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ASSESSMENT OF SOFT SKILLS AND DEVELOPMENT OF HUMAN RESOURCE MANAGEMENT IN THE LABOUR MARKET COMPETITIVENESS

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Introduction. Soft skills are critical and directly affect job performance, adaptability, and the ability to innovate. Soft skills such as creativity, emotional intelligence, critical thinking, and interpersonal interaction increase adaptability to innovation. Readiness for continuous learning and retraining through soft skills is crucial for professional success and competitiveness in the labour market.

Aim and tasks. This study comprehensively examines the impact of soft skills on professional competitiveness in the labour market. It develops a multi-level system for assessing these skills, with recommendations for their development in human resource management.

Results. The study highlighted the most in-demand skills based on feedback from academics and employers: responsibility (18.2%), creativity (18.9%), communication skills (17.3%), self-organisation (17.2%), emotional intelligence (15.9%), and leadership (12.5%). The content analysis confirms a certain degree of research into job seekers' demand for soft skills in the labour market. This emphasises its relevance in higher or professional education settings. The employee competitiveness index (ECI) is a composite indicator that integrates the key characteristics of soft skills and amounts to 0.75%. The structural model of the study allowed us to estimate the impact of soft skills on labour productivity both directly and through employment and market demand. In the model, soft skills accounted for 18% of the variance in employment and 30% in market demand, with both indicators exerting significant effects on productivity ($\beta = 0.32$ and $\beta = 0.29$, respectively).

Conclusions. The soft skills of modern specialists indicate their competitiveness in the labour market. The criteria and indicators of soft skills (communication, emotional intelligence, creativity and analytical thinking, flexibility and adaptability, self-organisation and productivity, leadership and management skills) are highlighted, emphasising the vectors for developing these skills. The presence of soft skills increases a specialist's competitiveness and serves as an indicator of this competitiveness. The development of soft skills increases the competitiveness of employees and contributes to efficiency growth. However, a limitation was identified: some organisations were reluctant to disclose training results, which requires further study.

Keywords: Labour Market, Leadership, Soft Skills, Self-Organisation Productivity, Human Capital.

1. Introduction.

The labour market in Ukraine is undergoing transformation and digitalisation, requiring more qualified personnel who are mobile and easily adaptable to new conditions and who change professionally according to the field of activity. Research into the current needs of the labour market shows that there is a demand for employees with soft skills (8 out of 10 talent managers surveyed believe that personal qualities are more important for work than hard skills), training and cooperation between businesses and educational institutions, and rapid response to the needs of the labour market. The European Centre for the Development of Vocational Education and Training (Cedefop) offers an online skills analysis tool that is planned to be integrated with Europass. It contains data on 56 indicators, 23 sectors, 48 occupations, and 28 countries. One of the indicators shows the percentage of jobs for which transversal skills are necessary, such as communication, teamwork, customer service, problem-solving, learning, and planning (National Qualifications Agency, 2022).

The analysis of the labour market is linked to the competitiveness of higher education graduates, which depends on the degree of development of transversal skills (Federation of Employers of Ukraine, 2022). Entrepreneurship is based not only on financial capital but also primarily on access to human capital, which comprises exceptionally highly qualified and talented specialists. The study aims to analyse the labour market in terms of the demand for modern specialists with developed flexible skills, which indicates such specialists' competitiveness in the labour market.

The main research questions are as follows:

RQ1. To determine the extent to which the labour market needs specialists with developed soft/flexible skills.

RQ2. To examine which flexible skills stakeholders prefer while analysing scientific works, and to identify possible discrepancies between theoretical discussions and practical requirements.

RQ3. To reveal the role of modelling the labour market/stakeholder requirements for flexible skills of specialists.

2. Literature Review.

2.1. Soft Skills and Competitiveness.

A review of studies on the demand for soft (flexible) skills in the labour market revealed studies that examined the issue of flexible skills of modern specialists as an indicator of competitiveness in the labour market, namely: the educational ecosystem for entrepreneurial education and labour market requirements (Kovtunets, 2022; Svitlychna et al., 2025) bridging the gap between labour market requirements and educational programme standards (Kobets & Koval, 2023; Kurpiela & Teuteberg, 2023); the labour market and the market for educational services (Yaschuk, 2016; Khaouja et al., 2021); studying employee requirements in job advertisements (Kurpiela & Teuteberg, 2023; Boshkoska et al., 2025).

Kurpiela and Teuteberg (2023), researching employee requirements in job advertisements, emphasise the importance of key competencies and the general relevance of strategically oriented vacancies in the era of PSS (Product Service System) BA (Business Analytics). The results of their research serve as a benchmark for relevant qualifications for hiring and training employees.

Regardless of the sector, social skills, especially communication skills, are relevant, and preference is given to thinking, motivation, and leadership skills over methodological transformation skills (Kurpiela & Teuteberg, 2023). Boshkoska et al. (2025) note that real-time data from job advertisements on professional websites provides a more direct, detailed and timely picture of current demand and skill requirements. The results can help business school program directors update and adapt their curricula to market needs (Biljana, Boshkoska, 2025).

Rios et al. (2020) examined how skill requirements varied by job type and the relationship between educational requirements and the importance of oral and written communication.

Khaouja et al. (2021) used a skills database in their study to analyse labour market needs, the type of skills acquired, methods for determining skills, the sector under study, and the details of skill identification.

However, these studies do not thoroughly examine soft skills development among skilled workers and their relationship to the labour market. This study will contribute to the implementation of scientifically based solutions and confirm the hypothesis that the presence of flexible skills increases the competitiveness of a specialist, and that the skills themselves are an indicator of this competitiveness in the labour market. Therefore, soft skills are important for employers and job seekers, and research on identifying specific soft skills through employer advertisements is effective.

2.2 Soft Skills and Competitiveness in the Labour Market.

Poláková et al. (2004) argued that the rapid development of technology is radically changing the requirements for the professional qualities of modern specialists due to skills that go beyond technical and digital competence. In this context, soft skills are becoming increasingly in demand in the labour market, and most importantly, the ability to combine technical knowledge, as they provide the necessary flexibility and competitiveness, but at the same time, the ability to think analytically, solve complex problems, communicate effectively, and take a creative approach is becoming indispensable. This balance will allow professionals to function effectively in the context of technological progress and remain relevant in the labour market.

Simultaneously, Kozminski (2005) argued that the formation of a new type of employee (niche-finders), capable of quickly adapting to change, and "top performers", who demonstrate high efficiency in flexible labour markets, especially in management, requires profound transformation. It is necessary to develop soft skills that allow employees and managers to function effectively in an environment where the speed of decision-making and adaptability are becoming critical factors of competition.

Interdisciplinary learning is highlighted by aligning educational and development goals with labour market needs, such as teamwork, adaptability, critical thinking and project management (Belchior-Rocha et al., 2022).

Svitlychna (2025), emphasising the country's economic and migration crisis, mobilisation, and demographic losses, notes that digitisation in society pushes employers to change their requirements for potential applicants significantly. Based on an analysis of the IT market in Ukraine and the competitiveness of IT specialists, a methodological approach was developed to review educational programs for training IT specialists in line with the needs of the labour market, which, thanks to the identification of statistically significant competencies, can be applied to any speciality (Kovtunets, 2022).

Despite the growing awareness of the importance of flexible skills for future specialists, there are significant gaps in their development during training (Singh Dubey et al., 2022). Curricula are mainly focused on the transfer of subject knowledge rather than the development of interpersonal competencies. There is a lack of systematic implementation of methods that promote the development of soft skills, or their application may be sporadic or lack proper assessment of their impact on the development of soft skills. Educators' training often focuses on subject areas rather than pedagogy oriented towards competence building.

The system for assessing the knowledge of higher education students rarely includes criteria for assessing their soft skills. Therefore, in wartime conditions, when many institutions have been relocated and classes are held in a mixed format, the educational environment does not fully promote the development of initiative, creativity, free communication, and teamwork, which requires overcoming these gaps and adopting a comprehensive approach to the development of soft skills.

3. Methods and Data.

3.1. Theoretical Framework.

The empirical part of the study involves surveying educators and managers of businesses and higher education institutions to determine the level of demand for specialists' soft skills as a key indicator of their competitiveness in the labour market (Fig. 1).

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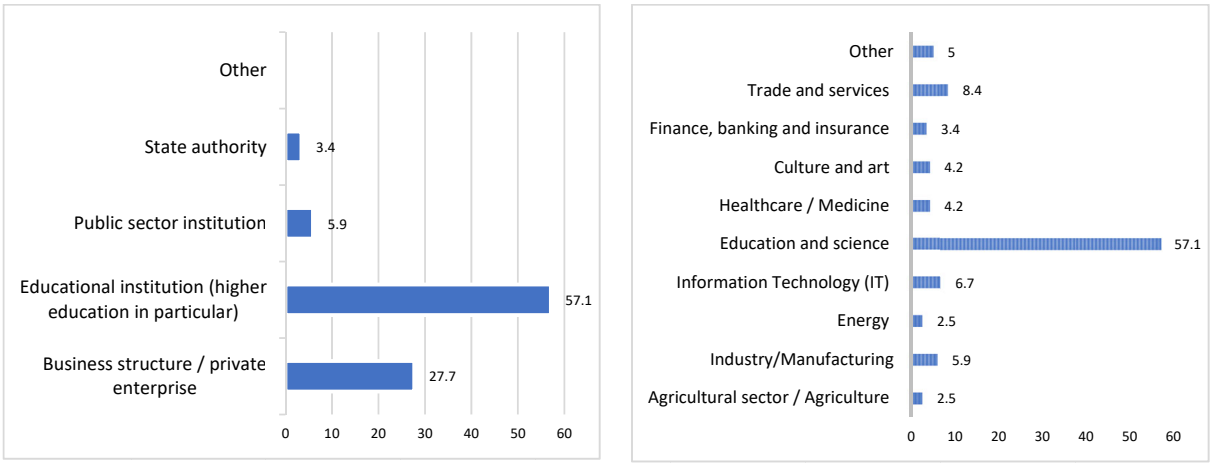

(a) **(b)**

Fig. 1. Distribution of Respondents by Enterprise Type (a) and Employment Sector (b).

An anonymous survey of 120 participants from various organisations and institutions was conducted to collect empirical data. The survey aimed to study the actual understanding of the role of soft skills in the professional activities of higher education graduates and identify barriers and prospects for developing such skills in organisations across various sectors of the economy.

The survey data will be used to analyse and create an analytical model that will contribute to developing recommendations for improving educational programs and increasing the competitiveness of graduates.

The analysis used SWOT and content analysis, theoretical integration, and comparison of studies on the demand for soft skills in the labour market. The SWOT analysis method was used to systematically analyse the factors influencing the development of specialists' flexible skills. The following key elements are presented below:

• Strengths: high-quality professional training, internal motivation and soft skills (creativity, communication skills, leadership, adaptability and responsibility in uncertain situations).

• Weaknesses: Inertia to change, low level of independence in decision-making, psychophysiological limitations, and unwillingness to leave the comfort zone.

• Opportunities: increased prestige of the profession through flexible skills, career development, motivation, effective interaction in the workplace, rapid adaptation, and establishment of productive relationships with colleagues and management.

• Threats: rapid changes in the content of professional activities due to digitalisation and performing duties in wartime conditions.

The content analysis results confirm a certain degree of study of the problem of the demand for soft skills in the labour market among job seekers. Based on the generalisation of scientific and practical experience, the study of research on the labour market and its requirements for future employees found that at the methodological level, the problem reflects the integration of scientific approaches; at the theoretical level, it enables the modelling of labour market requirements for these skills. The market needs specialists with flexible skills, which makes people with such skills competitive in the labour market, and skills are an indicator of competitiveness.

3.2. Theory and Practice of Soft Skills in the Labor Market.

An analytical review reveals information about the labour market and identifies possible discrepancies between theoretical discussions and practical requirements.

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These calculations make it possible to notice an objective view of the demand for soft skills in the labour market.

As shown in Fig. 2, in 2022, most stakeholders were interested in future employees' responsibility (41.5%), teamwork (23.8%), and result orientation (16.0%), which confirms the demand in the labour market for specialists with developed flexible transversal skills.

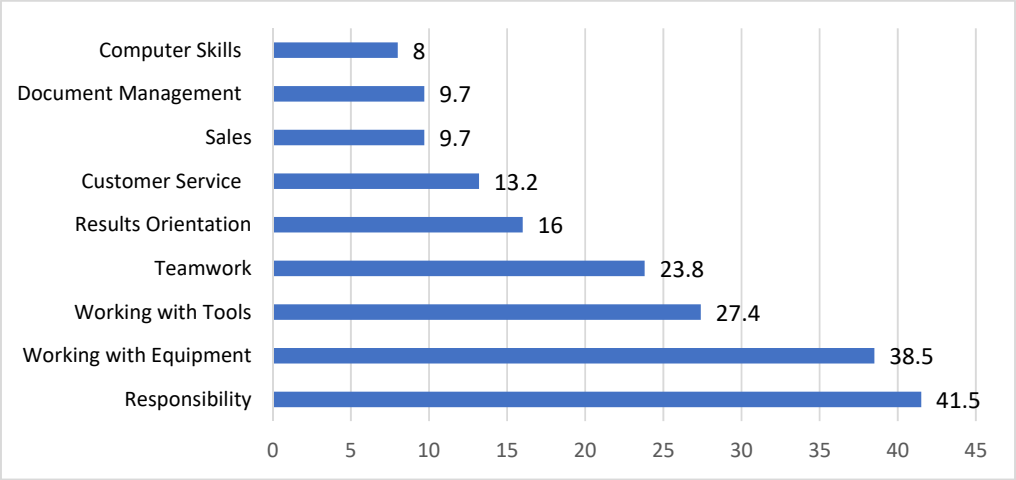

Fig. 2. Survey of Ukrainian Companies on Skill Demand (%), 2022.
Source: based on data from the Federation of Employers of Ukraine (2023).

This study analysed the frequency of mentions of flexible skills in scientific articles and employer websites (Table 1).

Creativity (139 mentions) and responsibility (133 mentions) were the leaders in the ranking. The data presented reflect the frequency of mentions of flexible skills in academic articles and on employer websites. Analysis of these indicators is key to understanding the current demand for such competencies in the labour market and identifying possible discrepancies between theoretical discussions and practical requirements.

Table 1. Soft Skills and Frequency of Mention in Studies (%), 2020-2025.

Soft skill	Total number of mentions	Percentage contribution (P_i)
Leadership	92	12.53%
Emotional intelligence	117	15.94%
Self-management	126	17.17%
Communication skills	127	17.30%
Responsibility	133	18.12%
Creativity	139	18.94%
Total	734	100.0%

Source: based on data from the Federation of Employers of Ukraine (2023).

Three complementary analytical approaches were selected for a comprehensive study of these data: the percentage ratio of each skill to the total number of mentions, a comparison of the relative importance of skills by source (the ratio of mentions on employer websites to mentions in articles), and ranking and comparison of ranks.

The first step in the analysis is determining the percentage of mentions of each soft skill out of the total number of mentions.

This approach provides a general idea of each skill's relative "contribution" or "weight" in the aggregate information space represented by articles and employer websites, as it reveals the most and least common soft skills.

The following formula was used to calculate this indicator:

$$P_{\text{i}} = \frac{N_{\text{i}}}{N_{\text{total}}} \times 100\%, \quad (1)$$

where:

P_i – desired value (percentage contribution) representing the share of a specific skill i in the total number of mentions.

N_i – total number of mentions of a specific soft skill i, summing mentions from articles and employer websites (values from the "Total number of mentions" column in Table 1).

N_{total} – total number of mentions of all soft skills, calculated as the sum of all values in the "Total number of mentions" column of Table 1 for all studied skills.

3.3. Assessment of Employee Competitiveness.

To assess the competitiveness of higher education graduates in the labour market, it is necessary to consider a comprehensive set of factors that reflect their readiness for professional activity.

The Employee Competitiveness Index (ECI) combines key characteristics such as education level, soft skills development, work experience and foreign language proficiency. Each component of the index is assessed on a special scale, and its relative importance is determined by weighting coefficients (ω_1, ω_2, ω_3, ω_4), which reflect the importance of each factor based on an analysis of demand in the labour market. The weighting coefficients are determined based on data on demand for skills obtained from recommendations and labour market forecasts, taking into account employers' current and future needs.

The Employee Competitiveness Index (ECI) is calculated using the following formula:

$$ECI = \omega_1 \cdot ES + \omega 2 \cdot SS + \omega 3 \cdot WS + \omega 4 \cdot LS \quad (2)$$

where:

ECI – Employee competitiveness index (ranging from 0 to 1).

ES – Education Score (normalised to 0–1).

SS – Soft Skills Score (normalised to 0–1).

WS – Work Score (normalised to 0–1).

LS – Language Score (normalised to 0–1).

ω_1, ω_2, ω_3, ω_4 – weight coefficients reflecting the relative importance of each component ($\sum_i \omega_i = 1$).

3.4. Model Design and Measurement Approach.

The survey and responses from respondents were conducted using Google Forms from May to June 2025, a service from Google that allows the creation of online surveys and questionnaires with different types of questions. The collected data were automatically stored in a table and could be viewed anytime in the "Responses" section. The questions were in various formats (text, multiple-choice, etc.).

After creating the form, it was sent to participants (120 people from various social structures) from education to industry via links and email. The respondents' answers were automatically collected in a spreadsheet that could be viewed in Google Forms. This procedure facilitates the analysis of the collected information and provides a convenient tool for obtaining user feedback and automatically calculating information.

For participants in the anonymous online survey "Soft skills in the labour market as the main indicator of the competitiveness of higher education institution graduates", the preamble presented the purpose and conditions of the survey. The data will be used for scientific research and to develop an analytical model.

The study applied a PLS-SEM approach to explore the relationship between employees' soft skills, employability, job performance, and perceived labour market demand. The conceptual model hypothesised that Soft Skills Level (SS) directly affects both Employability (EMP) and Labour Market Demand (LMD), while EMP and LMD jointly predict Job Performance (JP).

The constructs were operationalized using several indicators:

– Soft Skills Level (SS): A_AI (AI impact), A_AR (AI role), A_C (Concern), A_I (Invest), A_P (Program), A_S (Satisfaction), A_TN (Training Need).

– Employability (EMP): A_A (Awareness), A_B (Barriers), A_U (Understanding).

– Labour Market Demand (LMD): A_AP (AI Potential), A_OR (Open Results), A_SF (Support).

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– Job Performance (JP): A_CL (Collaboration), A_S (Satisfaction).

All indicators were measured on a 5-point Likert scale (1 – strongly disagree, 5 – strongly agree).

A structural model was formulated to test the proposed assumptions regarding the relationships between constructs (Figure 3).

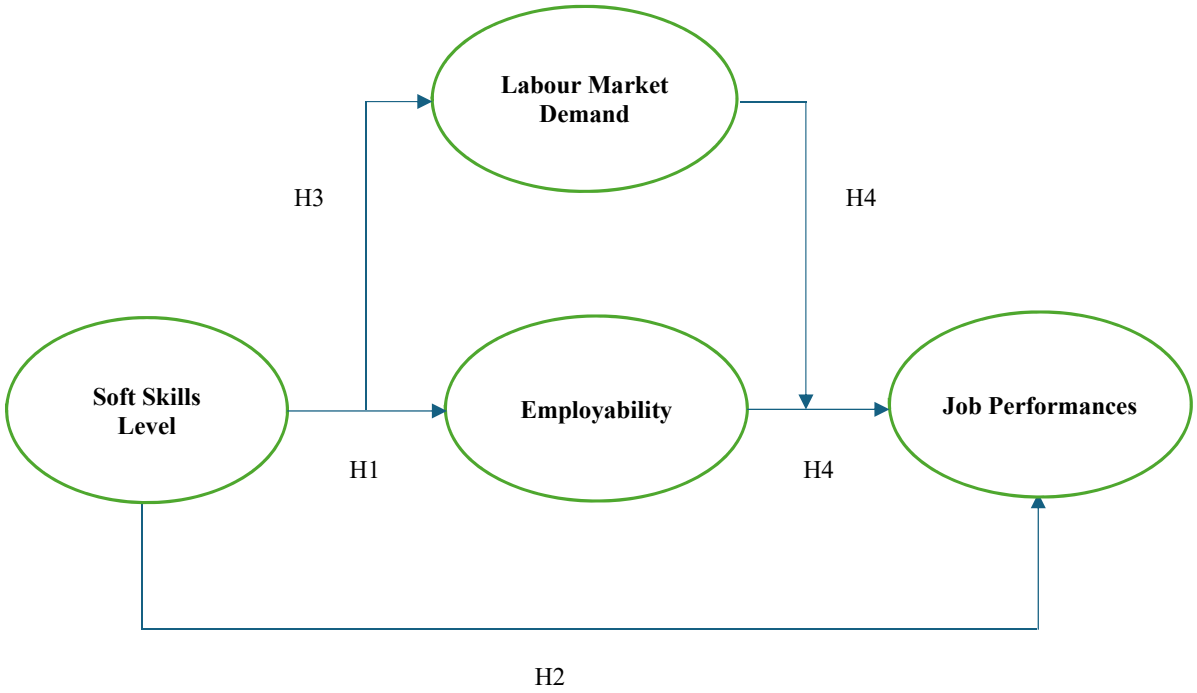

Fig. 3. The Research Model and Hypotheses.

The research hypotheses and rationale are as follows.

Hypothesis 1 (H1): Soft skills of a certain level of development positively influence employability.

A sufficient level of communication, teamwork, and the ability to adapt to new conditions contribute to a candidate's job performance, increase stakeholder attention during interviews, and positively assess their chances on the labour market.

Hypothesis 2 (H2): Soft Skills Level positively affects Job Performance.

A specialist's mastery of soft skills during their professional activities (sufficient level of communication, creativity in teamwork, ability to adapt to new conditions, etc.) is reflected in the manager's assessments and contributes to overall productivity.

Hypothesis 3 (H3): Soft skills of a certain level of development, including employability, positively impact labour market demand.

Soft Skills Level and high employability are indicators and consequences of the high demand for such employees from companies. Employers actively seek and hire candidates with developed soft skills.

Hypothesis 4 (H4): Soft Skills Level positively affects Job Performance and Labour Market Demand.

Employees who demonstrate excellent results thanks to a sufficient level of communication, creativity, teamwork, ability to adapt to new conditions, etc., create a positive reputation for the industry; They are valued by employers, resulting in increased demand for such employees, quality trends, and industry reports.

4. Results.

4.1. Analysis of Skills and Labor Market Forecasting.

Ukraine does not have a single database that collects information on the level of development of soft (transversal) skills among graduates of different types of educational institutions and their impact on employment outcomes. A significant part of the solution to this problem lies in the educational policy of modern higher education institutions in Ukraine, which creates a university educational ecosystem where specialists with non-standard thinking are trained and develop their soft or flexible skills as required by the labour market.

Calculating the percentage contribution of each flexible skill to the total number of mentions allows for a quantitative assessment of their overall representation in the sources analysed.

According to forecasts for the Ukrainian labour market, the following skills will be in demand over the next five years (Table 1, mentioned in %).

A review of academic journals on trending skills in the Ukrainian labour market over the next five years identified the following skills: technical skills and knowledge in the IT field, analytical thinking and innovation, flexibility and adaptability, soft skills, project management skills, and knowledge of foreign languages.

A more extensive list of trending skills based on these results is presented in Table 2. The Global Skills Report 2024 (GSR, 2024) identified key human and leadership skills, including communication skills, emotional intelligence, creativity, and leadership and management skills. While digital competence is a priority, flexible skills remain critical for applying technology and navigating a transformed workforce. The report compiles data from more than 148 million learners and 7,000 institutional clients and input from 325 leading universities and industry partners. Soft skills, or "human skills" as the report refers, are the cognitive, social, and emotional abilities that enable effective interpersonal interaction and decision-making.

Table 2. Trending Skills in the Ukrainian Labour Market.

Skills	Practical Application
Technical skills and IT knowledge	Skills in software development, adherence to cybersecurity protocols
Analytical thinking and innovation	Ability to adapt to new conditions, develop emotional intelligence, envision strategic solutions
Flexibility and adaptability	Stress resistance, adjusting professional goals, adapting to problems, using new approaches for problem-solving
Soft skills	Teamwork, workplace communication, time management, accountability for decisions
Project management skills	Leadership and project control
Knowledge of foreign languages	Using foreign languages for work and communication

Source: based on data from the Federation of Employers of Ukraine (2023) and Horova (2025).

These include creativity, critical thinking, information interpretation, decision-making, leadership, and communication (Coursera, 2024).

Soft skills complement digital skills and enable technology's practical and ethical use. Digital skills enhance soft skills, which are critical nowadays.

Therefore, there is a constant demand for fundamental communication skills. Soft (transversal) skills already occupy a central place in the broad spectrum of employee skills, as they enable effective work management, negotiation and conflict resolution, prioritisation, working in a multicultural environment, time management, and office software skills (UP-STUDY, 2019).

Therefore, owing to rapid changes in the economy, automation of routine production processes, and international competition, soft/transversal skills may become a decisive factor in employment for graduates of higher education institutions.

Critically important skills for the future include creative and analytical thinking, resilience, flexibility, adaptability, technological literacy, leadership and social influence, knowledge of artificial intelligence and big data, curiosity and lifelong learning, systems thinking, and talent management skills (Yakushenkova, 2025). Indeed, competitive training specialists in the labour market require comprehensive preparation for professional life, where education must be flexible, adaptive, and focused on developing practical skills.

The problem lies in the quality, timing, and development of soft or transversal skills in the university ecosystem, which varies in curriculum content, the level of digitalisation, and software. Education systems do not always have time to adapt to new requirements, lack the necessary funding, and have a shortage of qualified educators with the necessary competencies to train specialists according to modern standards due to the war (Kulishov et al., 2024). For the practical implementation of projected labour market needs and assessment of graduates' readiness for professional activity, it is advisable to use quantitative methods that comprehensively assess their professional competencies.

One such tool is the Human Resource Competence Index, which integrates key factors influencing successful employment and career development. The Human Resource Competence Index not only permits the determination of the current level of graduate training but also identifies areas for improvement in the content of educational programs. The components of the Employee Competitiveness Index (ECI) include the level of education, soft skills, work experience, and knowledge of foreign languages (Table 3).

Table 3. Components of the Employee Competitiveness Index (ECI).

ECI Component	Categories / Levels	Rating (points)
Level of Education (ES)	No higher education	0.2
	Bachelor's degree	0.6
	Master's degree	0.8
	Candidate of Science / Doctor of Philosophy	1.0
Soft Skills (SS)	Low	0.3
	Medium	0.6
	High (composite average for key skills: responsibility, teamwork, creativity)	1.0
Work Experience (WS)	No experience	0.0
	Less than 1 year	0.3
	1–3 years	0.6
	More than 3 years	1.0
Knowledge of Foreign Languages (LS)	No language	0.0
	One language (B1+)	0.5
	Two languages (B1+)	0.8
	Three or more languages (B1+)	1.0

It is worth emphasising once again that developed soft skills in job seekers play an important role in the modern labour market, with employers particularly interested in skills such as adaptability, creativity, and teamwork. Developing such skills is based on an interdisciplinary approach to addressing this important issue, because theoretical knowledge is insufficient. Teaching applicants to create projects, participate in internships, and volunteer is important. The number of job postings on Ukrainian online job platforms has increased since the full-scale invasion in 2023 (Figure 4) (WORK UA LLC, 2025).

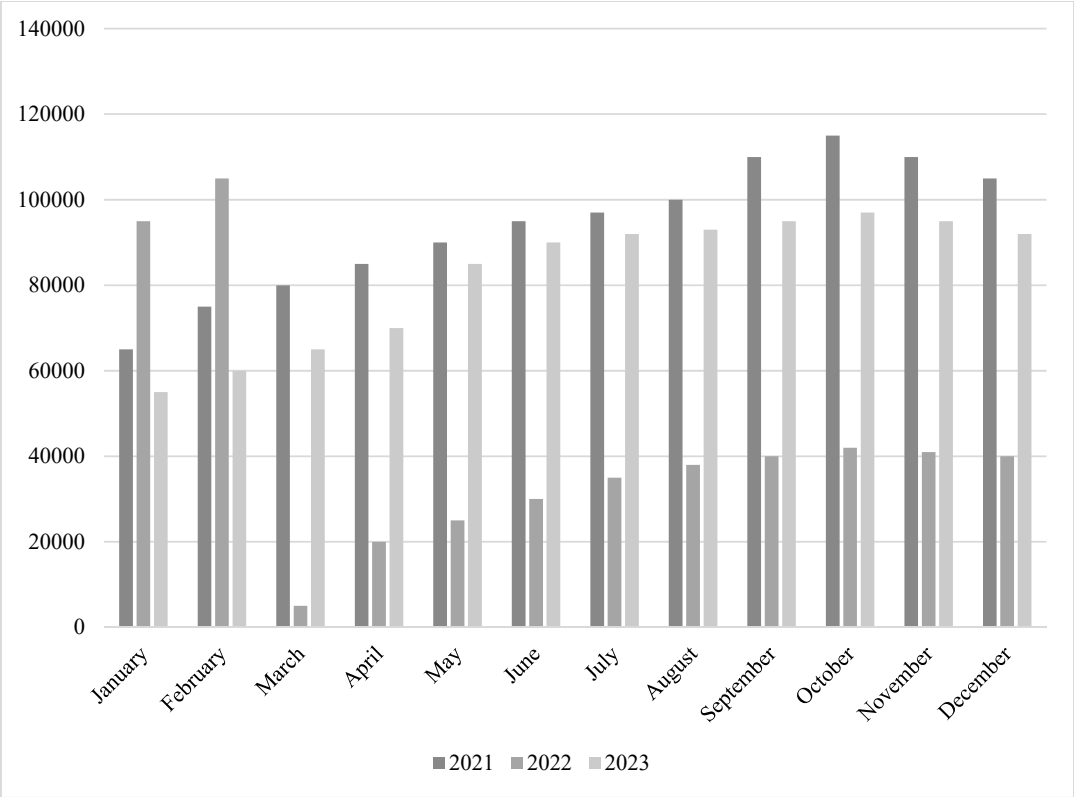

Fig. 4. Job Vacancy Dynamics in Ukraine, 2021-2023.

Source: based on research by WORK UA LLC (2025)

Employers are looking for educators and office managers: "Education, science" (+37%, 5,519 vacancies) and "Personnel management, HR" (+12%, 1,894 vacancies) (WORK UA LLC, 2025). For example, in "Medicine, Pharmaceuticals", vacancies have increased since the full-scale invasion in Ukraine (WORK UA LLC, 2025).

Specialists in these categories are more likely to get a job because they already have a certain level of soft skills.

4.2. Empirical Validation of the Soft Skills Framework.

The structural model contained four main relationships:

- SS → EMP.
- SS → LMD.
- EMP → JP.
- LMD → JP.

This structure allows for assessing direct and indirect effects of soft skills on job performance (Fig. 5).

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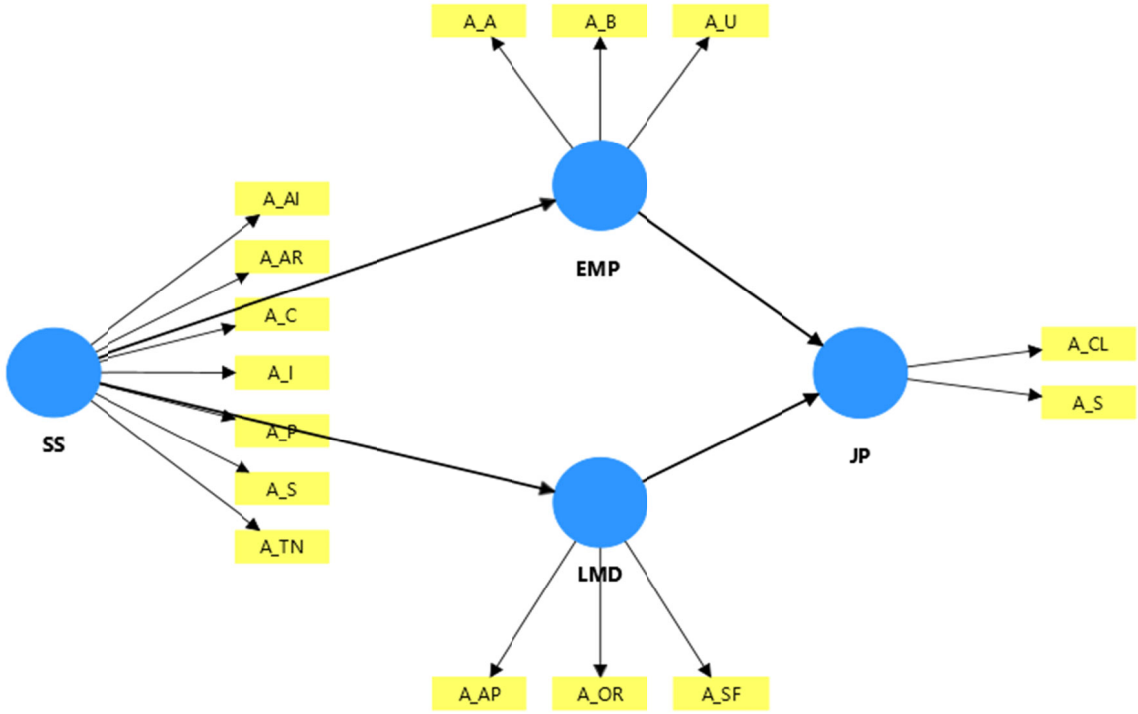

Fig.5. PLS Structural Model.

Source: based on primary data analysis conducted in SmartPLS.

Internal consistency was confirmed using Cronbach's alpha and Composite Reliability (CR), with all constructs exceeding the recommended threshold of 0,70. Discriminant validity was assessed via the Fornell–Larcker criterion and the HTMT ratio, both confirming satisfactory construct separation.

The model demonstrates moderate explanatory power (Table 4). The analysis showed that soft skills explain about 18% of the variation in the employment rate and about 30% of the variation in the labor market demand level. The employment rate and the work performance measures (LMD) explain about 30% of the observed variation in labor productivity among the study participants. According to Hear et al. (2022), these R^2 levels indicate moderate explanatory power, which is acceptable and typical for behavioral science research. The results point to a clear positive association between soft skills and both Employability ($\beta \approx 0.40$) and Labor Market Demand ($\beta \approx 0.44$).

Table 4. Variance Explained by Soft Skills Path Model Constructs.

Construct	R^2	R^2 Adjusted
EMP	0.183	0.175
JP	0.296	0.281
LMD	0.298	0.290

In addition, the employment rate ($\beta \approx 0.32$) and LMD ($\beta \approx 0.29$) also significantly affect labor productivity.

These results suggest that efforts to develop soft skills and train employees can improve labor productivity and meet market demand.

An adverse effect on the disclosure of results (A_OR) was observed. This result may indicate that some organizations are wary of disclosing training results because they perceive them as threatening their competitiveness. This issue requires further study in future studies.

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5. Discussion.

Job vacancy analysis, employer surveys, and career growth studies can be alternative approaches to assess the need for specific transversal skills among graduates in the labour market. As a rule, master's degree graduates have more developed transversal skills from participating in research, projects, and internships. This allows them to adapt to employer requirements and quickly occupy higher positions.

As Svitlychna (2025) notes, the training of competitive specialists in the labour market should be based on the principles of quality, reinforced by practical skills, and the individual, social, and general cultural development of the personality is important (Svitlychna, 2025). Research on practical solutions for developing flexible/transversal skills in future specialists for competitiveness in the labour market should be addressed in a set of tasks so that higher education is more oriented towards the labour market and includes both proposals and the need to adjust educational programmes to the requirements of the labour market.

At the same time, students of vocational and technical educational institutions in Ukraine have shown a significant increase in soft skills in 2022-2023: the proportion of those with low scores has almost halved, and the proportion of those with high scores has doubled (Sergeeva, 2024). The most significant progress is observed in critical thinking (an increase in high scores from 20% to 50%) and creativity (22% to 49%).

Promising areas of research include the development of online education (online platforms provide broad access to knowledge and allow students to study at any convenient time), interdisciplinary cooperation, which promotes the development of innovative approaches to learning, and the individualisation of learning (the creation of personalised learning paths for each higher education student). Future specialists study in the educational ecosystem of the university, which embodies the concept of Education 4.0.

It aimsto train competitive professionals capable of effectively using physical and digital resources to develop innovative solutions (Mourtsis & Vlachou, 2018).

Starting with the new academic year, three educational clusters will be introduced according to training profiles: language and literature, STEM, and social sciences and humanities. STEM/STEAM education is closely linked to the development of both professional and soft skills and the general competencies of specialists, which are now in greater demand in the labour market (Luchaninova, 2023).

A modern soft skill includes finding different ways to solve problems, avoiding fixation on a single option, and seeking alternative approaches. Among the skills listed above, according to participants in the World Economic Forum (2025), the following skills will increase in importance by 2030: creative thinking – 87%; AI and big data skills – 87%; leadership and social influence – 63%; systems thinking – 63%; networking and cybersecurity skills – 63% (Fig. 6).

The growth of automation can easily explain this trend, with the introduction of artificial intelligence, digital transformation, and adaptation to new requirements. At the same time, skills such as leadership and creative thinking (as well as communication skills, empathy, responsibility, adaptability, etc.) are the subject of discussion and the topic of our research, emphasising our chosen topic.

Currently, 70% of companies intend to hire employees with new skills, and 85% intend to retrain their employees (World Economic Forum, 2025).

In the context of Ukraine's war and economic uncertainty, there is an increasing demand for specialists with resilience, flexibility, adaptability, and creativity to solve new tasks. The solution to the problem lies at the intersection of transformational processes in both business and education, and the personal desire of students, employees, and others to develop such skills.

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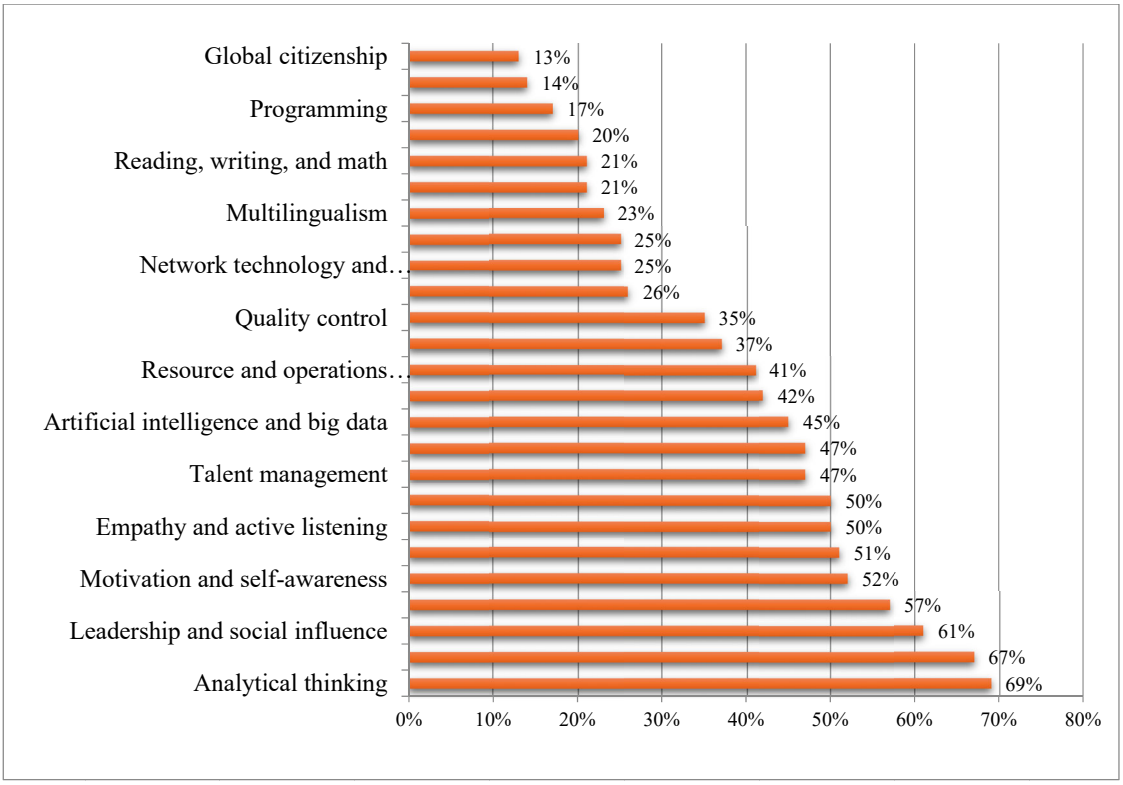

Fig.6. Key skills most in demand by employers by 2025.
Source: based on World Economic Forum (2025).

6. Conclusions.

The analysis of the need for soft skills in modern specialists as a key indicator of their competitiveness in the labour market allows us to conclude that the labour market is actively adapting to global trends, and employers prefer employees who not only possess professional competencies but are also capable of continuous learning and quickly adapting to the latest technologies.

The criteria for soft skills determine the vectors of their development, and the indicators reveal their content, ensuring a systematic and objective approach to concepts that are difficult to perceive due to their subjectivity. They unify the understanding of flexible skills and allow for observing clear behavioural manifestations that indicate their presence and development. Criteria and indicators serve as a basis for creating assessment tools and allow tracking the progress of skill development in the learning process. Modern soft skills include creative thinking, artificial intelligence and big data skills, leadership and social influence, and systems thinking.

Modelling the Ukrainian labour market allowed the study to identify the current state of various skills of job seekers. This will help higher education institutions adapt curricula and help future graduates develop flexible skills. The model we have developed allows us to identify the hard and soft skills that will be most valuable to future graduates. This will enable the development of retraining and upskilling programs that meet the market's needs.

The model provides empirical evidence that, given employment factors and labor market demands, developing employees' soft skills has both direct and indirect positive effects on labor productivity. These results highlight the strategic importance of soft skills development in human capital management. The labour market values a combination of hard and soft skills in specialists of various professions, which ensures the development of safety, communication, analytical, and integrative competencies, presentation skills, time management, during the learning process.

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