shortages would allow for more targeted policy recommendations and business adaptation strategies. Further studies should analyze the impact of government interventions, vocational training programs, and labor mobility policies on workforce stabilization. Identifying the most effective policy frameworks for supporting business resilience could inform decision-making at both national and regional levels. Given the increasing reliance on remote work, automation, and digital communication, future research should assess the effectiveness of cloud-based workforce management systems and other technological innovations in mitigating labor shortages. Investigating the motivations, expectations, and mobility patterns of job seekers would offer a more balanced view of labor market conditions, helping businesses align hiring strategies with workforce preferences.

Conflicts of Interest: Author declare no conflict of interest.

References

1. Al Shukaili, A. M., Al Kindi, K., Kassim, N. M., Ahmed, Z., & Al Hosni, K. (2023). Can government financial support enhance job creations: insights from Oman. *Journal of Science and Technology Policy Management*, 14(5), 807-829. [\[CrossRef\]](#)
2. Ambrogio, G., Filice, L., Longo, F., & Padovano, A. (2022). Workforce and supply chain disruption as a digital and technological innovation opportunity for resilient manufacturing systems in the COVID-19 pandemic. *Computers & Industrial Engineering*, 169, 108158. [\[CrossRef\]](#)
3. Amore, F., Silvestri, V., Turco, S., Fortini, S., Giudiceandrea, A., Cruciani, F., & Rizzo, S. (2024). Vision rehabilitation workforce in Italy: a country-level analysis. *BMC Health Services Research*, 24(1), 1323. [\[CrossRef\]](#)
4. Anderson, I. (2024). Labor Market Flexibility and Unemployment: A Study of the United States. *International Journal of Economics*, 9(2), 13-24. [\[CrossRef\]](#)
5. Brunello, G., Rückert, D., & Wruuck, P. (2024). Adult learning: the employers' provision of retraining and re-skilling. *Handbook on Labour Markets in Transition*, 424-441. [\[CrossRef\]](#)
6. Chakrabarti, A., Singh, K., & Mahmood, I. (2007). Diversification and performance: Evidence from East Asian firms. *Strategic Management Journal*, 28(2), 101-120. [\[Google Scholar\]](#)
7. Confederation of Employers of Ukraine. (2023). How Ukraine Can Compensate for the Loss of 30% of Its Workforce Potential. [\[Link\]](#)
8. Danilov, O. (2022, July 6). *Twitter/X post*. [\[Link\]](#)
9. Diia Business. (2023). *State and needs of business during the war: Survey results in August*. [\[Link\]](#)
10. Duval, M. R. A., Duval, R., Ji, Y., Li, L., Oikonomou, M., Pizzinelli, C., & Tavares, M. M. (2022). *Labor market tightness in advanced economies*. International Monetary Fund. [\[Google Scholar\]](#)
11. European Business Association. (2023). *Research on the Labour Market in Ukraine*. [\[Link\]](#)
12. Faqih, A., & Miah, S. J. (2023). Artificial intelligence-driven talent management system: Exploring the risks and options for constructing a theoretical foundation. *Journal of Risk and Financial Management*, 16(1), 31. [\[CrossRef\]](#)
13. Gavkalova, N., Akimova, L., & Akimov, O. (2023). Anti-crisis Management Mechanism in the Digital Age. *Marketing and Management of Innovations*, 14(4), 188-199. [\[CrossRef\]](#)
14. Guthrie, D. (1997). Between markets and politics: Organizational responses to reform in China. *American Journal of Sociology*, 102(5), 1258-1304. [\[CrossRef\]](#)
15. Institute for Economic Research and Policy Consulting. (2023). *Sixteenth monthly survey of enterprises: Ukrainian business during the war (August 2023)*. [\[Link\]](#)
16. Joint Representative Body of Representative All-Ukrainian Trade Union Associations at the National Level. (2023). *Project of the medium-term forecast of the need for specialists and workers in the labor market for 2024-2027 (2888)*. [\[Link\]](#)

17. Koutroukis, T., Chatzinikolaou, D., Vlahos, C., & Pistikou, V. (2022). The post-COVID-19 era, fourth industrial revolution, and new globalization: Restructured labor relations and organizational adaptation. *Societies*, 12(6), 187. [\[CrossRef\]](#)
18. Kwilinski, A., Lyulyov, O., Pimonenko, T., & Pudryk, D. (2023). Competitiveness of higher education systems: Exploring the role of migration flow. *Journal of Infrastructure, Policy and Development*, 8(2), 2839. [\[CrossRef\]](#)
19. Kwilinski, A., Lyulyov, O., Pimonenko, T., Dzwigol, H., Abazov, R., & Pudryk, D. (2022). International migration drivers: Economic, environmental, social, and political effects. *Sustainability*, 14(11), 6413. [\[CrossRef\]](#)
20. Kwiliński, A., Szczepańska-Woszczyzna, K., Lyulyov, O., & Pimonenko, T. (2024). Government effectiveness and immigrant outflows: Their role in advancing greenfield investment globally and regionally. *Polish Journal of Management Studies*, 29(2), 365-379. [\[CrossRef\]](#)
21. Legal Hundred. (2021). Results of the Verkhovna Rada's work in the field of social and legal protection of veterans and military personnel in 2021. *Analytical Report* [\[Link\]](#)
22. Li, L. (2024). Reskilling and upskilling the future-ready workforce for industry 4.0 and beyond. *Information Systems Frontiers*, 26(5), 1697-1712. [\[CrossRef\]](#)
23. Ministry of Economy of Ukraine. (2023). *Workforce projections for 2023–2027*. [\[Link\]](#)
24. National Bank of Ukraine. (2023). *Business expectations of enterprises, Q3 2023*. [\[Link\]](#)
25. Oklander, M., Yashkina, O., Zlatova, I., Cicekli, I., & Letunovska, N. (2024). Digital Marketing in the Survival and Growth Strategies of Small and Medium-Sized Businesses During the War in Ukraine. *Marketing and Management of Innovations*, 15(1), 15–28. [\[CrossRef\]](#)
26. Opendatobot. (2023). How many Ukrainians have not actually returned home due to the war? [\[Link\]](#)
27. Pudryk, D., Kwilinski, A., Lyulyov, O., & Pimonenko, T. (2023). Towards Achieving Sustainable Development: Interactions between Migration and Education. *Forum Scientiae Oeconomia*, 11(1), 113–132. [\[CrossRef\]](#)
28. Szczepanska-Woszczyzna, K., Lyulyov, O., Pimonenko, T., Infante-Moro, A., Zimbroff, A., & Solodovnikov, S. (2024). The Contribution of Higher Education to Innovation Development: Long-Term and Short-Term Analysis. *Forum Scientiae Oeconomia*, 12(4), 8–29. [\[CrossRef\]](#)
29. Trenerry, B., Chng, S., Wang, Y., Suhaila, Z. S., Lim, S. S., Lu, H. Y., & Oh, P. H. (2021). Preparing workplaces for digital transformation: An integrative review and framework of multi-level factors. *Frontiers in psychology*, 12, 620766. [\[CrossRef\]](#)
30. Trofyomenko, M., Bulatova, O., Trofyomenko, A., & Vyshniakov, O. (2023). Digital Development and Technological Innovations: Inequality and Asymmetry. *Marketing and Management of Innovations*, 14(3), 215–229. [\[CrossRef\]](#)
31. Ukraine Refugee Situation. (2023). UNHCR. [\[Link\]](#)
32. Ukrstat. (2021). *Labor force by gender, type of settlement, and age groups in 2021*. [\[Link\]](#)
33. Vranceanu, R., & Sutan, A. (2023). Should the firm or the employee pay for upskilling? A contract theory approach. *Managerial and Decision Economics*, 44(1), 197-207. [\[CrossRef\]](#)
34. Work.ua. (2023). *Ready to hire less experienced people: How employers overcome the labor shortage*. Kyiv International Economic Forum. [\[Link\]](#)
35. Zubair, S. (2024). AI-Driven Automation: Transforming Workplaces and Labor Markets. *Frontiers in Artificial Intelligence Research*, 1(3), 373-411. [\[Google Scholar\]](#)

РИНОК ПРАЦІ УКРАЇНИ: ВИКЛИКИ, ТЕНДЕНЦІЇ ТА АДАПТАЦІЯ БІЗНЕСУ

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Повномасштабне вторгнення в Україну суттєво порушило функціонування ринку праці, спричинивши значні зміни у доступності робочої сили через міграцію, військову мобілізацію та економічну нестабільність. Ці потрясіння призвели до серйозного дефіциту робочої сили, створюючи виклики для безперервності бізнесу та економічного відновлення. Дане дослідження аналізує динаміку змін на ринку праці України, основні виклики для бізнесу та адаптивні стратегії, які можуть забезпечити стійкість і довгостроковий розвиток компаній. У роботі використано відкриті джерела даних, зокрема статистику ООН та Opendatobot, для оцінки кількості осіб, які виїхали з України, змін у чисельності військовослужбовців та коливань у складі працездатного населення до і після повномасштабного вторгнення. Проведена кількісна оцінка залишкової робочої сили ілюструє масштаби кадрового дефіциту. Також дослідження включає аналіз офіційних заяв політиків та представників бізнесу для кращого розуміння динаміки ринку праці. Емпіричний аналіз свідчить про значне скорочення чисельності робочої сили, значна частина якої або виїхала за кордон, або залучена до оборони країни. Водночас зростає попит як на кваліфікованих, так і на некваліфікованих працівників, що змушує бізнес шукати нові шляхи адаптації персоналу. Висновки дослідження показують, що підприємства можуть частково компенсувати нестачу кадрів за допомогою впровадження сучасних цифрових комунікаційних інструментів, програм перенавчання працівників та структурованих процесів адаптації некваліфікованих кадрів. Результати підкреслюють необхідність оперативного коригування кадрових стратегій для забезпечення стабільної діяльності бізнесу. Політики, спрямовані на розвиток гнучкої зайнятості, інтеграцію цифрових технологій у сферу праці та цільове професійне навчання, можуть посилити стійкість бізнесу. Дослідження пропонує практичні рекомендації для підприємств різних галузей, акцентуючи увагу на адаптивному управлінні трудовими ресурсами як ключовому факторі відновлення економіки України в умовах триваючого конфлікту.

Ключові слова: ринок праці, Україна в умовах воєнного стану, стійкість бізнесу, економіка, зовнішні впливи на бізнес України, сучасні комунікаційні технології.