

Las Competencias Interpersonales en la Era Digital: Retos, Oportunidades y Perspectivas de Desarrollo

Soft Skills in the Digital Age: Challenges, Opportunities and Development Prospects

ALLA KRAVCHENKO

State University of Trade and Economics, Department of Philosophy, Sociology and Political Science, Kyiv, Ukraine

kravchenko_alla@outlook.com

<https://orcid.org/0000-0001-8429-2183>

NATALIIA HUSIEVA

State University of Trade and Economics, Department of Philosophy, Sociology and Political Science, Kyiv, Ukraine

n.husieva@ukr.net

<https://orcid.org/0000-0002-6062-6406>

OLENA KRASILNIKOVA

State University of Trade and Economics, Department of Philosophy, Sociology and Political Science, Kyiv, Ukraine

o_krasilnikova@outlook.com

<https://orcid.org/0000-0003-3346-7566>

IRYNA KYZYMENKO

State University of Trade and Economics, Department of Philosophy, Sociology and Political Science, Kyiv, Ukraine

irynakyzymenko@hotmail.com

<https://orcid.org/0000-0002-2148-9488>

VITALII RAZITSKYI

State University of Trade and Economics, Department of Philosophy, Sociology and Political Science, Kyiv, Ukraine

vitalii-razitskyi@hotmail.com

<https://orcid.org/0000-0002-0311-8317>

Recibido/Received: . 9-10-2024/31-05-2025: .

Cómo citar/How to cite: Kravchenko, Alla, Husieva, Nataliia, Krasilnikova, Olena, Kyzymenko, Iryna & Razitskyi, Vitalii (2025). Soft Skills in the digital age: Challenges,

opportunities and development prospects. *Sociología y Tecnociencia*, 15 (2), 25-47. DOI: <https://doi.org/10.24197/st.2.2025.25-47>

Artículo de acceso abierto distribuido bajo una [Licencia Creative Commons Atribución 4.0 Internacional \(CC-BY 4.0\)](#). / Open access article under a [Creative Commons Attribution 4.0 International License \(CC-BY 4.0\)](#).

Resumen: El objetivo del estudio era realizar una investigación detallada sobre el desarrollo de las Soft Skills en el entorno digital moderno e identificar las áreas clave para mejorar la competitividad de los especialistas. Se creó una metodología para evaluar las Soft Skills, que incluye un enfoque exhaustivo de medición y análisis. El estudio concluyó que las Soft Skills, como la comunicación, la inteligencia emocional, el trabajo en equipo y la adaptabilidad, son fundamentales para el éxito profesional. Su carencia puede limitar la progresión profesional y el rendimiento tanto de los jóvenes profesionales como de los trabajadores experimentados. Unas Soft Skills bien desarrolladas contribuyen a una mejor adaptabilidad al cambio, una colaboración más eficaz y una mayor productividad.

Palabras clave: Soft Skills, habilidades de comunicación, pensamiento creativo, inteligencia emocional, autorrealización con éxito, cualidades de liderazgo, trabajo en equipo, autogestión, era digital

Abstract: The purpose of the study was to conduct a detailed research on the development of Soft Skills in the modern digital environment and identify key areas for improving the competitiveness of specialists. A methodology for assessing Soft Skills was created, which includes a comprehensive approach to measurement and analysis. The study found that Soft Skills, such as communication, emotional intelligence, teamwork and adaptability, are critical for professional success. A lack of these skills can limit career progression and performance for both young professionals and experienced workers. Well-developed Soft Skills contribute to better adaptability to change, more effective collaboration and increased productivity.

Keywords: Soft Skills, communication skills, creative thinking, emotional intelligence, successful self-realization, leadership qualities, teamwork, self-management, digital age

1. INTRODUCTION

In a world that is rapidly moving towards digital technologies, Soft Skills are gaining new meaning and relevance. This is due to the fact that as the role of technology in all aspects of life grows, the requirements for professional success are changing significantly. Communication in virtual environments, effective information management, and the ability to work together at a distance are just some key Soft Skills that are becoming crucial for modern professionals. Therefore, the issue of developing Soft Skills in the context of digitalization is becoming essential for understanding and adapting to new challenges and opportunities. This means not only adapting to new technologies, but also actively using them to improve personal and professional growth. The study of the impact of digital technologies on Soft Skills helps to identify the best approaches to learning and developing these skills,

develop effective strategies for future professional practice and achieve success in a dynamic digital environment.

The problematic of this study is related to the insufficient level of development of Soft Skills among many professionals, which limits their career growth and performance. This is especially true in the context of the rapid development of digital technologies, where communication skills, emotional intelligence, teamwork, and adaptability are becoming increasingly important. There is a need for effective methods and strategies to develop these skills, as well as to identify their impact on the professional success and competitiveness of employees.

The problem that exists in the field under study is the insufficient development of Soft Skills in future preschool teachers and specialists in higher education, which negatively affects their professional competence and future employment opportunities. The authors Koshel et al. (2021) defined and substantiated the conceptual foundations of the Soft Skills development process in the context of forming the professional competence of a future preschool teacher as a crucial factor in further employment in preschool education institutions. Meshko and Meshko (2021) identified prospects for further research, which consist in substantiating and developing a system for the formation of Soft Skills of future specialists through formal and non-formal education in the socio-cultural environment of a higher education institution using digital technologies. The gaps that require further study include the development of integrated training programmes that effectively combine the development of Soft Skills with other aspects of professional training. One of the main problems is the need to integrate the development of Soft Skills with the study of technical disciplines.

Glazunova et al. (2022) focused on the importance of developing Soft Skills among computer science students through the use of project-based learning technologies. Researchers Isdawati (2019) and Breno et al. (2023) examined the use of technology in teaching Soft Skills and analysed the impact of the evolution of education on the development of Soft Skills in engineering education. It is necessary to study in more detail and develop effective teaching methods that facilitate the integration of Soft Skills into the educational process of technical specialities. This may include the development of new courses, programmes, and approaches to assessing Soft Skills. Another pressing issue is the need to adapt traditional communication and interpersonal skills to the new conditions that affect modern work. The authors AlAfnan et al. (2024) studied the development of communication skills in the era of artificial intelligence.

Poláková et al. (2023) found that in technology-oriented fields, there is a significant demand for Soft Skills, critical and analytical thinking, problem-solving, communication skills, and creativity and flexibility. Adapting traditional communication and interpersonal skills to the new conditions of digital transformation requires additional study. The general problem is the lack of a systematic approach to teaching and assessing Soft Skills among employees and

students, especially in the context of rapid technological development. Karneli et al. (2024) investigated the importance of Soft Skills in the context of digital business. The researchers focused on enhancing Soft Skills' competence as a key success factor in the digital age, reflecting the importance of the ability to communicate and work effectively in a team in a rapidly changing technological environment. On the other hand, Ragusa et al. (2022) and Caputo et al. (2019) investigated how higher education teachers can respond to the Soft Skills needs of students, especially in the context of information technology and big data. Methods for assessing the effectiveness of Soft Skills' development in the context of digital business need to be developed to ensure the practical relevance of the results.

The purpose of the study was to comprehensively study the development of Soft Skills in the modern digital environment and to identify the main ways to increase the competitiveness of specialists. To achieve this goal, the following tasks were identified: identifying the main Soft Skills that are most important in the modern professional environment and analysing modern methods and approaches to the development of Soft Skills.

Hypotheses were formulated in order to gain a deeper understanding and clarify their impact on modern professional practice:

1. The introduction of virtual trainers and simulations in the curriculum will contribute to more effective teaching of Soft Skills, such as leadership and conflict management.
2. The use of digital tools in educational processes will promote creativity and innovative thinking, which will have a positive impact on Soft Skills related to problem-solving and adaptability to change.

2. MATERIALS AND METHODS

The study identified key aspects related to the impact of digital technologies on Soft Skills. This included identifying the main skills that can be affected by digital tools, such as communication, collaboration, leadership, use of virtual simulators, time management, proactivity, analytical skills and multidisciplinary. The next step was to assess the tools used to develop these skills in the digital environment. Innovative methods such as virtual simulators and interactive platforms that provide opportunities for simulating real-life situations and interactive learning were included. The use of digital tools for communication and collaboration, such as email, chats (Slack, Microsoft Teams), video conferencing (Zoom, Skype), and specialized project management platforms (Trello, Asana) were also considered. This included both quantitative and qualitative research methods. Quantitative analysis was carried out through surveys that allowed us to collect statistical data on the use of digital technologies and their impact on the development of Soft Skills.

For the qualitative analysis, five focus groups were held, each involving professionals from different industries. The focus group participants included experts

from IT, education, marketing, finance, administration and other fields. Each focus group consisted of 8-10 people, which allowed us to get a variety of perspectives and deep insights into the impact of digital technologies on the development of Soft Skills. Participants shared their positive experiences of using digital tools for Soft Skills development, in particular, how virtual simulators and interactive platforms help to improve communication, collaboration, and leadership. The challenges faced by professionals in adapting to digital tools were discussed. For example, technical difficulties, productivity issues due to excessive number of messages, or difficulties in maintaining team spirit in virtual teams. Participants described the main challenges they face when adapting to new technologies. These included learning new tools, overcoming the fear of technology, and the need to keep their knowledge up-to-date. Participants discussed the effectiveness of various trainings and courses for developing Soft Skills in the digital environment. They shared their experience of participating in such programmes, their usefulness and practical application of the knowledge gained.

The study was conducted through a survey. The sociological sample was as follows: 50 professionals, including 27 women and 23 men, working in various industries, including IT, education, marketing, finance, administration, and others, took part in the survey. All of them actively use digital technologies in their daily work. The survey consisted of several sections covering different aspects of the topic. In the first section, respondents were asked to indicate whether they consider Soft Skills to be the most important in their work, such as communication, collaboration, leadership, time management, adaptability, proactivity, analytical skills, and multidisciplinary. In the second section, respondents were asked whether they use digital tools in their work, such as email, chats (Slack, Microsoft Teams), video conferencing (Zoom, Skype), specialized collaboration platforms (Trello, Asana). In the third section, respondents were asked whether they had participated in any training or courses to develop their Soft Skills over the past year. The fourth section focused on the impact of digital technologies on Soft Skills. The respondents were asked whether, in their opinion, digital technologies have a significant impact on the development of Soft Skills.

3. RESULTS

In a digital world where remote working and global teams are the norm, effective communication is a key success factor. Digital platforms such as email, chats, video conferencing and other communication tools enable instant information sharing and simplify interaction between team members from different parts of the world. However, these technologies also place new demands on communication skills. Communication in the digital world plays a key role in the development of Soft Skills such as communication effectiveness, collaboration and cultural sensitivity (Thornhill-Miller et al., 2023). Clarity and comprehensibility are key aspects of

effective communication. In the digital age, where non-verbal cues are absent, it is relevant to ensure that information is conveyed without errors or misunderstandings. Key elements of this approach include:

1. **Structured information:** Organizing information in a clear structure is critical. This may include the use of headings, subheadings, bullet points and numbered lists to facilitate comprehension and navigation. A clear structure helps readers easily follow the logic of the presentation and find the information they need quickly.

2. **Shortness and conciseness:** Using simple and clear language, avoiding unnecessary details and complex structures, helps to maintain attention and prevent misunderstandings. It is critical to be specific and avoid over-explanations or technical terms that may not be understood by the audience.

3. **Direct communication style:** It is worth using precise, unambiguous terms to avoid ambiguity. When instructions or expectations need to be communicated, they should be as clear as possible to avoid possible misunderstandings about tasks and requirements.

4. **Use of visual elements:** Graphs, charts, tables, and other visual aids can make explaining complex concepts much easier and make information more accessible. Visuals help to make information faster and easier to understand.

Digital leadership plays a key role in enabling effective remote work (Li et al., 2024). This requires leaders to be able to effectively manage virtual teams, set clear goals, and motivate employees from a distance. Leaders need to be able to organize and coordinate teamwork through digital platforms that allow for the sharing of documents, projects, and communication tools. This includes the use of specialized project management platforms such as Asana, Trello, or Monday.com, which provide transparency and clarity in the execution of tasks. Remote work also requires leaders to manage time and priorities effectively, with the ability to prioritize, allocate resources and ensure tasks are completed on time, even when team members are working in different time zones. Second, communication skills are key to leading in the digital environment. With many aspects of interaction taking place via text or video, leaders must be able to articulate their thoughts clearly and accurately to avoid misunderstandings. Regular constructive feedback is also important; this includes organizing regular virtual meetings where progress can be discussed, problems identified and solutions found together. Motivating and supporting the team is especially relevant in a remote work environment. Leaders need to be able to motivate team members using a variety of tools and techniques, such as recognizing achievements, encouraging them and providing professional development opportunities (Tyukhtenko & Makarenko, 2016). It's also critical to be sensitive to the emotional state of the team, to provide support and create a positive atmosphere, even if the team is working remotely. This may include organizing virtual events to keep team spirit alive or providing resources to improve work-life balance.

Leadership in a digital environment requires the ability to adapt quickly to change. Leaders need to be prepared to quickly adapt strategies and approaches in response to changes in the business environment or technological innovations. This includes the ability to introduce new tools and ways of working that can improve team performance. Leaders also need to be open to new ideas and ways of working, encouraging innovation among team members and embracing new technologies that can improve productivity. Adapting to these changes is becoming extremely important for successful functioning in today's digital environment. One of the key aspects of adaptation is continuous learning. Professionals must be prepared to learn new technologies and tools at a rapid pace. This includes the ability to quickly master new applications, platforms, and tools that appear on the market. Particular attention should be paid to the speed of adoption of new technologies. The faster a professional can integrate new tools into their work, the more effectively they can use them to improve work processes and personal productivity. It is crucial to be flexible and open to change, which will make it easier to adapt to the rapidly changing digital landscape (Dzyana & Dzyanyy, 2023).

The results of the focus groups on the impact of digital technologies on the development of Soft Skills showed a diversity of views and perspectives of participants from various industries, including IT, education, marketing, finance and administration. Each focus group consisted of 8-10 people, which ensured that different insights were obtained. Participants noted the positive experience of using digital tools such as virtual simulators and interactive platforms, which significantly improve communication, collaboration, and leadership skills. In particular, these tools help to create realistic scenarios for practical training and exercises. However, problems and challenges faced by professionals were also identified. One of the main problems is technical difficulties, such as software malfunctions or poor connection quality. Some participants noted that an excessive number of notifications and emails can reduce productivity by causing information overload. In addition, maintaining team spirit and effective interaction in virtual teams often requires additional efforts and strategies. Challenges to adapting to new technologies also include learning new tools, which can be difficult and time-consuming, fear or uncertainty about adopting new technologies, and the need to constantly update knowledge and skills to use digital technologies effectively (García-Juárez et al., 2024). Participants discussed the effectiveness of various trainings and courses aimed at developing Soft Skills in the digital environment. Most participants recognized that such programmes are useful and have practical application in their professional activities, noting that effective trainings should include practical tasks and real-life cases to facilitate better learning.

In the world of digital technologies, the key skills that matter for success in the modern labour market are not only communication, collaboration, leadership, and adaptation to change, but also a number of other Soft Skills that play a pivotal role in shaping a competitive specialist. The ability to manage time is a critical skill in today's digital world, where the speed of change and the amount of information is

constantly increasing (Gulati & Reaiche, 2020). Planning and organization involves creating clear plans for different time horizons – daily, weekly and long-term – to help structure tasks and prioritize. The use of planners, calendars and specialized applications allows effectively distributing tasks and deadlines. Prioritization of tasks requires the ability to determine the importance and urgency of tasks, as well as managing deadlines to ensure timely completion of projects. Resource management covers the effective use of available resources such as time, human resources and tools, as well as managing the stress that can arise from high volumes of tasks and deadlines (Murtezaj et al., 2024). Flexibility and adaptability include the ability to quickly adapt plans and strategies in response to changing conditions or priorities, and to respond to unforeseen situations that may affect the delivery of tasks.

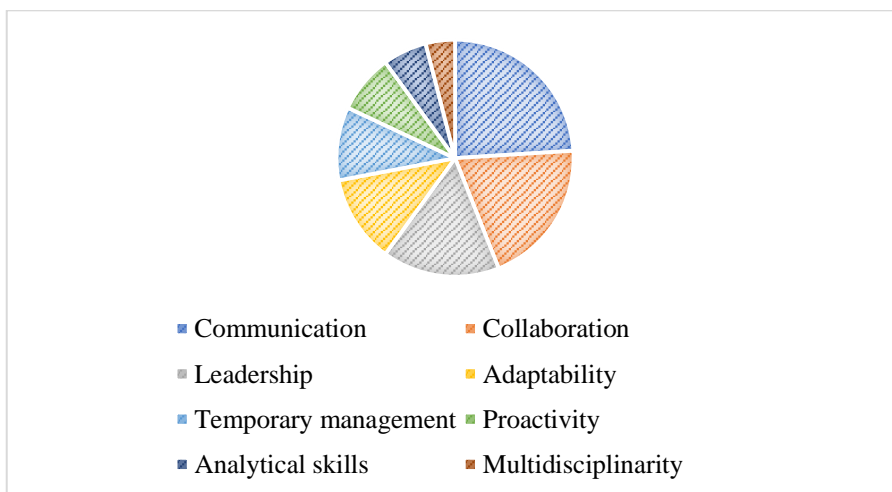
Virtual environments often require quick resolution of problems and conflicts at a distance. In such environments, the skills of analysing the situation, finding alternative solutions and making decisions under uncertainty become important. Problem-solving skills include not only technical knowledge, but also interpersonal skills such as empathy, listening and understanding different points of view (Oliinyk et al., 2025). It is also relevant to be able to use digital collaboration tools, such as online forums, discussion platforms and video conferencing, which allow for quick and efficient problem-solving within a team, even if its members are in different time zones. The ability to effectively use various digital tools and platforms is a major component of Soft Skills in the digital age (Vrabec, 2019). Professionals should have skills in working with project management software, data processing, analysis and information visualization. Technological literacy also includes knowledge about cybersecurity, data privacy, and customizing digital tools to meet the needs of a particular job. Without these skills, employees can be less productive and efficient, which affects the company's overall performance. It's crucial to keep one's knowledge up-to-date and adapt to new technology trends.

In virtual team environments, it is important to have strong ethical engagement and cultural sensitivity skills. This includes an understanding of cultural differences, the ability to work with diverse groups of people, and adherence to professional ethical standards. Cultural sensitivity helps to avoid misunderstandings and conflicts that may arise from different cultural traditions and approaches to work (Sytnyk & Zakharchyn, 2024). Digital technologies make it possible to study the cultural characteristics of different countries, which is especially significant for international companies and teams. Interaction ethics includes adherence to the principles of honesty, responsibility, and respect for other team members. In the digital era, the development of Soft Skills is becoming extremely important for a successful career. Among these skills, self-discipline, self-control and intrinsic motivation occupy a special place (Babina et al., 2024). The ability to manage one's motivation, set personal goals and work towards their achievement are essential for professional and personal development. These skills become even more relevant in the digital age, as they ensure efficiency and productivity in remote work. Online courses, webinars,

and self-development platforms such as Coursera, Udemy, or LinkedIn Learning provide an opportunity to continuously improve one's skills and knowledge. These resources provide access to a wide range of learning materials, allowing professionals to learn new techniques and approaches that are essential to their careers. In addition, interacting with like-minded communities and participating in mentoring programmes facilitates the exchange of experience and feedback, which is also a key element of professional development.

The results of the first section of the survey show that the majority of respondents consider Soft Skills to be important for their professional activities. In particular, 64% (32 respondents) consider Soft Skills to be critical to their work. These skills include the ability to communicate effectively, collaborate in a team, demonstrate leadership, manage time, be adaptable, proactive, and have analytical skills and multidisciplinary knowledge. On the contrary, 36% (18 respondents) do not consider Soft Skills to be the most relevant in their work. This may indicate that some professionals may place more emphasis on technical skills or specialized knowledge in their fields. Perhaps their work requires less interaction with other people, or they work in environments where technical skills are more critical to completing tasks. The respondents were also asked to assess the importance of such Soft Skills as communication, collaboration, leadership, adaptability, time management, proactivity, analytical skills, multidisciplinary, and others. This allowed us to collect data on which skills respondents consider most critical for their professional activities (Figure 1).

Figure 1. Results of the survey on the importance of each Soft Skill



Source: created by the authors

The introduction of digital tools has a significant impact on labour market requirements, changing traditional expectations for professional skills and qualifications (Hampe et al., 2020). In this context, the role of Soft Skills in the formation of a competitive specialist becomes especially important, as these skills allow for effective adaptation to new conditions, work in a digital environment and maintain high productivity and professional development.

Soft Skills, such as adaptability and flexibility, help professionals respond quickly to changes in the technological environment and work processes (Yarin et al., 2023). These skills allow effectively learning new tools and technologies, which is critical in a dynamic digital world. For example, the ability to quickly adapt to new project management platforms or communication tools can significantly increase productivity and efficiency. Soft Skills, such as time management and self-discipline, play a key role in maintaining high productivity in a remote work environment. The ability to set priorities, plan one's working day and use one's time effectively helps in avoiding burnout and ensures that a person achieves his/her goals. In addition, self-discipline and intrinsic motivation help to maintain a constant level of productivity, even when working from home or in different time zones. Soft Skills, such as communication effectiveness, play a pivotal role in interacting with colleagues, clients, and partners in the digital environment (Shcherban et al., 2025). The ability to express one's thoughts clearly and understandably, to adapt the communication style to the audience and the format of communication (text, video, oral) helps to avoid misunderstandings and ensures effective interaction. Furthermore, sensitivity to intercultural nuances is becoming increasingly important in a globalized world, where teams often consist of representatives of different cultures.

Analytical skills are becoming increasingly critical in the context of the growing digitalization of business processes, as companies increasingly use data to make decisions (Varenky & Piskova, 2024). In today's world, where large amounts of information are available through various digital platforms and technologies, the ability to analyse this data is a critical component of Soft Skills. Professionals with advanced analytical skills can effectively extract useful insights from large amounts of data. This includes an understanding of statistical methods, the ability to work with a variety of data analysis software tools such as Excel, SQL, R, Python, and specialized analytics platforms. The ability to collect, clean and structure data is the basis for further analysis. One of the key components of analytical skills is the ability to interpret data and turn it into useful information for decision-making. This requires not only technical knowledge, but also the ability to think critically, understand the business context and identify hidden patterns and trends. Analysts must be able to develop hypotheses, conduct research, test these hypotheses, and draw conclusions based on the data. In addition, the ability to present the results of the analysis in a clear and convincing manner is important. This may include creating reports, data visualizations and presentations that allow other team members or management to understand key insights and use them for strategic planning and decision-making.

Effective communication of analytical results is a major part of analytical skills, as without a clear and understandable presentation of data, even the most accurate analytical findings can go unused.

In today's digital world, virtual communication and collaboration are becoming the standard, so it is crucial to have the skills to communicate effectively across remote platforms (Ketners, 2025). This includes the ability to communicate clearly and concisely using emails, chats, video conferencing and other digital communication tools. Virtual communication requires the ability to quickly adapt to different communication platforms and tools, such as Zoom, Microsoft Teams, Slack, and others. In addition, a key aspect is the ability to actively listen and effectively exchange ideas in conditions of limited non-verbal communication. The lack of physical presence makes it difficult to convey emotions and feelings, which can lead to misunderstandings, so it is necessary to develop empathy and cultural sensitivity skills. In the digital age, employees are increasingly expected to be independent in solving problems and proactive in finding new solutions and approaches. This means that employees need to be able to take responsibility for their projects, plan and organize their work without constant supervision from management. Proactivity also includes the ability to identify problems and opportunities before they arise, as well as to initiate changes and implement new ideas. It is important to develop self-organization, time management and effective planning skills to be able to work autonomously and productively.

Changing conditions and requirements require flexibility in adapting to new technologies and market conditions (Istrefi et al., 2025). The world is changing rapidly, so employees must be prepared to continuously learn and master new skills. Flexibility means the ability to move easily from one task to another, to adapt quickly to new working tools and methods. Adaptability includes the ability to respond to changes in the business environment, such as new market trends, changes in customer requirements, or internal company reorganizations (Berisha & Rexhepi, 2022). Employees must be prepared to continuously develop and improve their skills to remain competitive. Often, knowledge of not only one's own specialization is required, but also the ability to understand and work with other disciplines and functional areas. In modern business, projects are becoming more complex and multifaceted, requiring employees to be able to collaborate with specialists from different fields (Florez-Salas et al., 2023). Multidisciplinary includes the ability to integrate knowledge from different fields to solve complex problems, as well as an understanding of the basic principles and methods of other disciplines. This helps to work more effectively in interdisciplinary teams, where the knowledge and experience of different specialists are combined to achieve a common goal. This approach contributes to more innovative and efficient problem-solving.

The results of the second section of the survey showed that digital tools are an integral part of work for the majority of respondents. 88% (44 respondents) said they actively use these tools in their daily work. This indicates that digital technologies

play a key role in enabling effective communication and collaboration in modern work environments. On the other hand, 12% (6 respondents) indicated that they do not use digital tools in their work. This may be due to the nature of their professional activities, which do not require the constant use of such tools, or to other factors, such as lack of access to these technologies or personal preferences. The development of Soft Skills in the digital age is critical for successful professional activity (Kopolovich, 2020). In the context of digitalization, opportunities for the development of Soft Skills are becoming more accessible through innovative teaching methods. Virtual simulators, interactive platforms, and gamification are becoming popular tools that help improve skills. Continuous access to online courses and self-development platforms allows professionals to maintain and develop these skills in a rapidly changing technological environment. The prospects for the development of Soft Skills include not only the improvement of existing skills, but also the adaptation of new methods of training and professional development support.

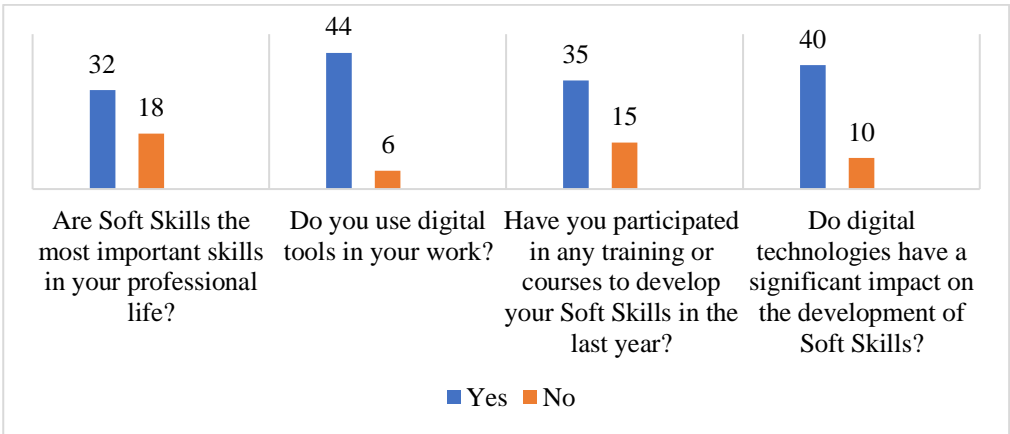
Virtual simulators are computer programs that simulate real work situations, allowing users to practice and improve their skills in a safe, controlled environment (Plotzky et al., 2021). These simulators can be used to develop various Soft Skills, such as communication, conflict management, leadership, and decision-making. For example, managers can use virtual simulators to model complex negotiations or crisis situations where they need to make quick decisions and interact effectively with the team. Thanks to interactive elements and the ability to receive real-time feedback, users can learn quickly and adjust their actions. Interactive Soft Skills learning platforms offer users access to a wide range of learning resources, including video tutorials, online courses, webinars and interactive exercises. These platforms typically include gamification elements such as points, levels and rewards to increase user motivation and engagement.

Gamification is another innovative method of teaching Soft Skills in a digital environment (Seliro Wangi & Wajdi, 2020). The use of game elements, such as points, ratings, badges, competitions, increases the motivation and engagement of users in the learning process. Gamification can be applied in a variety of forms, from game-based simulators to interactive courses that include competitive elements. For example, participants can compete in communication or problem-solving tasks, receiving rewards and feedback to encourage further skill development. One of the key benefits of using virtual simulators, interactive platforms and gamification is the ability to personalize learning. Users can choose the courses and exercises that best suit their needs and goals, and learn at a time and pace that suits them. This is especially important in today's world, where many professionals work remotely and have limited time to learn. Furthermore, these tools allow organizations to scale learning effectively and provide the same quality of education to all employees, regardless of their location. They also help to reduce training costs, as many of these platforms are available online and do not require the physical presence of trainers or instructors.

The results of the third section of the survey show that the majority of respondents are actively engaged in developing their Soft Skills. In particular, 70% (35 respondents) said that they had participated in Soft Skills training or courses in the last year. These courses and trainings cover a wide range of skills, including communication, collaboration, leadership, adaptability, time management, proactivity, analytical skills, and multidisciplinary. Respondents indicated that these training programmes were useful for their professional activities, helping them to improve interaction with colleagues, organize their workflow more efficiently and make informed decisions. On the other hand, 30% (15 respondents) have not received any Soft Skills training in the last year. Some respondents indicated that they consider their skills to be sufficiently developed, or that their work does not pay much attention to the development of Soft Skills.

The results of the fourth section of the survey show that most respondents recognize the significant impact of digital technologies on the development of Soft Skills. In particular, 80% (40 respondents) believe that digital technologies have a significant impact on the development of Soft Skills. However, 20% (10 respondents) believe that digital technologies have little or no impact on the development of their Soft Skills. Some of them noted that face-to-face communication and traditional teaching methods remain more effective for developing Soft Skills. Others suggested that digital technologies may even make it more difficult to develop some skills, such as emotional intelligence and interpersonal interaction, due to the limited opportunity for face-to-face communication. Based on the survey, a bar chart was developed to visualize the key findings and reflect the distribution of respondents' opinions and experiences (Figure 2).

Figure 2. Survey results on Soft Skills and their interaction with digital technologies



Source: created by the authors

Analysing strategies to overcome the main challenges faced by professionals in adapting to digital technologies and improving Soft Skills is critical to ensure successful career development in today's digital environment (Tripathy, 2020). One of the main challenges is the rapid pace of technology change, which requires employees to constantly update their knowledge and skills. To overcome this challenge, it is necessary to introduce regular training and professional development, in particular through online courses, webinars, and seminars.

Another significant challenge is the difficulty of maintaining effective communication and collaboration in a remote work environment. To solve this problem, it is worth using specialized digital teamwork tools, such as Slack, Microsoft Teams or Trello, which provide the ability to quickly share information and complete tasks together. In addition, it is relevant to develop digital etiquette and interpersonal communication skills, which promotes better understanding and interaction between team members. Problem-solving and decision-making under uncertainty are also crucial challenges. To overcome them, it is recommended to introduce trainings to develop analytical skills, critical thinking and creative problem-solving. The use of virtual simulators and simulation platforms can help employees practice dealing with real-life situations, which helps to increase their confidence and competence. Equally important is the development of leadership skills in the digital environment. To do this, it is necessary to implement mentoring and coaching programmes that help leaders develop skills in managing virtual teams, setting clear goals and motivating employees from a distance. It is also worth using digital tools to track productivity and organize workflows, which allows for more effective team management.

In general, to successfully adapt to digital technologies and improve Soft Skills, it is necessary to implement a comprehensive approach that includes regular training, the use of specialized digital tools, the development of analytical and leadership skills, as well as ensuring effective communication and collaboration. This approach will help increase the productivity, adaptability, and success of professionals in the modern digital world.

4. DISCUSSION

In the era of rapid development of digital technologies, the importance of Soft Skills is taking on a new dimension. Changes resulting from the introduction of innovative technologies have a significant impact on professional activities, requiring employees to adapt and develop specific skills. The study confirms that Soft Skills have a significant impact on the development of professionals from various industries. Digital tools significantly expand the possibilities of communication, collaboration, leadership, and adaptation to change, while posing new challenges to professionals. Communicating in a digital environment requires new skills, such as the ability to express thoughts clearly in emails and chats, adapt to cultural

differences, and effectively resolve conflicts in virtual communication environments (Dmytrenko, 2024). Digital technologies enable instant communication with people from different parts of the world, which increases the demands on communication skills. Collaboration is also changing in the digital age. Remote work environments require employees to be able to work effectively in virtual teams, develop projects together and interact through specialized platforms for sharing documents and information. Digital technologies facilitate the creation of more flexible and productive workgroups, but also require new approaches to managing these groups (Abdullayev et al., 2024).

The authors Foerster-Pastor and Golowko (2018) came to a similar conclusion about the importance of developing Soft Skills in the field of public employment administration in their study. They emphasized that Soft Skills are critical for the effective functioning of this sector, covering such aspects as effective communication and intercultural interaction. Krpálek et al. (2021) also focused on the need for digital and communication skills in the business services industry. They identified that Soft Skills such as effective communication, customer service and intercultural communication are critical for successful performance in this industry. Leadership in the digital environment requires the ability to effectively manage virtual teams, set clear goals and motivate employees from a distance. Remote working and distributed teams present new challenges for leaders in terms of organizing workflows and maintaining high levels of productivity (Rexhepi et al., 2024). The use of digital tools, such as project management platforms (Trello, Asana), productivity tracking systems (Jira, Basecamp), and communication tools (e.g. Slack, Microsoft Teams) has become essential for modern leaders. These tools allow for effective coordination of team activities, ensure transparency of processes and timely completion of tasks, and maintain constant communication with all project participants. Leaders who are able to successfully integrate these technologies into their management practices are more likely to succeed in the virtual space.

Scientist Regine (2020) examined in his study inclusive leadership and communication skills, emphasizing their importance in today's professional environment. The results of his work showed that inclusive leadership and developed communication skills are interconnected and critical to the success of organizations in the modern world. This, as well as this study, is directly related to the challenges and strategies of leadership in the digital environment, where effective management of virtual teams, setting clear goals and motivating employees at a distance are important aspects. The study found that digital technologies open up new opportunities for the development of Soft Skills through the use of innovative teaching methods. Among them, virtual simulators, interactive platforms, and gamification stand out as increasingly popular and effective tools in the modern world. Virtual simulators allow for the creation of realistic simulations of work situations where users can practice communication, collaboration, and problem-solving skills in a safe environment. Interactive platforms, such as collaborative

learning platforms or online courses, provide access to numerous learning materials, trainings, and courses. These platforms often include interaction elements such as discussion forums, group projects, and opportunities to receive feedback from instructors and other participants. This approach promotes collaboration and communication skills, as users must interact with others to achieve common goals.

In the same direction, studies were conducted by Unnikrishnan et al. (2021), who focused on the use of immersive virtual reality (VR) and simulation training for the development of Soft Skills. The results of the researchers showed that the use of immersive VR can be effective for the development of Soft Skills. They focused on creating realistic learning environments where users could interact with virtual characters and situations that simulated real-life challenges and analysed how VR technologies can optimize the development of communication skills, emotional intelligence, and conflict resolution. Bukeyeva et al. (2023) also explored the use of simulation learning to improve Soft Skills. They developed and tested various simulation scenarios aimed at improving communication skills and other aspects of Soft Skills. Their work has highlighted that simulation training can effectively contribute to the development of Soft Skills, particularly in the areas of emotional intelligence and conflict management. Gamification, i.e. the use of game elements in non-game contexts, has become another powerful tool for developing Soft Skills. Incorporating game elements such as rewards, competitions, and progress levels can significantly increase user motivation and engagement in the learning process. Gamified platforms can create an engaging learning environment where users actively interact, learn and strive to reach new levels, which helps to develop skills such as proactivity, adaptability, and self-control.

Similar conclusions were reached by Adhiatma et al. (2019) and Altomari et al. (2023), who studied gamified learning and its application to improve individual skills, in particular in the context of software and serious game development. The results of the study by Adhiatma et al. demonstrate that gamified approaches allow for more effective learning and assessment of skills, especially in complex and technical areas such as programming. The results of Altomari et al. showed that gamification creates an interactive learning environment where students can effectively learn and improve their skills through tasks, simulations and virtual challenges. Analysing strategies for overcoming the main challenges faced by professionals in adapting to digital technologies and improving Soft Skills is crucial for successful career development in the modern digital environment. This paper has identified several key aspects that contribute to effective adaptation to digital change and Soft Skills' development. Using technology to improve self-discipline and time management is another effective strategy. Planning tasks, setting priorities, and using digital tools to track progress can optimize workflows and increase productivity. In particular, using tools such as Trello or Asana can help in structuring one's workday and managing projects more effectively. Developing cultural sensitivity and ethics in the digital environment is also important. Professionals who are able to work in

multicultural teams and adhere to ethical standards will be able to create a favourable working environment and avoid conflicts. This includes understanding cultural differences, respecting diversity, and being able to adapt their communication and management approaches to the cultural characteristics of the team.

Authors Ngo and Thuy (2024), Aryani et al. (2021) also explored the importance of Soft Skills for academic success and career development, but from the perspective of university students and the impact of communication skills on careers from high school to the workplace. Ngo and Thuy researched the importance of Soft Skills for academic performance and career development among university students. They emphasized that Soft Skills are critical to academic success, including effective listening, clear and logical expression, and conflict resolution. Aryani et al. also investigated the impact of communication skills on career development, particularly from high school to the workplace. The results showed that Soft Skills, including effective listening, clear communication, and conflict resolution, are the most valuable for successful career development.

In general, the results of the study show that the growing importance of Soft Skills in the context of digital technologies opens up new opportunities for self-improvement and professional growth, but at the same time, it requires professionals to be ready for continuous learning and adaptation to change.

5. CONCLUSIONS

The study found that in the context of rapidly growing digital technologies, there is an increasing demand for Soft Skills such as communication, collaboration, and leadership. This confirms the need for a balanced development of technical and social competencies in professionals. The ability to effectively use modern tools and technologies, as well as to successfully solve complex problems, collaborate with colleagues and manage processes, is critical to success in the digital environment. The survey results showed that most respondents consider Soft Skills to be the most important for successful work. Approximately 90% of participants use digital tools in their work, with the main tools being email, chats, video conferencing and specialized platforms. Regarding participation in Soft Skills training, the majority of respondents (over 70%) confirmed that they had participated in such programmes in the past year. The majority also recognized that digital technologies have a significant impact on the development of their Soft Skills, contributing to improved communication, performance, and collaboration in virtual and distributed team environments.

The study showed that in the context of the rapid development of digital technologies, Soft Skills such as adaptability, flexibility, time management, self-discipline, and communication effectiveness are becoming increasingly relevant. These skills are critical for successful adaptation to new tools and technologies, increased productivity and effective interaction in the digital environment. The study

confirmed that virtual simulators and interactive platforms offer significant potential for the development of Soft Skills in various fields of activity. These innovative learning methods allow for the creation of realistic virtual environments that help improve interpersonal interactions and communication skills. They also provide opportunities to practice leadership skills through virtual management and collaboration in virtual teams. Despite these benefits, the integration of virtual simulators and interactive platforms comes with challenges that should be considered. The high cost of developing, maintaining and improving such platforms can be an obstacle to their widespread use.

Prospects for further research in the field of Soft Skills in the digital era include investigating the impact of Soft Skills' development through the use of artificial intelligence and augmented reality, as well as assessing the effectiveness of new digital platforms and learning methods in practice in various professional fields. A limitation of the study comes from the geographical context or cultural peculiarities that may affect the perception of Soft Skills and their development in different parts of the world.

REFERENCES

- Abdullayev, K., Aliyeva, A., Ibrahimova, K., Badalova, S., & Hajizada, S. (2024). Current trends in digital transformation and their impact on the national economy. *Scientific Bulletin of Mukachevo State University. Series "Economics"*, 11(1), 9-18. <https://doi.org/10.52566/msu-econ1.2024.09>
- Adhiatma, A., Fachrunnisa, O., & Rahayu, T. (2019). Gamified training: A new concept to improve individual Soft Skills. *Jurnal Siasat Bisnis*, 23(2), 127-141. <https://doi.org/10.20885/jsb.vol23.iss2.art5>
- AlAfnan, M., Dishari, S., & MohdZuki, S. (2024). Developing Soft Skills in the artificial intelligence era: Communication, business writing, and composition skills. *Journal of Artificial Intelligence and Technology*. <https://doi.org/10.37965/jait.2024.0496>
- Altomari, L., Altomari, N., & Lazzolino, G. (2023). Gamification and Soft Skills assessment in the development of a serious game: Design and feasibility pilot study. *JMIR Publications*, 11, e45436. <https://doi.org/10.2196/45436>
- Aryani, F., Wirawan, H., Saman, A., Samad, S., & Jufri, M. (2021). From high school to workplace: Investigating the effects of Soft Skills on career engagement through the role of psychological capital in different age groups. *Education + Training*, 63(9), 1326-1345. <https://doi.org/10.1108/ET-03-2021-0087>

- Babina, S., Kravchenko, A., Krasilnikova, O., Krokmal, N., & Horpynych, O. (2024). Metamorphoses of personality in the information society: Education, culture, identity. *Journal of Interdisciplinary Research*, 51, 73-78.
- Berisha, B., & Rexhepi, B. (2022). Factors That Determine the Success of Manufacturing Firms: Empirical Evidence from Kosovo. *Quality - Access to Success*, 23(191), 194-202. <https://doi.org/10.47750/QAS/23.191.23>
- Breno, L., Pessoa, S., Perota, B., Tavares, F., de Resende, L. M., Yoshino, R. T., & Pontes, J. (2023). Evolution of Soft Skills for engineering education in the digital era. In *Optimization, Learning Algorithms and Applications* (pp. 640-653). Springer. https://doi.org/10.1007/978-3-031-23236-7_44
- Bukeyeva, A., Hendrixson, V., Kemelova, G., Aimbetova, D., Drobchenko, Y., & Riklefs, V. (2023). Optimizing Soft Skills acquisition through simulation training: balancing realism and academic stress in a longitudinal cohort study. *Research Square*. <https://doi.org/10.21203/rs.3.rs-3800705/v1>
- Caputo, F., Cillo, V., Candelo, E., & Liu, Y. (2019). Innovating through digital revolution: The role of Soft Skills and Big Data in increasing firm performance. *Management Decision*, 57(8), 2032-2051. <https://doi.org/10.1108/MD-07-2018-0833>
- Dmytrenko, O. (2024). The political potential of the digital generation. *Foreign Affairs*, 34(4), 128-140. [https://doi.org/10.46493/2663-2675.34\(4\).2024.128](https://doi.org/10.46493/2663-2675.34(4).2024.128)
- Dzyana, H., & Dzyanyy, R. (2023). Public administrative activity in the conditions of contemporary uncertainty: information and communication aspect. *Democratic Governance*, 16(1), 37-51. <https://doi.org/10.23939/dg2023.01.037>
- Florez-Salas, J.L.T., Ramos-Saira, E.M., Joo-García, C.E., Ramos-Alave, R., Del Carpio-Delgado, F., & Laura-De La Cruz, K.M. (2023). Safety and Occupational Health Management System in Mining to Reduce Fatal Accidents in the Mining Industry. *Smart Innovation, Systems and Technologies*, 366, 57-67. https://doi.org/10.1007/978-981-99-5414-8_7
- Foerster-Pastor, S., & Golowko, N. (2018). The need for digital and Soft Skills in the Romanian business service industry. *Management & Marketing*, 13(1), 831-847. <https://doi.org/10.2478/mmcks-2018-0008>

- García-Juárez, H.D., Bustamante-Ochoa, C., del Carpio-Delgado, F., & Bravo-Chávez, Y.M. (2024). PDCA methodology for improving process management in a natural products company. *Aibi, Revista de Investigacion Administracion e Ingenierias*, 12(1), 108-120. <https://doi.org/10.15649/2346030X.3588>
- Glazunova, O., Korolchuk, V., Voloshyna, T., & Vakaliuk, T. (2022). Development of Soft Skills in Computer Science bachelors in the project learning process. *Information Technologies and Learning Tools*, 92(6), 111-123. <https://doi.org/10.33407/itlt.v92i6.5076>
- Gulati, R., & Reaiche, C. (2020). Soft Skills: A key driver for digital transformation. In *The Fourteenth International Conference on Digital Society* (pp. 40-44). https://personales.upv.es/thinkmind/dl/conferences/icds/icds_2020/icds_2020_2_30_18007.pdf
- Hampe, N., Sassenberg, K., Scholl, A., & Reichenbach, M. (2020). Introducing digital technologies in the factory: Determinants of blue-collar workers' attitudes towards new robotic tools. *Behaviour & Information Technology*, 41(14), 2973-2987. <https://doi.org/10.1080/0144929X.2021.1967448>
- Isdawati, I. (2019). Utilizing technologies in teaching Soft Skills: Issues and challenges. In *The 2nd International Conference on Sustainable Development & Multi-Ethnic Society*. <https://doi.org/10.32698/GCS.0163>
- Istrefi, A., Zeqiri, J., Hasani, V.V., & Komodromos, M. (2025). The role of entrepreneurial marketing and digital transformation on women's entrepreneurial intentions in Kosovo. *International Journal of Technology Enhanced Learning*, 17(2), 174-196. <https://doi.org/10.1504/IJTEL.2025.145315>
- Karneli, O., Handayati, R., & Rijal, S. (2024). Enhancement of Soft Skills competence in human resources as a key success factor in the digital business era. *Journal of Contemporary Administration and Management*, 2(1), 319-324. <https://doi.org/10.61100/adman.v2i1.126>
- Ketners, K. (2025). Digital practices of diplomatic communication and their implications for global politics. *Foreign Affairs*, 35(1), 64-72. [https://doi.org/10.46493/2663-2675.35\(1\).2025.64](https://doi.org/10.46493/2663-2675.35(1).2025.64)

- Kopolovich, O. (2020). Learning Soft Skills in the digital age: Challenges and insights from development and teaching. *The Online Journal of Applied Knowledge Management*, 8(2), 91-106.
- Krpálek, P., Berková, K., Kubišová, A., Krelová, K., Frendlovská, D., & Spiesová, D. (2021). Formation of professional competences and Soft Skills of public administration employees for sustainable professional development. *Sustainability*, 13(10), 5533. <https://doi.org/10.3390/su13105533>
- Koshel, A., Koshel, V., & Minenok, A. (2021). Development of Soft Skills in the future educators as a necessary component competitiveness in the labor market. *Bulletin of the T.H. Shevchenko National University "Chernihiv Colehium"*, 168(12), 194-198. <https://doi.org/10.5281/zenodo.4769564>
- Li, Z., Yang, C., Yang, Z., & Zhao, Y. (2024). The impact of middle managers' digital leadership on employee work engagement. *Frontiers in Psychology*, 15, 1368442. <https://doi.org/10.3389/fpsyg.2024.1368442>
- Meshko, H., & Meshko, O. (2021). Soft Skills formation of the non-pedagogical specialties students in the process of studying the course "pedagogy". *Scientific Bulletin of Uzhhorod University. Series: "Pedagogy. Social Work"*, 48(1), 267-271. <https://doi.org/10.24144/2524-0609.2021.48.267-271>
- Murtezaj, I.M., Rexhepi, B.R., Xhaferi, B.S., Xhafa, H., & Xhaferi, S. (2024). The Study and Application of Moral Principles and Values in the Fields of Accounting and Auditing. *Pakistan Journal of Life and Social Sciences*, 22(2), 3885-3902. <https://doi.org/10.57239/PJLSS-2024-22.2.00286>
- Ngo, A., & Thuy, T. (2024). The importance of Soft Skills for academic performance and career development – From the perspective of university students. *International Journal of Engineering Pedagogy*, 14(3), 53-61. <https://doi.org/10.3991/ijep.v14i3.45425>
- Oliinyk, O., Zholdoshbaev, D., Koshonova, S., Kravtsov, Y., & Bocheliuk, V. (2025). Psychology of stress and adaptation during complex crises: Practical aspects of assisting people in difficult circumstances. *European Journal of Trauma and Dissociation*, 9(2), 100541. <https://doi.org/10.1016/j.ejtd.2025.100541>
- Plotzky, C., Lindwedel, U., Sorber, M., Loessl, B., König, P., Kunze, C., Kugler, C., & Meng, M. (2021). Virtual reality simulations in nurse education: A

- systematic mapping review. *Nurse Education Today*, 101, 104-135.
<https://doi.org/10.1016/j.nedt.2021.104868>
- Poláková, M., Horváthová-Suleimanová, J., Madžik, P., Copuš, L., Molnárová, I., & Polednová, J. (2023). Soft Skills and their importance in the labour market under the conditions of Industry 5.0. *Heliyon*, 9(8), e18670.
<https://doi.org/10.1016/j.heliyon.2023.e18670>
- Ragusa, A., Caggiano, V., & Trigueros, R. (2022). High education and university teaching and learning processes: Soft Skills. *International Journal of Environmental Research and Public Health*, 19(17), 106-121.
<https://doi.org/10.3390/ijerph191710699>
- Regine, B. (2020). Inclusive leadership and Soft Skills. In *The Routledge Companion to Inclusive Leadership* (pp. 264-272). Routledge.
- Rexhepi, B.R., Daci, E., Mustafa, L., & Berisha, B.I. (2024). Analysis of the effectiveness of freelance exchanges and their demand among corporate customers in the context of tax regulation. *Scientific Bulletin of Mukachevo State University. Series Economics*, 11(1), 60-70.
<https://doi.org/10.52566/msu-econ1.2024.60>
- Seliro Wangi, N., & Wajdi, M. (2022). Gamification: An effective strategy for developing Soft Skills and STEM in students. *Qalamuna – Jurnal Pendidikan, Sosial, dan Agama*, 14(1), 663-676.
<https://doi.org/10.37680/qalamuna.v14i1.4650>
- Shcherban, T., Hoblyk, V., Chernychko, T., Pigosh, V., & Kozyk, I. (2025). Assessment of the digital transformation of Ukraine's economy: Challenges, opportunities, and strategic prospects. *Scientific Bulletin of Mukachevo State University. Series "Economics"*, 12(1), 159-168.
<https://doi.org/10.52566/msu-econ1.2025.159>
- Sytnyk, Yo., & Zakharchyn, H. (2024). HR management of enterprises under martial law, socio-cultural and technological challenges. *Economics, Entrepreneurship, Management*, 11(1), 67-79.
<https://doi.org/10.56318/eem2024.01.067>
- Thornhill-Miller, B., Camarda, A., Mercier, M., Burkhardt, J.M., Morisseau, T., Bourgeois-Bougrine, S., Vinchon, F., El Hayek, S., Augereau-Landais, M., Mourey, F., Feybesse, C., Sundquist, D., & Lubart, T. (2023). Creativity, critical thinking, communication, and collaboration: Assessment, certification,

- and promotion of 21st century skills for the future of work and education. *Intelligence*, 11(3), 54. <https://doi.org/10.3390/jintelligence11030054>
- Tripathy, M. (2020). Relevance of Soft Skills in career success. *MIER Journal of Educational Studies Trends and Practices*, 10(1), 91-102. <https://doi.org/10.52634/mier/2020/v10/i1/1354>
- Tyukhtenko, N.A., & Makarenko, S.M. (2016). Economic and mathematic models for staff planning at enterprises of all ownership forms. *Actual Problems of Economics*, 175(1), 435-442.
- Unnikrishnan, R., Konstantinos, K., & Francesco, C. (2021). A systematic review of immersive virtual reality for industrial skills training. *Behaviour & Information Technology*, 40(12), 1310-1339. <https://doi.org/10.1080/0144929X.2021.1954693>
- Varenkyk, V., & Piskova, Z. (2024). Soft, hard, and digital skills for managers in the digital age: Business requirements and the need to master them. *Development Management*, 23(1), 46-61. <https://doi.org/10.57111/devt/1.2024.46>
- Vrabec, N. (2019). Soft Skills in the digital age. *Megatrendy a Média*, 6(1), 301-314.
- Yarin, A., Prado, J., Pozo, A., Carpiol, F.D., Patricio, S., & Surichaqui, B. (2023). Quality Management and Customer Satisfaction in SMEs in the Textile Industry. *Journal of Textile and Apparel, Technology and Management*, 12(4), 1-9. <https://jtatm.textiles.ncsu.edu/index.php/JTATM/article/view/20052>