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Future of Ukraine Workforce

Report

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Research Methodology

The methodology for the report involves several approaches to gather data on the Ukrainian private sector and its workforce.

1. **Desk research, reviewing existing reports and statistics on the private sector and workforce development in Ukraine.** This included identifying trends and areas of opportunity, common challenges and government policies and regulations related to workforce development. Additionally, education and training programs in Ukraine were analyzed to identify areas for improvement and potential collaboration with employers.
2. **Questionnaire survey of private sector employers in SMEs to gather data on their current workforce development and mid- to long-term needs.** A total of 252 respondents were sampled, and SMEs were classified by the size of their workforce: micro-enterprises (1-9 employees), small enterprises (10-49 employees), and medium-sized enterprises (50-249 employees).
3. **Individual interviews with economic experts and focus-group discussions with private sector employers** to identify emerging trends and skills that will be in demand in the future.
4. **Individual interviews with representatives from the private sector, government, and education sectors** to identify challenges and barriers to workforce development.
5. **Individual interviews with educators and mental health professionals** about the current state of mental health education in Ukraine and potential efforts to integrate mental health in standard training and educational curricula.

Key Findings

- Since the beginning of 2023, there has been a gradual recovery of the labor market in Ukraine. However, unemployment remains higher than before the full-scale invasion by Russia in February 2022 and is taking on the characteristics of a structural phenomenon. The deepening disparities in both professional and regional aspects pose significant challenges to further employment growth. The consequences of the war, including the destruction, closure, and relocation of enterprises, along with the significant number of refugees, internally displaced persons (IDPs), and mobilization efforts, have led to a mismatch between labor market supply and demand in war-affected and rear regions. This mismatch is particularly evident in various professions. Additionally, factors like varying labor market demands and limited job prospects in destination locations exacerbate these issues. Consequently, individuals are often compelled to work in positions that underutilize their qualifications and skills. As of May 2023, the unemployment rate is estimated to be around 20%.
- Private businesses are facing a shortage of skilled workers as their primary challenge. Despite high levels of unemployment, there is a scarcity of certain professions. The reasons for this phenomenon are: 1) the emigration of skilled workers, especially women, from Ukraine to other countries as refugees; 2) the mobilization of men into the Armed Forces (with a total estimated number of about 1 million personnel). IDPs and refugees are losing their work qualifications if they cannot quickly find jobs in their field of expertise.
- Assuming there are no significant shocks (escalation of military operations, blackouts, etc.), the gradual recovery of the labor market will continue. The unemployment rate will decrease due to the activation of economic activity. The process of reconstruction of the Ukrainian economy will help eliminate structural disparities, including through investments in affected regions and the return of refugees and IDPs to their homes. Currently, the number of job offers in the eastern, northern, and southern regions of Ukraine has not returned to the level of early 2022, while western and partially central regions offer even more vacancies than before the full-scale invasion by Russia.

- Despite a slowdown in migration processes, the number of Ukrainians remaining in Europe is around 8.2 million, of which about 5.1 million have temporary protection status in the EU¹. From a demographic perspective, this mainly consists of young women with children, which significantly complicates the situation with the workforce in Ukraine in the future. With the reduction of security risks, the return of refugees will accelerate, but there remains a threat of reverse movement – family reunification or job search outside Ukraine.
- The problem of the mismatch between education and training of workers with the private sector's needs has become more acute. Plans for workforce preparation are not being adjusted, and specialists continue to be trained in the same volume and specialties as planned during peacetime. The recovery of the Ukrainian economy will require the preparation and retraining of a large number of specialists in priority sectors of the economy (IT sector, agro-industrial sector, energy sector, transport industry, military-industrial complex, etc.).
- A significant problem remains the psychosocial condition of the population, particularly IDPs and those who were in active combat zones. This will require significant efforts from both the government and private sector, as well as an increase in the training of psychological specialists. A challenge will be the return to peaceful life and employment of veterans, including disabled veterans. Individuals with disabilities, both combatants (male and female) who were injured during hostilities, and civilians who sustained injuries, concussions, or mutilation during their work, activities, or residency in the respective territory due to military aggression while under occupation or in areas affected by military operations, will require professional rehabilitation.

¹ Ukraine Refugee situation. Operational data portal.URL: <https://data2.unhcr.org/en/situations/ukraine>



The Size of the Workforce in Ukraine

In the explanatory note to the Budget project for 2023, the population of Ukraine was estimated at 34.5 million². The number of employed people on average for 2021, the last period for which there are statistical data³, was 15.6 million, including 7.4 million women and 8.2 million men⁴.

The workforce size in the country is influenced by the population and the dynamics of indicators like mortality and birth rates, and migration flows. According to the Office of the United Nations High Commissioner for Refugees, as of May 9, 2023, about 8.2 million refugees (about half the population of New York) from Ukraine have been recorded throughout Europe since February 24, 2022⁵. Nearly 5.1 million refugees from Ukraine have temporarily registered for protection or similar national protection schemes in Europe. Approximately 2.8 million people left or were deported to Russia and Belarus⁶. About 250,000 refugees moved to the United States⁷ and Canada⁸. According to the International Organization for Migration, 40% of working-age refugees are already employed⁹, which means that about 3 million have jobs and receive social support from the countries that have accepted refugees. Taking into account these migration flows during the period up to 2022 and during the war, the size of the workforce in Ukraine has decreased to approximately 11-12 million people.

Assuming the war ends and men are granted permission to leave, the number of those who will go to their wives and children, who have decided not to return, in a worst-case scenario, will be 1 million people, and the country will feel an additional outflow of working-age men. Accordingly,

² Пояснювальна записка до проекту Закону України «Про Державний бюджет України на 2023 рік». URL: <https://itd.rada.gov.ua/billInfo/Bills/CardByRn?regNum=8000&conv=9>

³ Until 2022, the State Statistics Service of Ukraine regularly conducted surveys of households. During the period of martial law, the conduct of surveys was suspended, so estimates of employment and unemployment require alternative sources of data.

⁴ Ситуація на ринку праці та діяльність Державної служби зайнятості у січні-вересні 2022 року. URL: https://www.dcz.gov.ua/sites/default/files/infofiles/09_sytuaciya_na_rp_ta_diyalnist_dsz_2022.pdf

⁵ Ukraine Refugee situation. Operational data portal. URL: <https://data2.unhcr.org/en/situations/ukraine>

⁶ Прищепя Я., Матвішина Г. Як через війну скоротилось населення України та що з цим робити: розповідає експерт. URL: <https://suspiine.media/354672-ak-cerez-viynu-skorotilos-naselenna-ukraini-ta-so-z-cim-robiti-rozpovidaє-ekspert/>

⁷ До США за програмою для біженців прибули понад 82 тисячі українців із близькими. URL: <https://www.eurointegration.com.ua/news/2022/12/11/7152291/>

⁸ Ukraine immigration measures: Key figures. URL: <https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/ukraine-measures/key-figures.html>

⁹ Ключові цифри: Мобільність всередині та з України, 2020-2023 URL: <https://www.migrationdataportal.org/sites/g/files/tmzbd1251/files/2023-02/ukraine-key-figures-2023.pdf>

the workforce forecast at the end of the war, considering only migration reduction, will be about 10-11 million people.

In addition to migration losses, there is a natural decrease in the population, including the workforce. During the state of war, there are no official statistics on birth and death rates, as well as losses in the armed forces. According to the UN, the losses among the civilian population are 8,791 deaths and 14,815 injured¹⁰. The exact number of deceased and executed people in Mariupol, Volnovakha, Severodonetsk, and other cities and settlements is currently unknown. According to expert estimates, this number in Mariupol alone may exceed 20,000 people¹¹.

Another significant factor for calculating the workforce is mobilization - 700,000 to 1 million Ukrainian military personnel have been drafted into the Armed Forces, who were previously employed in other sectors of the economy. Even after the end of hostilities, the quantitative composition of the Armed Forces will remain at a high level until Ukraine receives effective security guarantees. The losses of the Armed Forces remain classified until the end of the war, but according to estimates as of February 2023, they may amount to 120-130 thousand killed and injured¹².

¹⁰ Ukraine: civilian casualty update 8 May 2023. URL: <https://www.ohchr.org/en/news/2023/05/ukraine-civilian-casualty-update-8-may-2023>

¹¹ Мер Маріуполя назвав дані про загиблих у місті. URL: <https://www.radiosvoboda.org/a/news-mariupol-zahybli/32363334.html>

¹² Ukraine war, already with up to 354,000 casualties, likely to last past 2023 - U.S. documents. - URL: <https://www.reuters.com/world/europe/ukraine-war-already-with-up-354000-casualties-likely-drag-us-documents-2023-04-12/>

Current and Future Challenges of Workforce Development in Ukraine

1. **Reduction in jobs** due to complete or partial cessation of enterprise activity resulting from the destruction of equipment and premises during hostilities, loss of facilities that remained in the occupied territory, bankruptcy due to the loss of markets for goods in Ukraine and beyond. Since the beginning of the war, nearly 5 million working-age individuals have lost their jobs, or up to 30% of employed people¹³.
2. **High level of workforce emigration.** Due to the prolonged hostilities, there is an increasing risk of a significant number of Ukrainian citizens not returning to their homeland after leaving in search of temporary shelter from armed aggression. This results in the loss of the country's labor and educational potential. As of May 9, 2023, refugees from Ukraine have been registered throughout Europe at around 8,207,977 people, with 5,093,606 individuals registered for temporary protection or similar national protection schemes in Europe¹⁴. According to a survey conducted by UNHCR in December 2022 - January 2023, 12% of the refugees plan to return to Ukraine in the near future, while 65% intend to do so in the future¹⁵. However, as the number of refugees who found jobs abroad increases, so does the number of those who plan to stay and not return to Ukraine. International estimates suggest that the percentage of non-return to the homeland after the conflict ends in various countries averages at around 30%. For Ukrainian refugees, this rate may reach over 40%, as the conflict has become protracted. The longer Ukrainians stay abroad, the higher the integration of children, young people, and refugees of working age into local communities, especially if the standard of living in other countries is higher than in Ukraine.
3. **Emergence of workforce imbalances** by region, gender and age structure, as well as professional-qualification structure. There is a shift in the gender proportions of the workforce towards an increase in female

¹³ Українське суспільство в умовах війни. 2022: Колективна монографія / С. Дембіцький, О. Злобіна, Н. Костенко та ін.; за ред. член.-кор. НАН України, д. філос. н. Є. Головахи, д. соц. н. С. Макеєва. Київ: Інститут соціології НАН України, 2022. 410 с. URL: <https://i-soc.com.ua/assets/files/monitoring/maket-vijna...2022dlya-tipografiivse.pdf>

¹⁴ Ukraine Refugee situation. Operational data portal. URL: <https://data2.unhcr.org/en/situations/ukraine>

¹⁵ Lives on Hold: Intentions and Perspectives of Refugees from Ukraine #3 URL: https://data.unhcr.org/en/documents/details/99072#_ga=2.207718802.1623471674.1677490380-1388492483.1677253513.

participation in the labor market. The absence of or loss of a family breadwinner due to military service has resulted in women having to take on more responsibilities to provide for their families' basic needs. In 2022, employers reported to the State Employment Service about 123.4 thousand planned mass layoffs (compared to 224.7 thousand people in 2021). As of April 1, 2023, there were 137,000 unemployed individuals in Ukraine¹⁶.

4. **High levels of unemployment due to a shortage of labor caused by asymmetries between supply and demand for labor.** Relocated businesses with complex production processes are filling vacancies, while high unemployment persists among IDPs. Due to the lack of work in their field, individuals with higher education often work in positions below their qualifications and receive lower wages than their previous level of pay. The ban on men leaving the country provides a significant supply of labor. However, many men avoid official employment due to fear of mobilization.
5. According to the indicator of **human capital utilization efficiency**, which is calculated as the ratio of GDP per capita to wages, Ukraine ranks among the lowest in the rating¹⁷. The lag in labor productivity is a negative phenomenon for the country's economy. Taking into account the real GDP reduction by 29.1% in 2022¹⁸ and the GDP per capita reduction by 4.4%¹⁹, according to data from the Ministry of Finance website, and an average monthly wage increase of 6% according to State Statistics Service (<https://ukrstat.gov.ua/>), the reduction in the human capital utilization efficiency indicator for 2022 will be 10%.
6. **Loss of labor due to mobilization, death, and disability resulting from military action.** The number of employees with disabilities is increasing, and their level of productivity and the range of jobs they can perform differs from the pre-war period. More than 80% of employers are willing

¹⁶ У Службі зайнятості сказали, скільки українців мають статус безробітного. URL: <https://www.ukrinform.ua/rubric-society/3696918-u-sluzbi-zajnatosti-skazali-skilki-ukrainciv-maut-status-bezrobitnogo.html>

¹⁷ Український ринок праці: імперативи та можливості змін : колективна монографія / за наук. ред. д.е.н., проф. І.Л. Петрової, к.е.н. В.В. Близнюк ; НАН України, ДУ «Ін-т екон. та прогнозув. НАН України». К., 2018. 356 с. URL: <http://ief.org.ua/docs/mg/306.pdf>

¹⁸ Торік реальний ВВП скоротився на 29,1% - Держстат. Укрінформ. URL: <https://www.ukrinform.ua/rubric-economy/3695597-torik-realnij-vvp-skorotivsa-na-291-derzstat.html>

¹⁹ Валовий внутрішній продукт (ВВП) в Україні 2023. URL: <https://index.minfin.com.ua/economy/gdp/>

to hire veterans and people with disabilities²⁰, some of whom intend to receive financial support from the government. The government plans to expand programs that compensate employers for hiring veterans after they return from the front, as well as individuals with disabilities resulting from the war, in order to accelerate their integration into peaceful life.

7. **The informalization of the labor market is increasing**, with a growing number of vacancies without official registration and payment. As a result, there are no social guarantees, working hours are not counted towards employment history, and so on. The requirement for men to register with military recruitment offices for official employment also increases unemployment and the size of informal employment. According to estimates by the State Employment Service of Ukraine (SES) as of March 2023, about 3 million employees worked without official registration²¹, which is more than 20% of the working-age population of Ukraine. At the same time, the informal sector of the economy serves as a buffer against unemployment, absorbing a certain portion of those who become unemployed during economic downturns. The SES faces a challenging situation where individuals primarily seek its services for unemployment benefits rather than actively seeking employment. This trend discourages employers from engaging with the SES as they perceive a lack of genuine interest from job seekers and even encounter instances of intentional resistance. Consequently, employers show little interest in approaching the SES for recruitment purposes.
8. The liberalization of labor relations in the context of a state of martial law has had an impact on social protection and weakened the position of workers in social dialogue, particularly by strengthening the trend towards bilateral relations instead of tripartite ones (weakening the involvement of a third party, such as a government or trade unions). **Problems have arisen in the field of working conditions** due to the lack of culture of prevention in the areas of safety and hygiene at work, as well as the increase in the proportion of those employed in the informal

²⁰ Понад 80% роботодавців готові брати на роботу ветеранів та людей з інвалідністю, - Тетяна Бережна. - <https://www.me.gov.ua/News/Detail?lang=uk-UA&id=306ee951-5745-4cb1-a4ff-a50ea55cced2&title=Ponad80-Robotodavtsiv>

²¹ Бюджет України втрачає 100 млрд гривень на рік через незарєстрованих працівників — Держпраці. URL: <https://www.work.ua/news/ukraine/2359/>

sector of the economy who do not have state protection for ensuring safe working conditions. The responsibility for creating decent and safe working conditions has been shifted to the employee with the changes made to the Labor Code regarding remote work.

9. **The legislation on labor, formed on the principles of Soviet industrial economy, is ineffective** in the realities of economic transformation and under conditions of martial law. The current Labor Code (Code of Laws on Labor) was adopted back in 1971, and it undergoes constant changes that do not keep up with the trends in the labor market development. It is imperative to implement measures that extend employment rights to workers in non-standard employment arrangements, such as gig economy workers, freelancers, and part-time employees. To facilitate the effective implementation of telecommuting in the workforce, comprehensive policies should be established.
10. **Significant imbalance in salary payments** and asymmetry in the distribution of employees based on their level of payment for economic activity. In 2022, the average salary varied by a factor of 3.35 across different types of economic activities, ranging from 8,848 UAH (\$240) in postal and courier activities to 29,666 UAH (\$800) in aviation transportation. In the context of high government military expenditures, an important concern arises regarding the **tax burden**, particularly the preferential tax regime benefiting self-employed individuals, leading to lower taxes for them. Addressing the issue of tax burden requires a comprehensive approach that considers the interests of workers, businesses, and government revenue requirements. This may involve evaluating tax policies, implementing progressive tax systems, exploring alternative sources of revenue, and ensuring that any adjustments to the tax burden are fair and sustainable. Furthermore, the anticipated future increase in the tax burden on employees will likely result in a larger labor supply and subsequently lower salary thresholds. In addition to the tax burden and its impact on employment and salary thresholds, it is crucial to consider the **implications of the Consumer Price Index** and the decrease in real wages for workers (inflation in Ukraine in 2022 was

26.6%²²). These factors directly affect the purchasing power of workers and can influence their compensation demands.

11. **The employment structure** across industries and workforce preparation does not meet the needs of today. Existing structural imbalances, which are due to the preservation of outdated technological bases for a significant number of domestic enterprises, are accompanied by weak sensitivity of the professional-qualification structure of the labor market to structural changes. Demand in the labor market is still mainly focused on blue-collar (manual work and industry) professions²³, while the popularity and prestige of vocational education have significantly decreased over the past decade.
12. There is a **high level of unemployment and economic inactivity among young people**. According to the methodology of the International Labour Organization, 19.1% of young people aged 15 to 24 were unemployed in 2021 (as a percentage of the corresponding age group's labor force), which is 0.2% less than in 2020. Compared to other age groups identified by the State Statistics Service, this is the highest percentage. Many young people under the age of 18 travel abroad with their parents. The most pressing problem is the proportion of young people who have difficulty finding their first job after completing their education. This is evidence of gaps between employers' demands for potential workforce skills and the skills and knowledge that students acquire in higher and vocational education institutions. This mismatch manifests itself in excessive or insufficient skills or education. The widespread adoption of online education and artificial intelligence (for example, Chat GPT), has significant implications for youth employment. It necessitates a structural overhaul in the approach to education across various sectors to ensure **alignment between the skills acquired through online platforms and the evolving job market demands**. This entails integrating AI technologies into educational frameworks to equip youth with the skills necessary for the future workforce, thus mitigating the risk of a skills mismatch.

²² Інфляція в Україні в 2022 році становила 26,6% – Держстат. URL: <https://www.epravda.com.ua/news/2023/01/10/695830/>

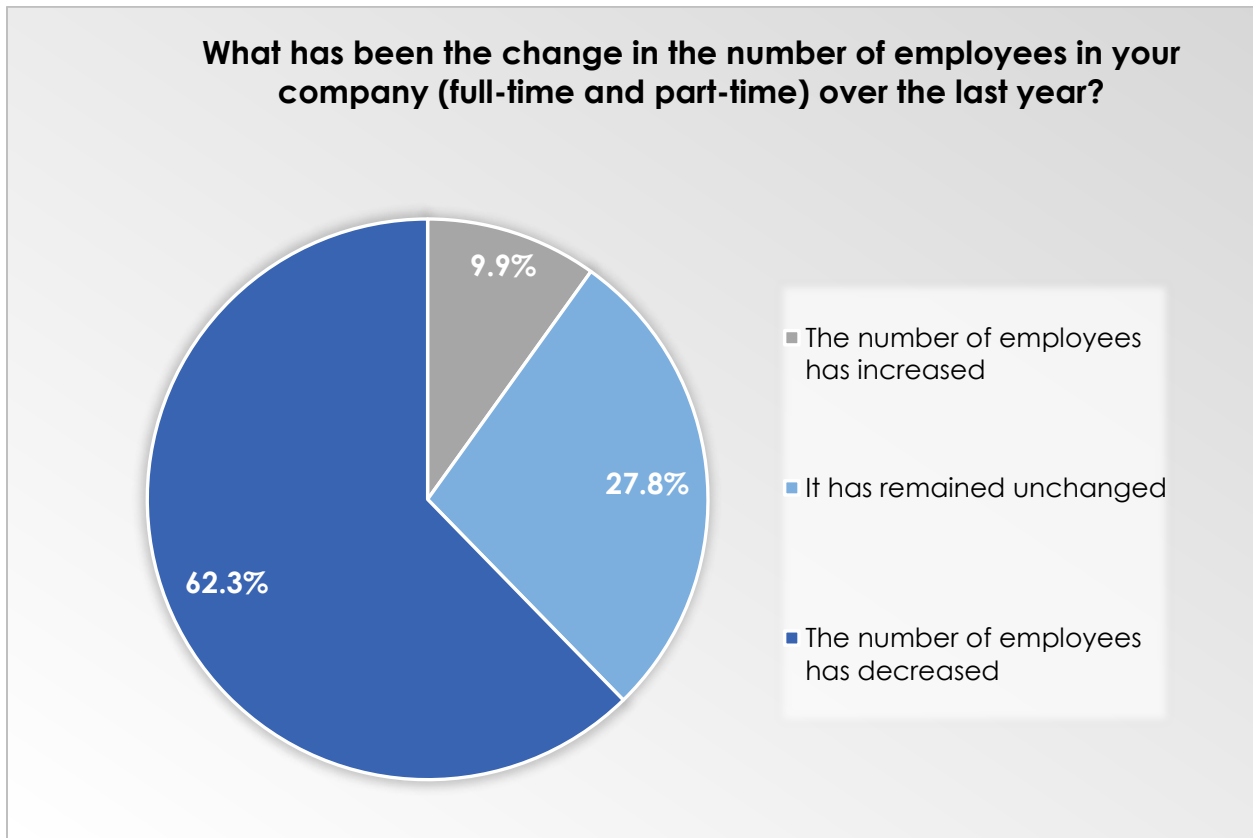
²³ Світчери підуть в робітники? Як змінився ринок праці під час війни і що буде після неї. URL: <https://www.bbc.com/ukrainian/articles/c2xpp4yyyny1o>

13. **The increase in the number of people joining the army** takes away individuals from other "civilian" areas of activity. Even after the threat from Russia's aggression is defeated, there will still be a need to maintain military capabilities in Ukraine. The more people are involved in defense and power structures, the fewer will remain in real production. Therefore, in the actual economy, there will only be an increase in staff shortages.
14. **Women will become the prevailing workforce** due to direct military losses and higher male mortality rates in Ukraine²⁴. Gender equality in the professional sphere will increase, and the distinction between female and male professions will continue to blur.
15. **The return to civilian life for combatants and demobilized military personnel** will require shortened rehabilitation programs, training, and retraining in the most in-demand specialties in the labor market.
16. **Further growth of hidden employment** will be associated with workers' desire to ensure an acceptable level of income even in cases where they lose their insurance period.

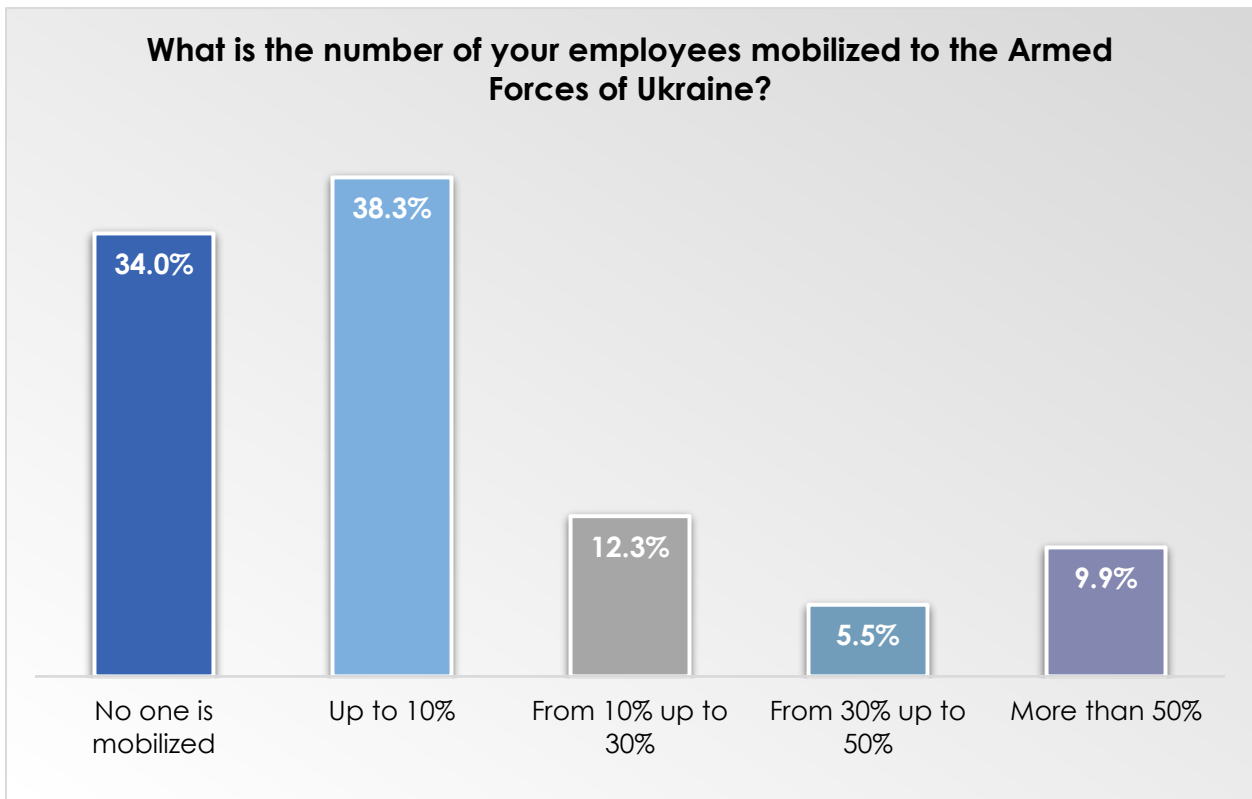
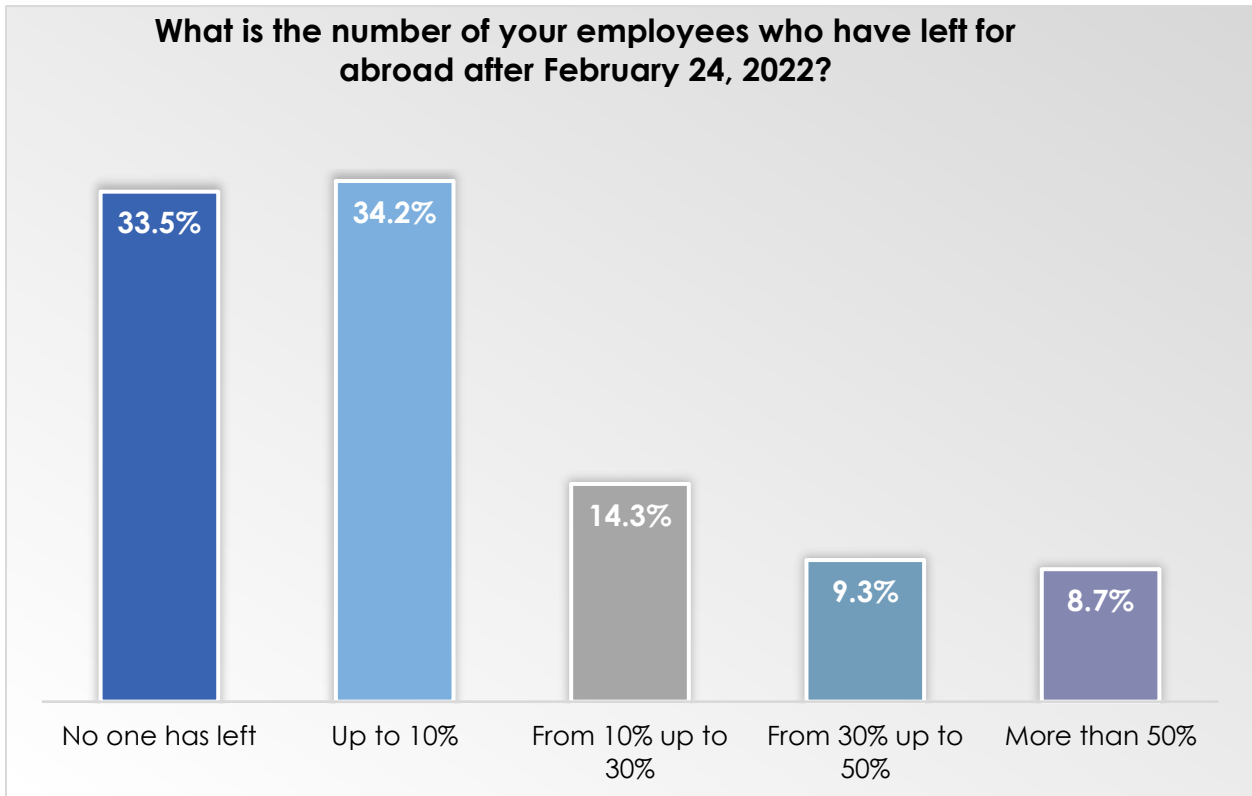
²⁴ Соціально-економічні та гуманітарні наслідки російської агресії для українського суспільства / Центр Разумкова. Київ, 2022. URL: https://razumkov.org.ua/uploads/article/2022_Gum.pdf.

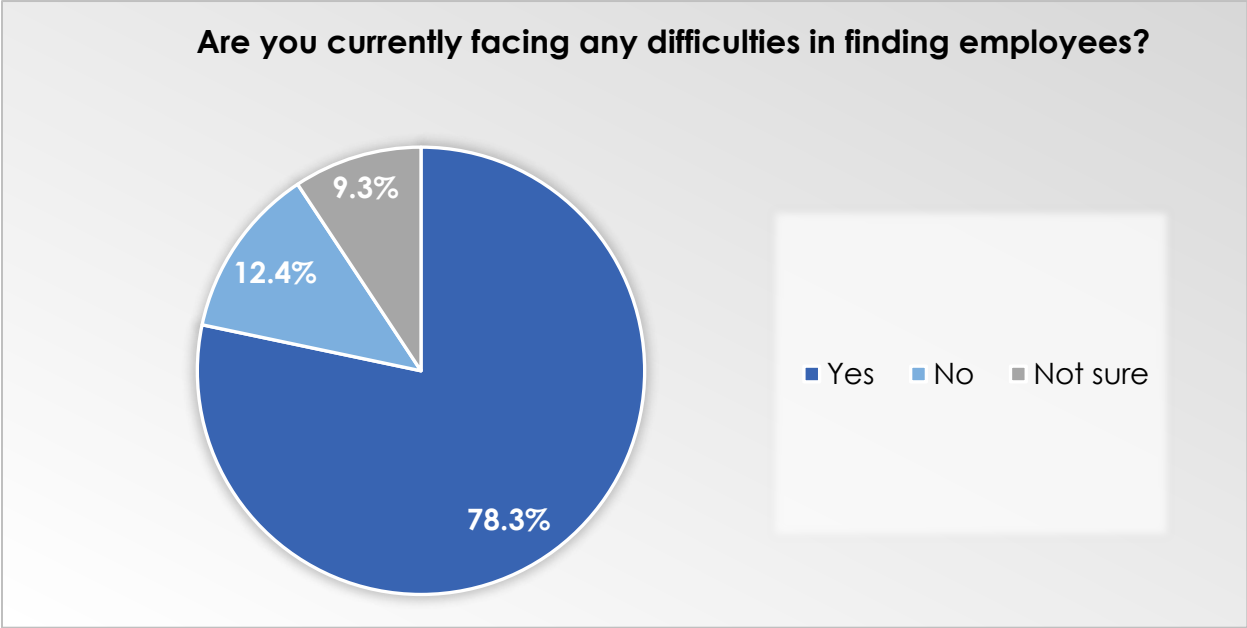
Results of the Survey of Small and Medium Enterprises

According to the survey, 62% of respondents said that the number of their employees had decreased over the past year.

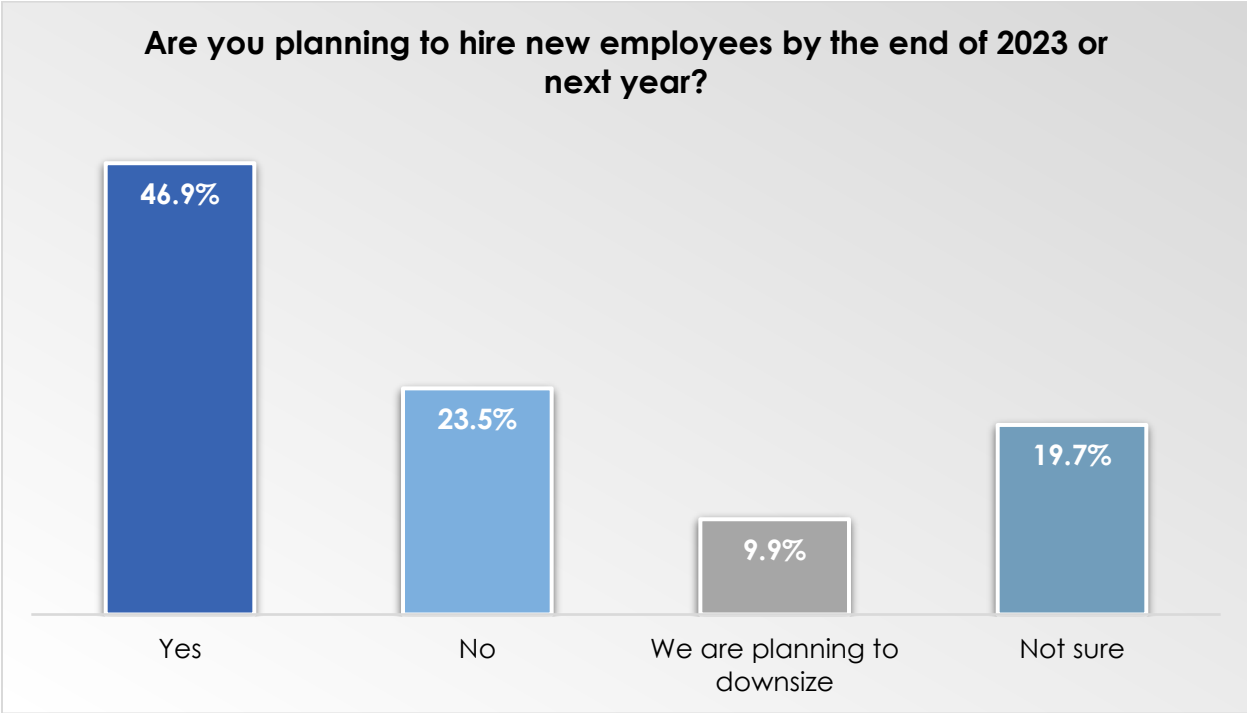


Only one-third of those surveyed had no employees who left or were mobilized to join the Armed Forces of Ukraine (ZSU), while another third reported that up to 10% of their staff had left or been mobilized. Almost 10% of those surveyed had lost or mobilized more than 50% of their employees. This situation has led to a shortage of personnel, with 78% of respondents reporting difficulties in finding workers.

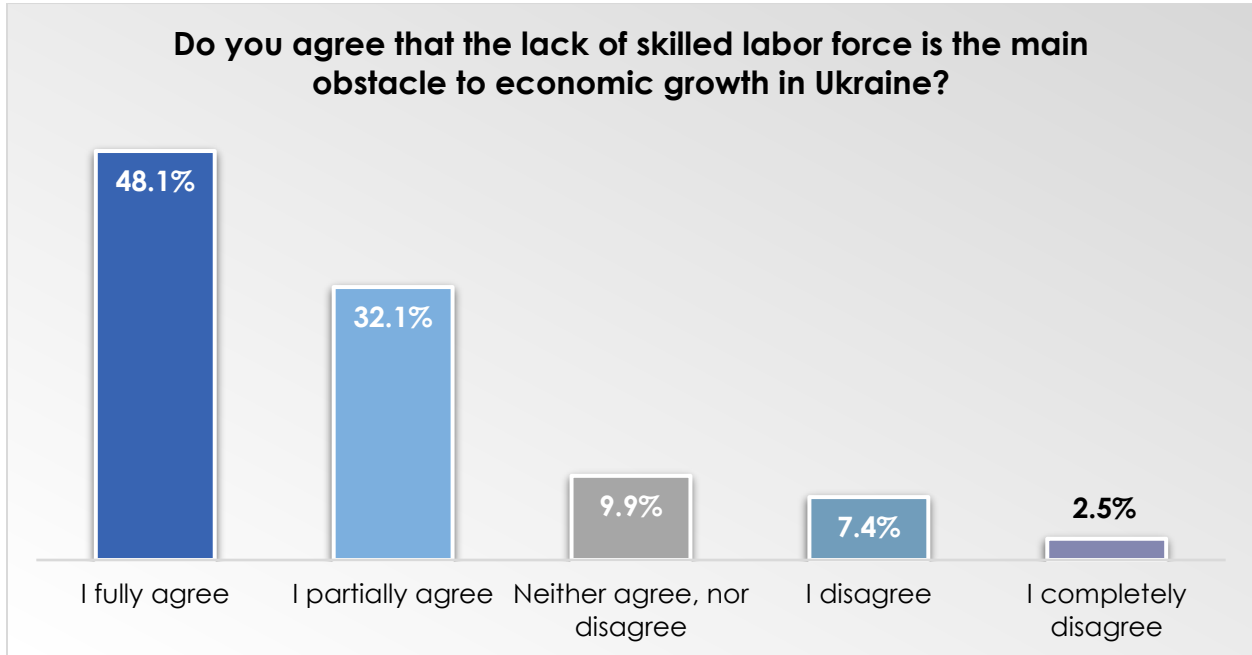




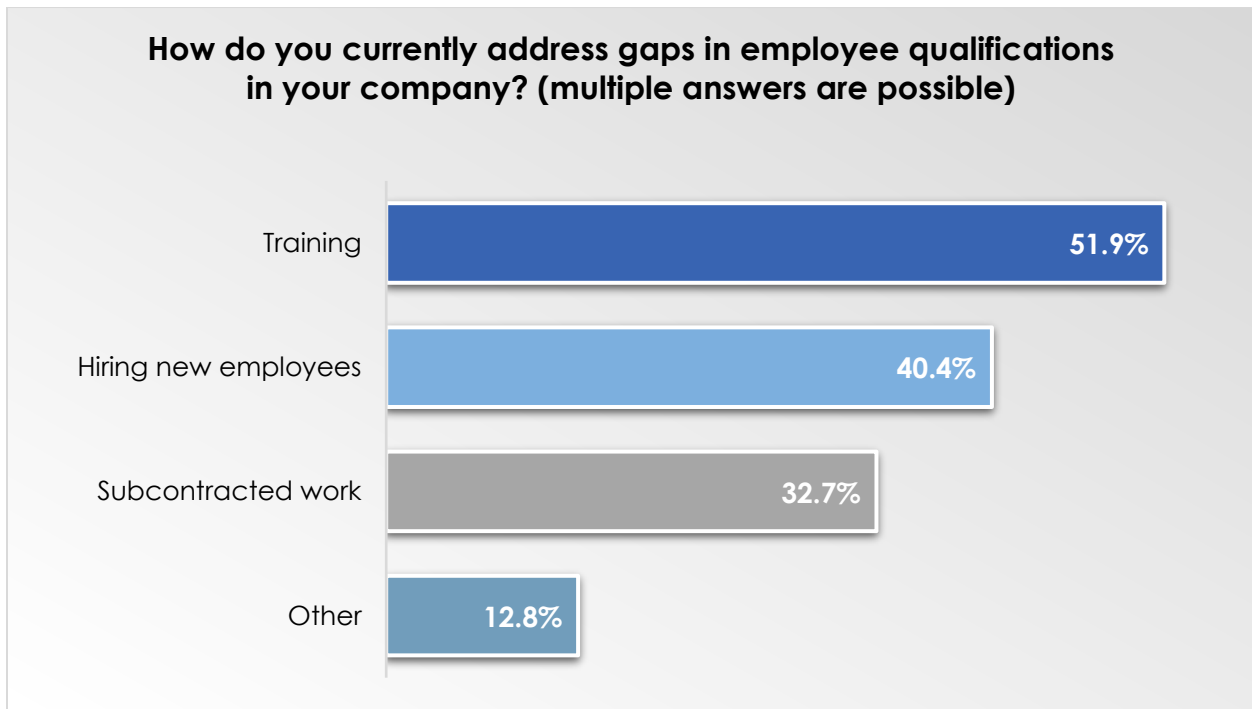
Despite the current economic situation, 47% of those surveyed plan to hire new employees by the end of the year, while 10% plan to reduce their workforce.



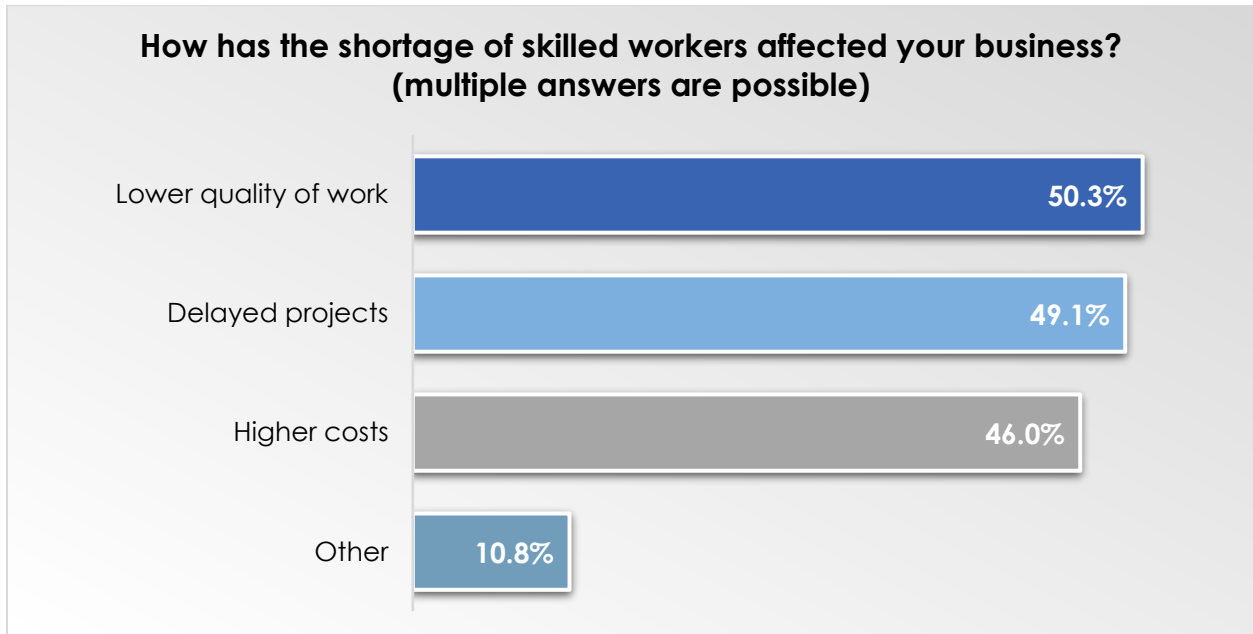
Almost 80% of respondents fully or partially agree that the lack of skilled labor is the main obstacle to Ukraine's economic growth.



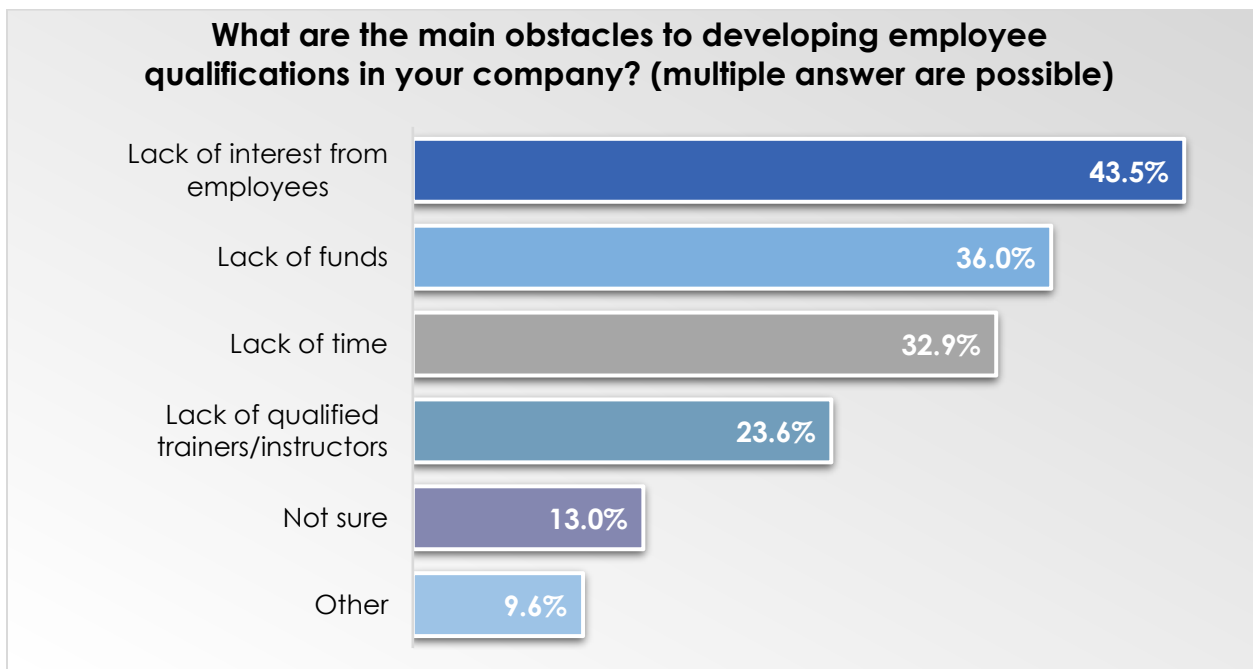
To address the skills gap, 50% of those surveyed provide training for their employees, 40% hire new employees, and 30% engage contractors.



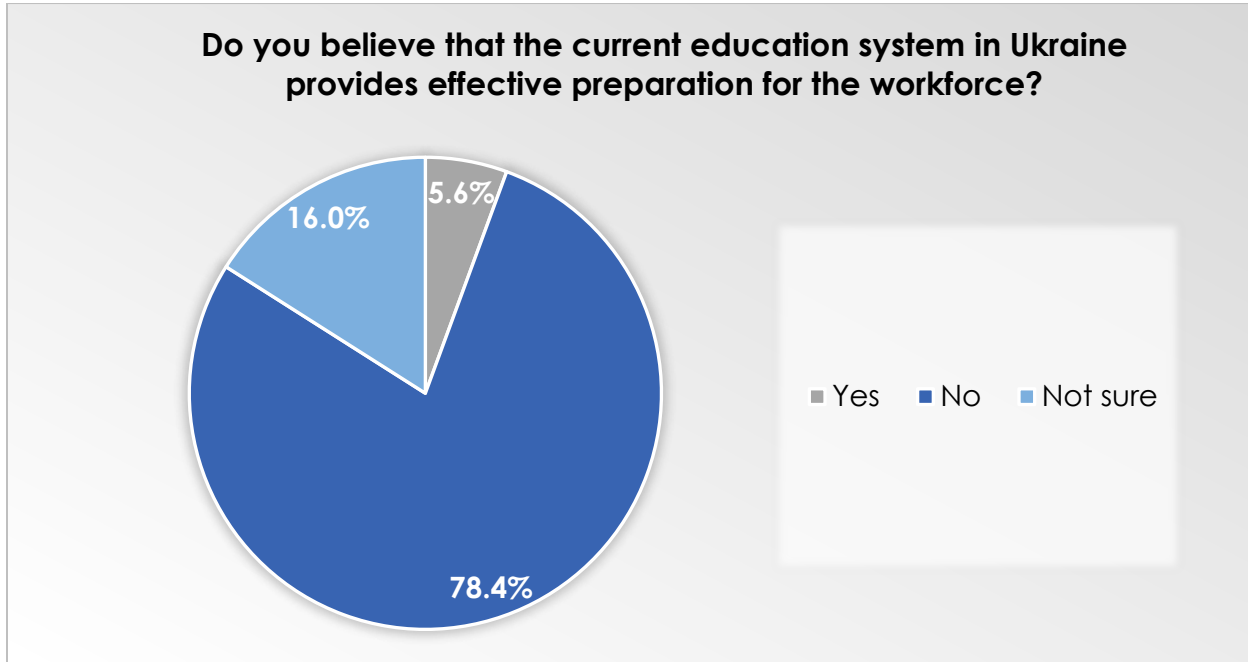
However, due to insufficient worker qualifications, around 50% report a decrease in work quality, project delays, and increased costs.



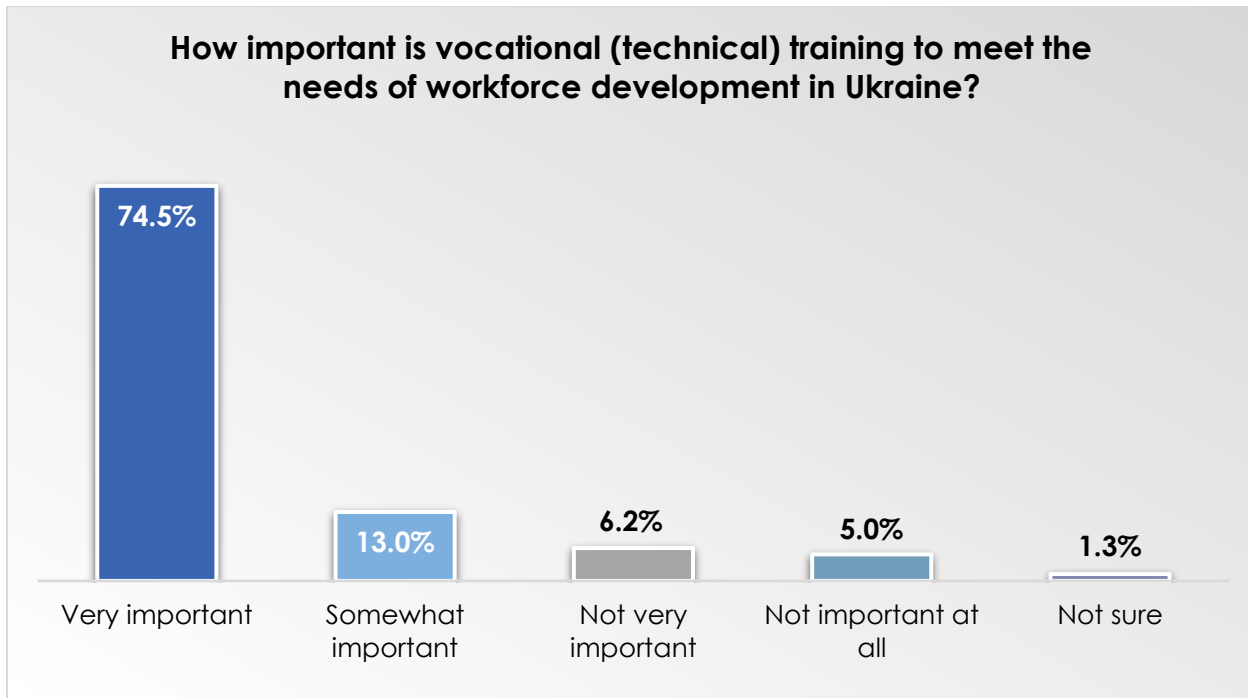
The main challenges in improving worker qualifications include lack of interest on the part of employees (43%), lack of company funds (36%), and lack of time (33%).



Nearly 80% of those surveyed do not consider the contemporary education system in Ukraine effective in preparing skilled workers.

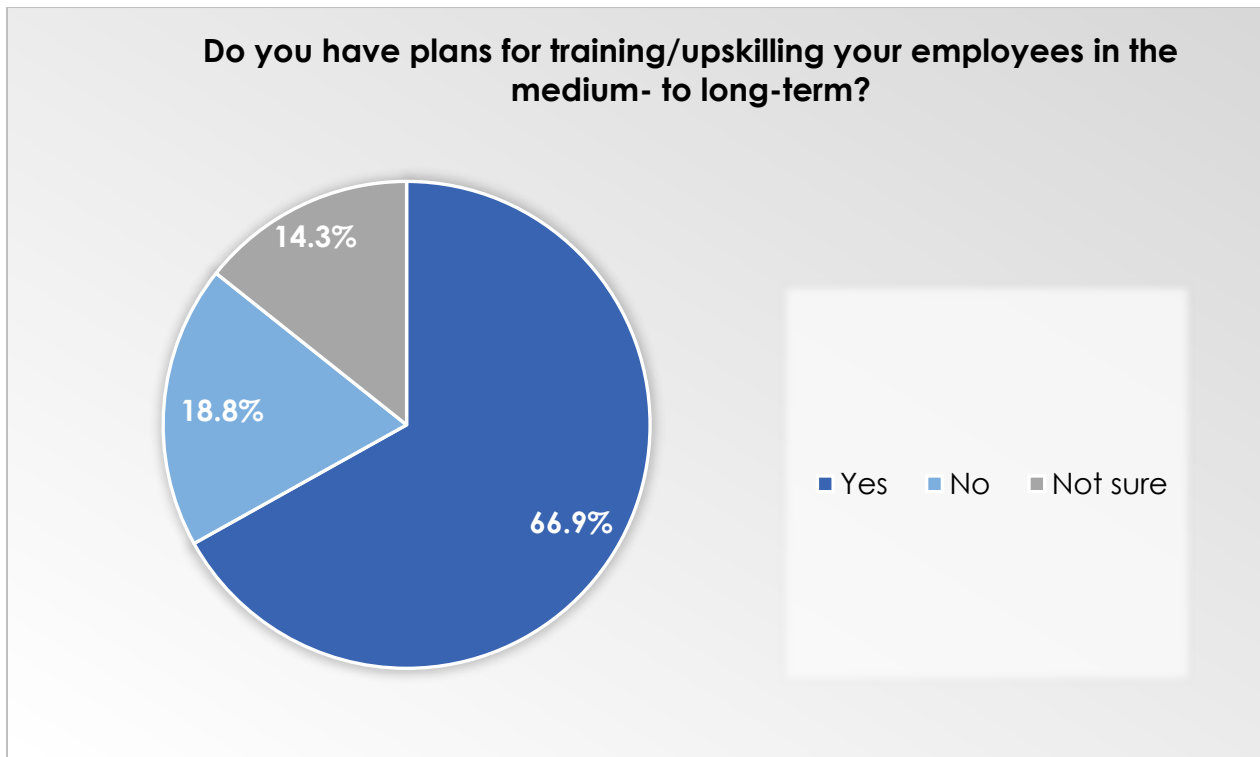
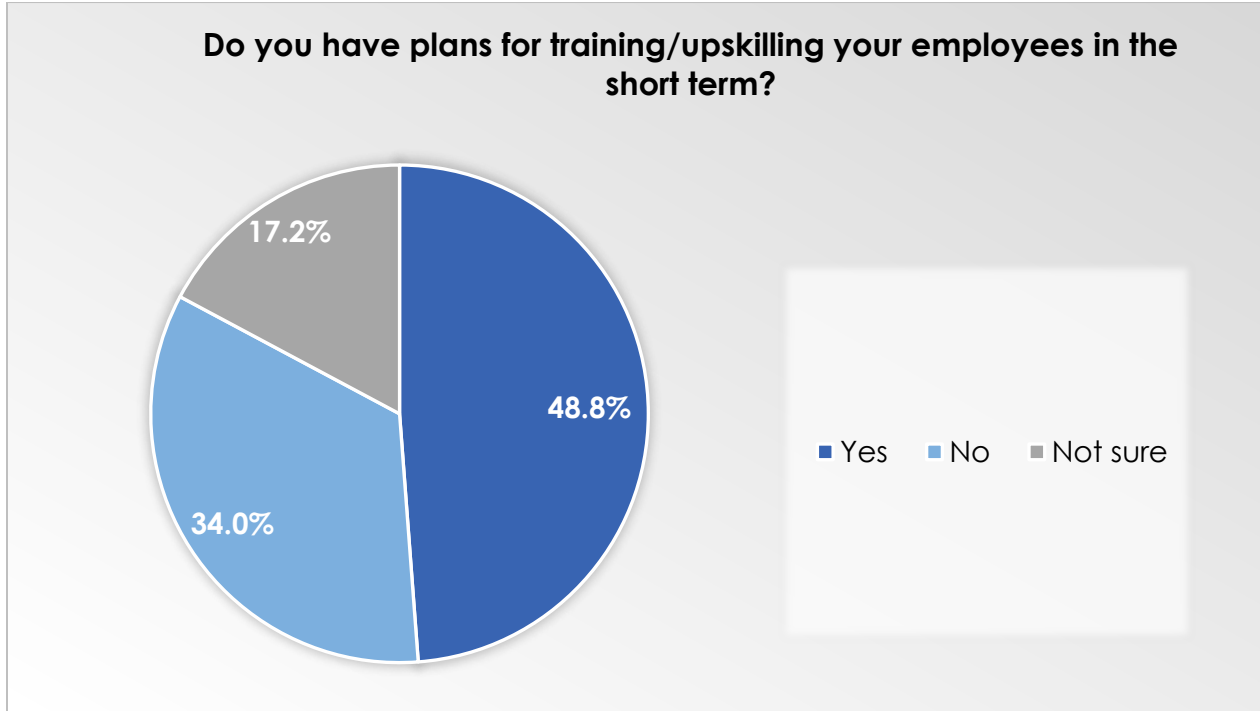


75% consider vocational education to be very important for developing the workforce in Ukraine.

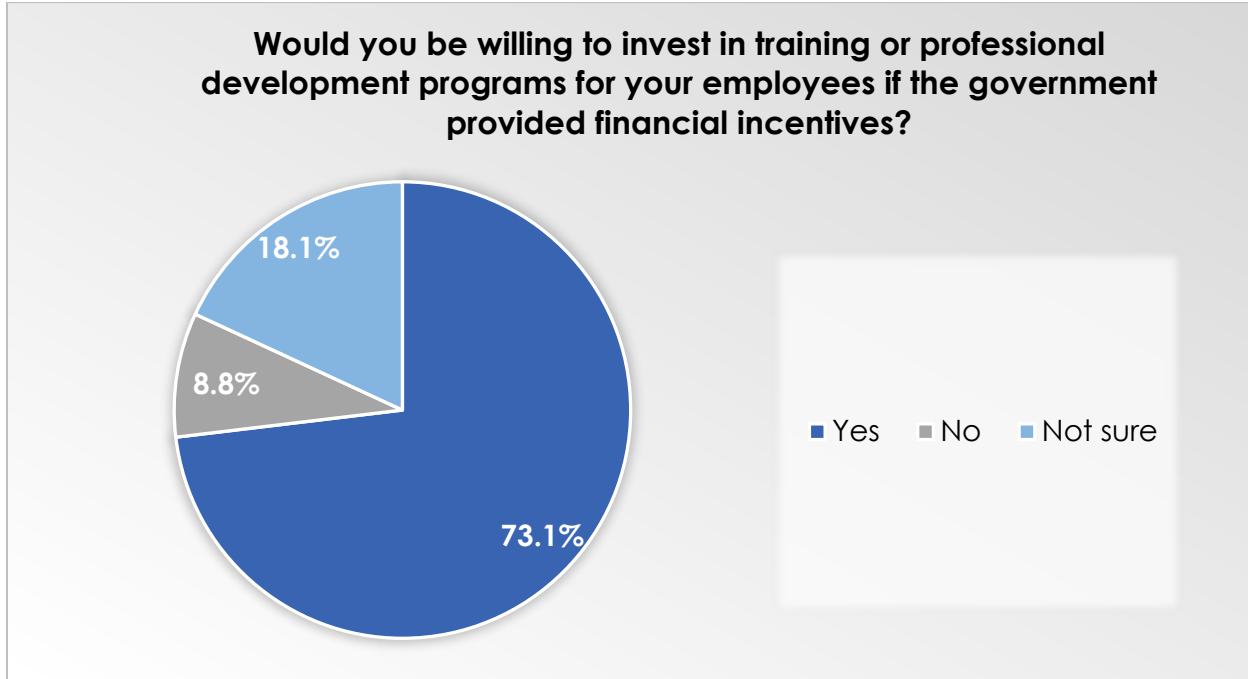




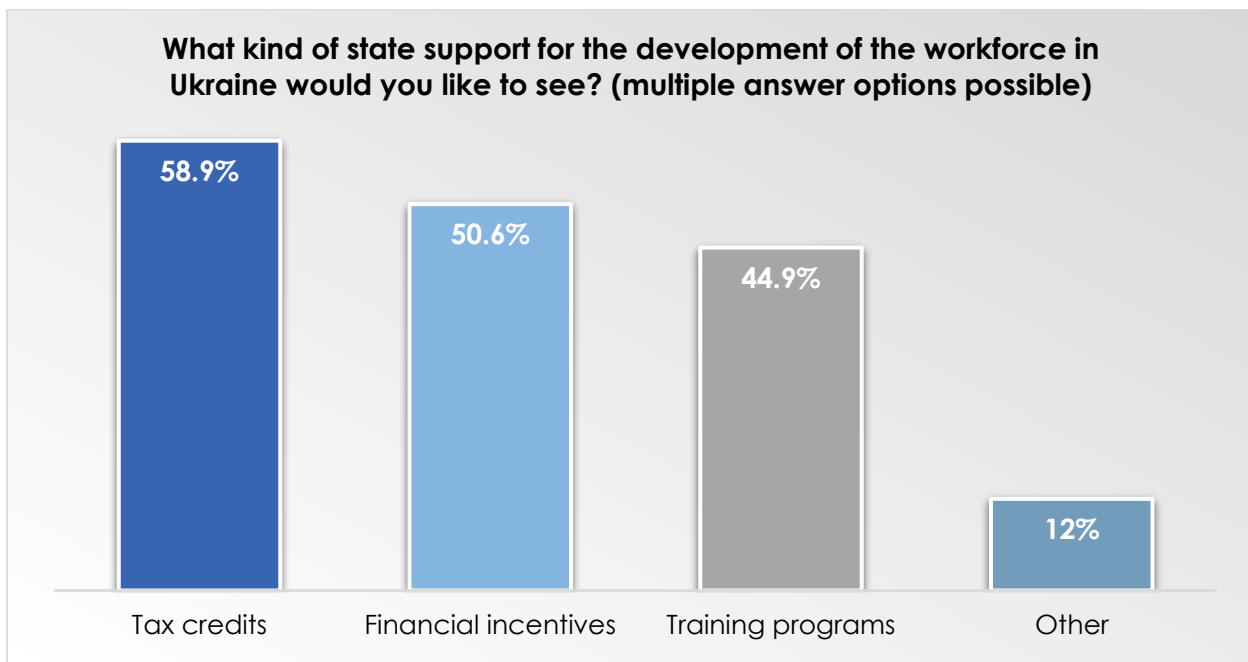
49% plan to train and improve the qualifications of their workers in the short term, while 67% plan to do so in the medium and long term.



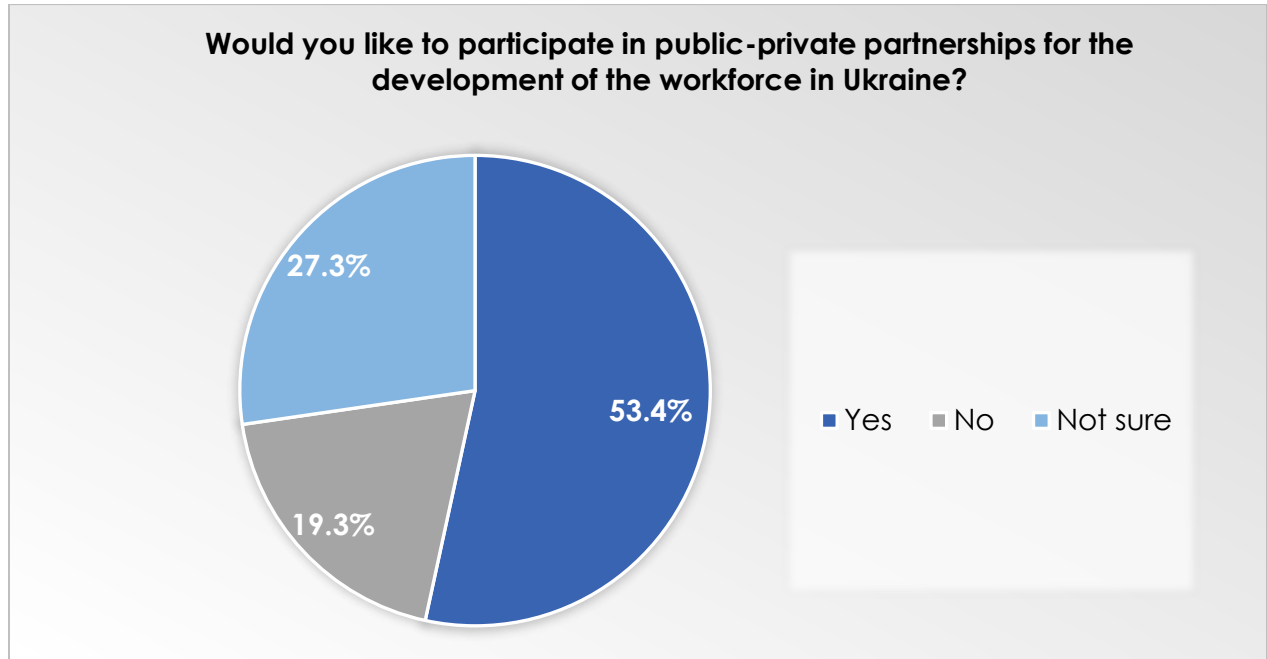
73% of respondents are willing to invest in worker training if the state stimulates this process.



The main incentives are tax credits (59%), financial incentives (50%), and training programs (45%).



53% of those surveyed wish to participate in public-private partnerships for workforce development.



The survey indicates that almost all businesses in Ukraine have experienced problems during the war, with only one-third of companies reporting no employees leaving or being mobilized, while 10% lost more than 50% of their workers. This highlights a serious shortage of labor, particularly skilled labor. The main problem is the mismatch between the education system and the current demands of employers. Nearly 80% consider the education system ineffective, and 75% see a need to reestablish vocational schools. About 70% of employers plan to self-fund worker education but need state incentives. The government should develop an effective mechanism for public-private partnerships to train and develop the workforce, including tax credits, financial incentives, and training programs that fulfill the needs of employers. Currently, according to the survey, the education system is disconnected from employer needs and produces workers who are not adapted to the modern demands of the labor market, requiring retraining without adequate motivation, time, or funding.

The Role of Education and Training for the Ukrainian Workforce

Education plays a crucial role in human capital formation, particularly when demographic development is unfavorable. High quality education, retraining and professional development systems can help alleviate labor supply shortages²⁵.

Investments in human capital, such as scholarships, budgetary positions in higher education institutions, and adult retraining programs, have not been a priority in Ukraine, even before the war. The war has also accelerated the depreciation of human capital, causing significant collective psychological trauma that will affect people's mental health for a long time. This, in turn, will affect their physical health and job productivity.

The role of education for the Ukrainian workforce has been affected by various issues. One of the primary problems is the transition to online learning, which was first implemented during the COVID-19 pandemic, causing a significant gap in education. Then the Russian invasion exacerbated the situation, causing geographical disparities and interruptions in learning. This lack of proper education will have long-term effects on the productivity of the workforce and their well-being.

Furthermore, accessibility to education has been a significant issue due to the destruction of various educational institutions, especially in eastern and southern regions. Additionally, some students are currently studying abroad, which could potentially be beneficial if they return to Ukraine with their skills and knowledge, but they may not return.

Efforts to enhance the quality and relevance of education, especially in technical-vocational, higher, and adult education, are insufficient. Higher education institutions should embrace flexibility and innovation, as their personnel and infrastructure are essential for the development of adult education and retraining programs aligned with labor market needs.

Another issue is the mismatch between the current state of workforce preparation and the needs of the economy. The education system's plans for workforce preparation were made before the war, which makes it

²⁵ Ukraine's Resilience to Crises: Human Capital. URL: <https://ces.org.ua/wp-content/uploads/2022/04/UKRAINES-RESILIENCE-TO-CRISES.-HUMAN-CAPITAL-.pdf>

difficult to adjust to the current market demands. According to the data from the State Employment Service, one of the main issues in the labor market is the professional-qualification imbalance and certain disparities between the demand and supply of labor. Currently, employers have the highest demand for skilled workers in manual professions. However, among the registered unemployed individuals, 43% have higher education, and in some major cities, this number reaches 60% or higher²⁶. Moreover, the number of unemployed individuals among former managers, professionals, and specialists is three times higher than the number of corresponding job vacancies. Prioritization of economic sectors that require restoration is necessary to stabilize the workforce's size and productivity.

Current vocational education institutions are unable to provide adequate teaching and vocational training due to outdated equipment, teaching methods, and the lack of qualified teachers. Furthermore, the structure of vocational training does not align with labor market needs, as regional training orders prioritize communal enterprises over broader labor market demands.

While higher education institutions generally have better teaching processes, they face challenges in attracting highly qualified and motivated teachers. Insufficient financial and academic autonomy hampers their ability to update curricula to meet current labor market requirements.

The government is proposing retraining programs at vocational education centers under the State Employment Service. By the Resolution of the Cabinet of Ministers of Ukraine dated March 24, 2023, No. 264, a new procedure for the vocational training, retraining, and qualification improvement of registered unemployed individuals was approved. The procedure includes the implementation of vocational training for the unemployed based on the principle of "money follows the person." Unemployed individuals will be able to independently choose an educational institution to undergo vocational training and, if necessary, a place of residence during the training period. Enrollment in educational institutions, as well as the provision of accommodation, will be carried out

²⁶ Яких працівників потребують українські роботодавці сьогодні та яку зарплату готові платити? - Державна служба зайнятості інформує. URL: <https://www.kmu.gov.ua/news/yakykh-pratsivnykiv-potrebuiut-ukrainski-robotodavtsi-sohodni-ta-iaku-zarplatu-hotovi-platyty-derzhavna-sluzhba-zainiatosti>

based on a training certificate and a certificate of residence during the training period.

In addition, a government program called "Start in IT" was recently launched, which provides payment for the cost of training for citizens who have lost their jobs, are on furlough, unpaid leave, and people who wish to acquire a new profession in the IT field²⁷. At the same time, Ukraine needs a more extensive reskilling program considering unprecedented challenges in the job market.

In the Recovery Plan presented in 2022 in Lugano²⁸, among national projects, a reskilling program was mentioned, which involved creating a public-private platform (marketplace) for the labor market that would help address the main problems of the unemployed: finding a job/profession that matches their skills or experience; understanding trends and forecasts of labor market demand and supply; receiving personalized job vacancies; reskilling into a different profession and potentially receiving state financial support for retraining and education.

The private sector is investing in the development of the workforce (on-the-job retraining and professional development), but the difference between what educational institutions provide and what employers demand is significant. Soft skills are highly valued by employers, but the education system does not prioritize their development. The system needs to adapt to the business demands and focus on professional skills that align with the market's needs.

Finally, a strategic economic development plan is necessary to align the education system with the economic goals. The education system needs to be more flexible and diversified, with additional qualifications or training courses for employees. Theoretical knowledge needs to be integrated with practical experience and the peculiarities of business and societal relations in Ukraine.

Overall, Ukraine needs to focus on improving the quality and relevance of education at all levels, particularly in technical-vocational, higher, and adult education. Efforts should be made to modernize infrastructure, update teaching methods, enhance the qualifications of teachers, align

²⁷ Старт в IT. URL: <https://www.dcz.gov.ua/storinka/start-v-it>

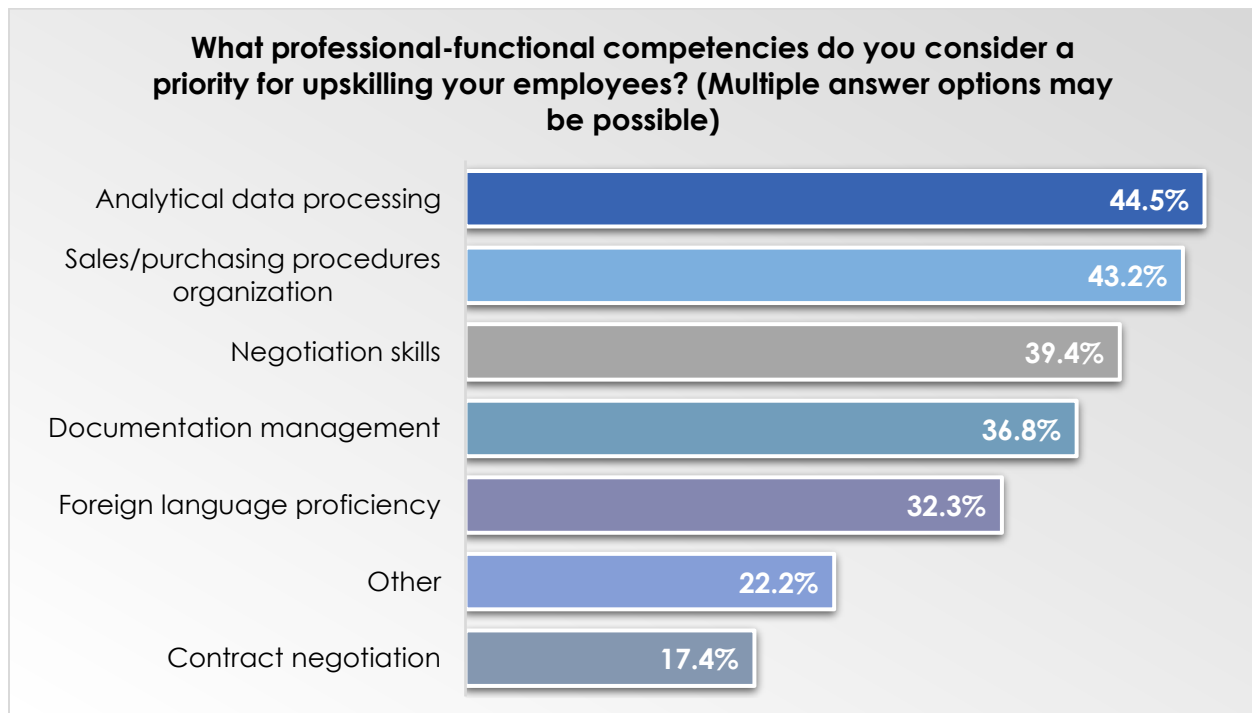
²⁸ Recovery and Development Plan of Ukraine. URL: <https://www.urc-international.com/urc2022-recovery-plan>

vocational training with labor market needs, and promote flexible and innovative approaches in higher education. Additionally, the state should address the low enrollment rates in adult education and develop professional development programs that are responsive to evolving employment sector requirements.

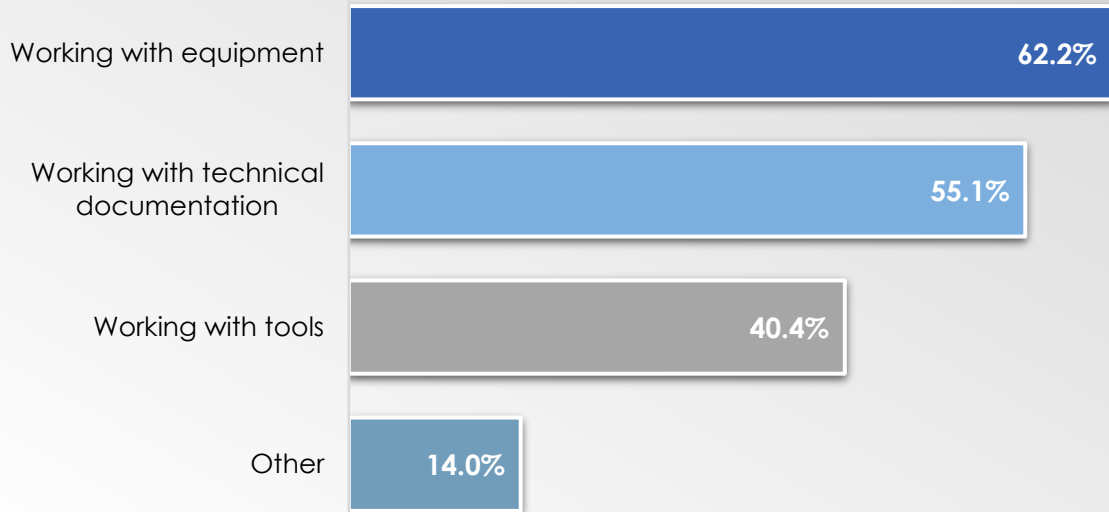
Skills Needed for Future of the Ukrainian Workforce

Skills are at the core of the ability for Ukrainian private sector and employees to prosper in an ever-changing world. The future of work will vary depending on the education level and qualifications of people. The demand for low-skilled jobs will progressively decrease, while some will persist. Jobs that involve physical or manual, numerical, and customer service skills are most at risk of being transformed or eliminated due to the advancement of automation and intelligent systems. There is also increased demand for STEM skills (science, technology, engineering, mathematics) and interdisciplinary skill combinations, such as "hybrid skills", "transversal skills", and "inter-functional skills". The future of work will place a higher value on professional expertise, research and foresight skills, as well as the ability to perform sophisticated analysis and interpretation of complex information and technological skills.

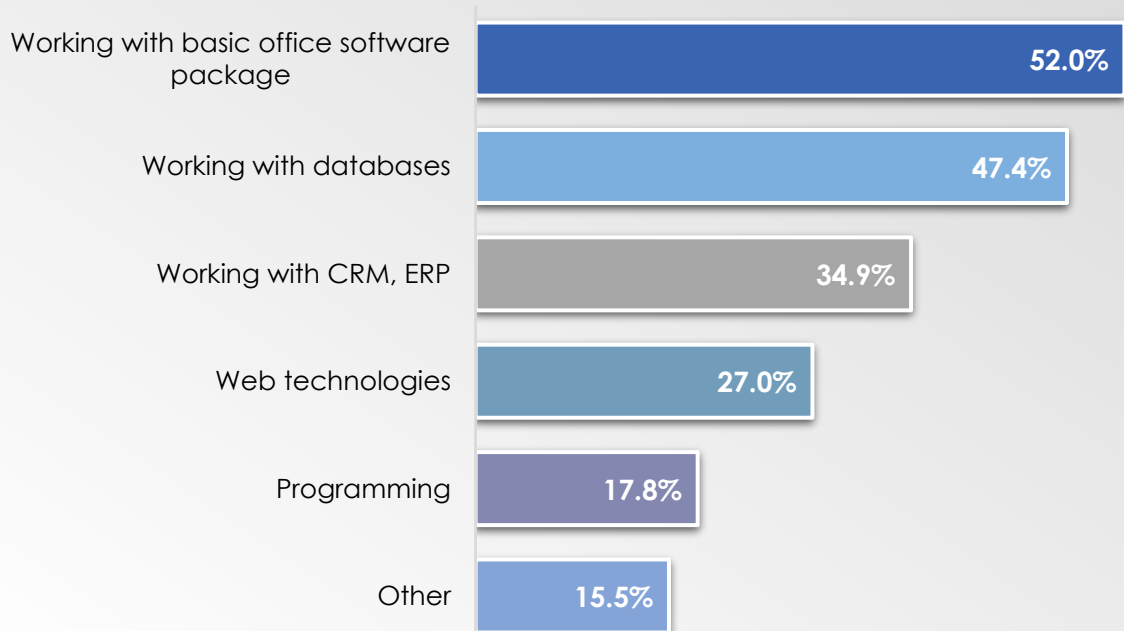
Results of the questionnaire survey of private sector employers in SMEs conducted by Center for Applied Research in May 2023. Sample – 252 respondents.



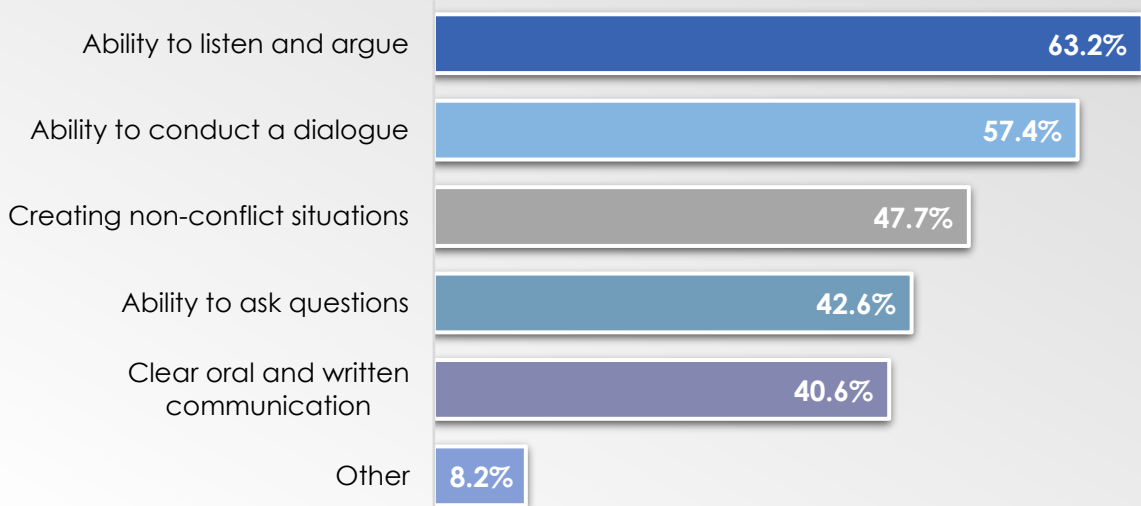
What professional-technical competencies do you consider a priority for improving the qualifications of your employees? (multiple answer options possible)



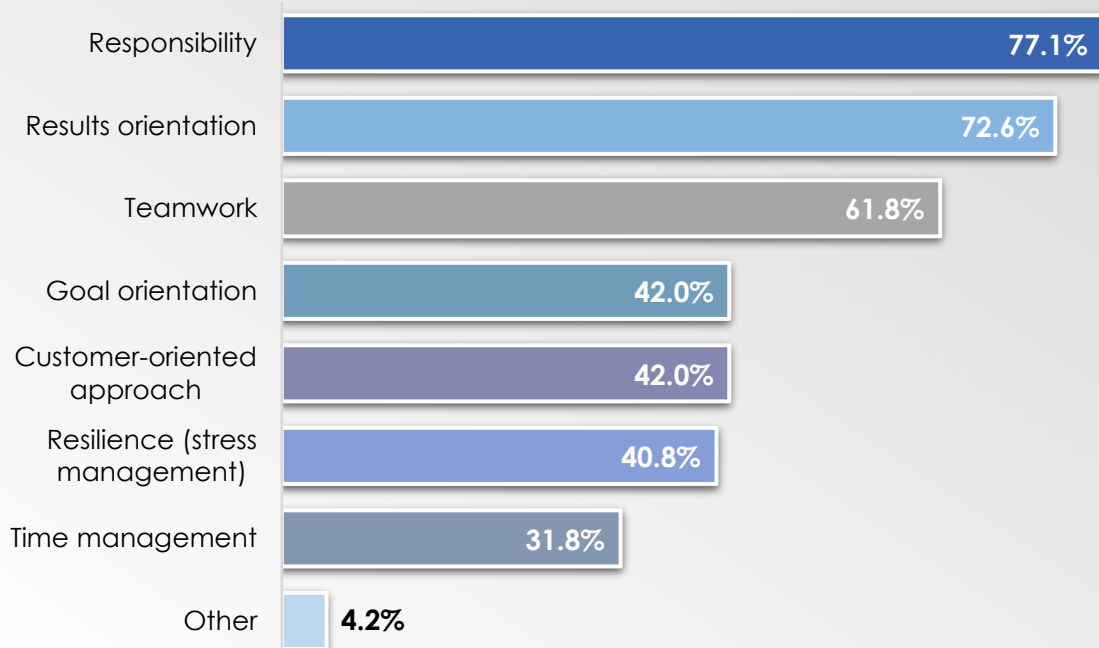
What digital competencies do you consider a priority for improving the qualifications of your employees? (multiple answer options possible)



What communicative competencies do you consider a priority for improving the qualifications of your employees? (multiple answer options possible)



What personal and communication competencies do you consider a priority for improving the qualifications of your employees? (multiple answer options possible)



Recommendations

1. **Economic Recovery Strategy:** To stimulate economic growth, it is recommended to reduce the tax burden on small and medium-sized businesses and simplify business regulation in Ukraine. This may include implementing a "tax holiday" specifically for young entrepreneurs. Additionally, reducing the burden on the Social Security Fund is necessary due to high taxes leading to higher levels of salary shadowing.
2. **Labor Market Deregulation:** Continuing the deregulation of the labor market and gradually moving away from Soviet legislation towards EU standards can help decrease informal employment. There should be a comprehensive labor law reform that considers the effects of modernization on production, which usually involves dismissing workers and increasing employee qualification requirements.
3. **Education and Workforce Development:** The state's policy towards technical and higher education should be geared towards supporting and developing human resources for reconstruction and innovative transformation in the national economy. The system for preparing specialists should also be changed to shift from skill requirements to professional standards based on competency. Dual education should be implemented to prepare professionals for specific job positions. Skills development and effective implementation of the right and access to lifelong learning must be an integral part in broader economic growth strategies and recovery and resilience plans. Private-public partnerships for adult retraining are essential.
4. **Workforce Data Analytics:** Use modern approaches and technologies to collect and analyze data on workforce skills across different sectors and regions (their skills, abilities, experience, desire for professional development, demographics, training needs, development opportunities). Talent intelligence platforms can use this information to provide training and qualifications relevant to labor market needs.
5. **Refugee Policy:** Adequate wage payment, safe working environment, innovation, and high levels of state support (financial,

housing, infrastructure development) will be needed to implement the Ukrainian refugee return policy. It is essential to provide clear instructions on where these people will be returning and what opportunities they will have in Ukraine. Additionally, the longer people stay abroad, the harder it will be to bring them back. Therefore, an economic boom is necessary to encourage their return.

6. **Immigration Policy:** In addition to encouraging Ukrainians to return from abroad, it is recommended to fill gaps in the workforce by attracting immigrants from other countries. Simplifying immigration legislation is necessary. Foreigners face challenges with obtaining work permits, foreign students have limited legal employment opportunities and there is the obligation to establish significantly higher wages for workers from other countries compared to the average wage in Ukraine.
7. **Remote Workforce:** Due to the shortage of human resources, it is recommended to increase the geography of recruiting under remote work conditions.
8. **Gender and Job Diversity:** Reviewing gender stereotypes in male-dominated professions and hiring more women can provide a fresh perspective to the labor market. Additionally, implementing programs to enhance the skills of current employees is necessary.
9. **Employment of Veterans and People with Disabilities:** Programs to help veterans and people with disabilities find employment should be implemented.