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PERCEPTIONS OF DIGITAL COMPETENCIES AND EMPLOYABILITY AMONG EMPLOYEES IN BELGRADE

Ana-Marija Vukić
University of Novi Sad, Technical Faculty Mihajlo Pupin, Zrenjanin, Serbia
https://orcid.org/0009-0005-0532-2011

Dragana Glušac
University of Novi Sad, Technical Faculty Mihajlo Pupin, Zrenjanin, Serbia
https://orcid.org/0000-0003-2222-5406

Dragana Sajfert
Information Technology School – ITS, Belgrade, Serbia
https://orcid.org/0009-0005-4714-4495

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ABSTRACT

The results obtained in this study provide key insights into the impact of digital skills on various dimensions of a society's economic development and faster employment in Human Resource Management (HRM). The paper analyzes the relationship between the possession of digital competencies and their impact on society's economic development. This issue has emerged alongside the development of digital technologies, the rapid training of human resources, and the application of such knowledge to economic development. The main research hypothesis is to determine the level of correlation between digital competencies and employees, as well as their application to economic development, including the extent to which qualitative and quantitative factors influence this relationship. The results are as follows: 27% of respondents reported the ability to adapt to external changes; 22% indicated the ability to reorient production processes; 28% reported taking greater responsibility for profitability; 25.5% stated that principles and values positively affect employability; 34.21% indicated that employability depends on individual skills and competencies; 21% stated that employability depends on individuals' professional goals; 34.25% reported the ability to communicate in a foreign language; 32.45% indicated the ability to apply digital skills; and 20.17% reported the ability to communicate using digital media.

Address of the corresponding author:
Dragana Sajfert
dragana.sajfert@its.edu.rs

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1 INTRODUCTION

The ability to apply digital skills and the quality of institutions are emerging as key drivers that could enhance global economic growth. Our research shows that in recent decades a global economic system has taken on a new form, closely linked to virtual and intangible factors such as information, investment, technology, labor, systems, political processes, and in some cases even religious processes (Husein et al., 2023). From a theoretical perspective, modern economic growth—often considered a primary indicator—is observed when the GDP growth rate consistently exceeds the population growth rate. This has been recognized as a new phenomenon in the history of the world economy (Husein et al., 2023). The contribution of the information sector as a share of total GDP has changed only marginally over the past 40 years, fluctuating between 4–5% and reaching a peak of just 5.5% at the end of 2018. Global internet bandwidth increased by 35% in 2020, marking the largest annual growth since 2013. The adoption of robotics and the intensity of robotics (the number of robots per employee) are concentrated in so-called “robotics industry hubs” (Brynjolfsson et al., 2025). Digital transformation is reshaping global business by redefining operations, customer engagement, and value creation (Ristevska-Jovanovska, 2026).

In relation to traditionally established scientific concepts, digital competencies are most closely associated with abilities. However, in the field of economics, these two terms acquire specific meanings; thus, digital competencies are considered abilities derived from specific and relevant experiences. A digitally competent individual is sufficiently qualified to perform a task, which is primarily achieved through education, practical experience, or innate abilities. Economic development is a multidimensional process that goes beyond mere economic growth. It encompasses structural changes in the economy, technological progress, and improvements in education, healthcare, and institutions, intending to enhance the quality of life and reduce poverty. Economic development is the process through which simple, low-income national economies are transformed into modern industrial economies.

2 LITERATURE REVIEW

At the global level, the impact of digital competencies in education represents one of the fastest-growing industries, directly contributing to the creation of many jobs and stimulating the development of other sectors of the economy. Modern enterprises, to remain competitive in the global market, must apply the latest technologies while keeping costs as low as possible. This has led to the transfer of these technologies from the most economically developed countries to India, China, and other Asian countries, which have a well-trained and relatively low-cost, highly skilled workforce. These trends are also directed toward the Republic of Serbia, which has a certain—though insufficient—number of highly educated professionals for the application of digital competencies in business (Bartlett, 2009). The Toyota Production System (TPS) is recognized for fostering continuous improvement and emphasizing team-based problem solving within a culture that values open communication and learning. At the same time, artificial intelligence (AI) is rapidly transforming manufacturing by introducing opportunities for expansion and automation (Bunjamin, 2025). Research has been conducted on how digital competencies contribute to the creation of social capital and professional recognition (Hoz-Ruiz et al., 2025). Another study examined the impact of digital skills in education across 27 EU countries, analyzing how enabling factors shape these competencies, particularly under different socio-economic conditions. Using a quantitative methodology, the study applies cluster analysis and linear ordering methods to classify countries according to digital skills indicators (Labudova & Fedranova, 2024). The digital economy represents a major transformation driven by innovative technologies, especially the internet, artificial intelligence, and large volumes of data. This shift has improved learning by making educational materials more accessible. However, the digital divide creates significant challenges, as not everyone has equal access to technology or advanced online skills. Ensuring that everyone has access to virtual learning resources is crucial for leveraging the digital economy to improve education for all. Modern societies are undergoing digitalization that is transforming organizations and workplaces. Scholars, practitioners, and policymakers

increasingly focus on digital competencies as a means of helping the general population and workforce adapt to the technological revolution, enhance competitiveness and employability, and reduce social exclusion (Peiró & Martínez-Tur, 2022). The study also relies on reports and Russian empirical research on the digital economy and the regional structure of demand for digital skills. The results show that digitalization does not lead to a linear displacement of workers from the labor market; instead, it redistributes work functions between humans and algorithms, intensifying skill polarization and reinforcing the shift toward lifelong learning as an economic necessity. The concept of digital capital has been further developed to demonstrate the significant mediating effect of digital skills on education and the economic development of society (Lybek et al., 2024). The impact of digital competencies is mediated by, and depends on, citizens' ability to navigate both the risks and opportunities of digital technologies. Negative effects related to the excessive use of digital technologies are becoming increasingly evident (Blank & Lutz, 2018; Gui & Büchi, 2021; Scheerder et al., 2019). The range of impacts of digital technologies in education on economic development is much broader. It includes reduced costs of communication, campaigns, coordination, maintenance, and the expansion of social networks, as well as improved access to information, expertise, and educational tools—including tools for content creation and design (Blank & Lutz, 2018). It is not surprising that there is a positive correlation between perceived harms and perceived benefits (Blank & Lutz, 2018).Many of these digital competencies are closely linked to education and the economic development of society. Accordingly, previous research has found support for the ability to mobilize resources online (Larsson & Moe, 2014). The three main parameters considered are: educational background, skills related to digital competencies, and their impact on the economic development of society (Chesley, 2014). Digitalization therefore changes not only how we act in our private and professional lives, but also how we engage in the educational process and how individuals can organize themselves to influence decision-making related to the economic development of society (Donders et al., 2014). To use digital skills beneficially, an individual must overcome the final barrier, often defined as the "usage threshold" (van Deursen & van Dijk, 2014). To surpass this barrier, an individual needs to understand how to apply ICT in a productive and valuable manner. In some cases, the ability to apply digital skills effectively is categorized as a strategic skill (van Deursen & van Dijk, 2015). Digital competencies consist of a predefined set of abilities that influence individuals' capacity to engage with digital technology (Ragnedda et al., 2020). They resemble cultural capital in terms of specific skills and knowledge that can be acquired and that have an impact on the economic development of society (Ragnedda et al., 2020). Digital skills are often learned through practice, by doing, rather than through formal education (van Dijk, 2005). The generation of ideas positively affects the creation of new products, leading to economic development and a competitive advantage for companies (Vukić et al., 2026). Knowledge of digital tools significantly improves organizational performance and competitiveness, supporting sustainable development and innovation in dynamic business environments (Zuniga-Collazos et al., 2025). The results reveal an increasing emphasis on communicative digital competencies, especially digital communication, information management, and virtual collaboration (Hoz-Ruiz et al., 2025). Technology has emerged as a key factor in enhancing competitiveness in the economic sector. The process of digitalization, accelerated by the pandemic, has proven crucial for improving economic performance and optimizing development processes (Zúñiga-Collazos, 2025). However, many small and medium-sized enterprises still struggle to integrate information and communication technologies (ICT), highlighting the need for training in digital competencies and technological skills. The economic development of society is a dynamic concept that evolves and is influenced by various social factors. It is characterized by an individual's employability through the development of key competencies—such as knowledge, skills, and abilities—which enable effective task performance and adaptation to constant changes in the labor market (Heijde & Van der Heijden, 2006). In addition, one of the criteria used to assess employability is earned income, as it reflects a worker's value in the labor market and their ability to access better opportunities (Thijssen et al., 2008).

3 METHODOLOGY

This section describes the research procedures. The paper examines the impact of digital skills on various dimensions of the economic development of society, as well as how to select and employ human resources. The study aims to investigate the necessity of digital skills and the competence of human resources in employment, and how these factors influence the economic development of society and the competitiveness of companies. Data were collected through an online questionnaire administered to 114 employees using a semi-structured survey, followed by analysis. The survey was conducted among employees in Belgrade.

3.1 Research Problem and Subject of the Study

Computer competencies (digital skills) represent a set of knowledge and abilities necessary for the effective use of information and communication technologies (ICT). The impact of digital skills on various dimensions of the economic development of society and on faster employment is increasingly emphasized (HRM). Studies on the application of computer competencies generally provide evidence that their role is indispensable in the economic development of any society, including Serbia.

3.2 Review of Existing Research in This Field

Digital competencies are of vital importance for improving employability (Zuniga-Collazos et al., 2025).

Knowledge of digital tools significantly enhances organizational performance and competitiveness, supporting sustainable development and innovation in dynamic business environments (Hoz-Ruiz et al., 2025).

In recent decades, the global economic system has taken on a new form associated with virtual and intangible factors such as information, investments, technology, labor, systems, political processes, and in some cases even religious processes (Husein et al., 2023).

Today, increasing attention is being paid not only to innovation, but also to the leading role of individuals in economic growth and enhancing a country's competitiveness (Kritikos, 2014).

A questionnaire was used, developed based on the above-mentioned literature.

3.3 Research Objectives

This study aims to examine the necessity of digital skills and the competence of human resources in employment, which has an impact on the economic development of society and the competitiveness of companies. Being digitally competent means being able to understand media, search for and critically evaluate information, and communicate with others through various tools, thereby helping companies operate more efficiently.

3.4 Expected Results

Employees are expected to possess general digital competencies, which include technological skills for using various online platforms and applications. The research aims to determine the extent to which employees' digital competencies influence different dimensions of economic development and faster employment of HRM (young, highly educated workforce).

3.5 Research Methods

Based on the conclusions of previous studies and conceptual literature, specific assumptions were introduced for this research. These assumptions provided the foundation for constructing original research frameworks, which in turn shaped the structure of the study and influenced the determination of representative sample sizes. The study is grounded in assumptions derived from prior research and conceptual literature, which guided the development of original research frameworks. These frameworks directed the overall structure of the study, including the determination of representative sample sizes.

The research framework of this paper was established through the application of methodological pluralism, encompassing methods of content analysis of relevant literature and documents, as well as a survey method conducted through a structured questionnaire.

3.6 Questionnaire Distribution and Data Collection

Each employee was initially contacted by the researcher via telephone. After obtaining consent to participate, a cover letter was sent to the employee along with technical instructions for completing the electronic questionnaire. The study included the participation of employees from the business sector in Belgrade. The survey questions were thematically grouped as follows: demographic characteristics and work experience, and digital competencies.

4 RESULTS

4.1 Results Related to Research Questions

The first research question refers to determining the gender of employed respondents. Figure 1 illustrates the gender distribution of respondents from the surveyed population of employees. Based on the results obtained from tests conducted using Google Forms, out of 114 surveyed employees, 44.8% were women (51 respondents), while 55.2% were men (63 respondents).

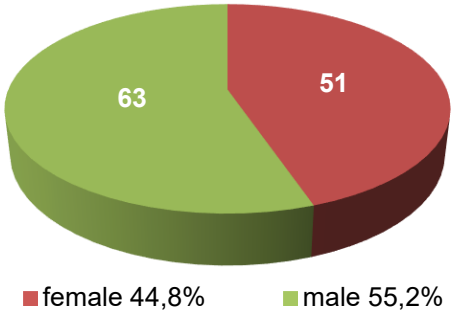


Figure 1. Gender of respondents

The age structure of the surveyed employees in companies is presented in Figure 2. Participants younger than 30 years account for 36% (41 respondents). Employees aged between 30 and 39 represent the next group, accounting for 28% (32 respondents). Employees aged between 40 and 49 make up 18.5% (21 respondents), followed by those aged between 50 and 59 with 9.5% (11 respondents). Finally, respondents older than 60 years account for 8% (9 respondents), representing a relatively small share.

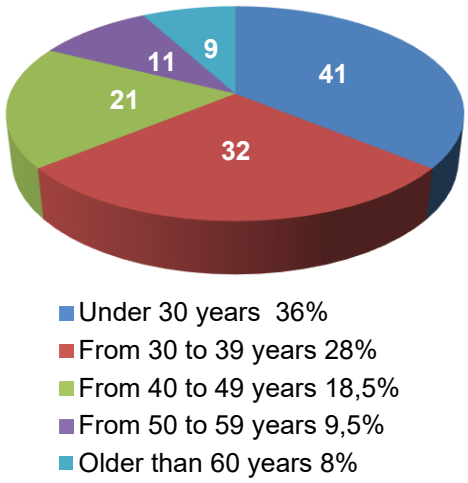


Figure 2. The age of the respondent

The educational structure of the surveyed employees, categorized by field of study, is presented in Figure 3. A total of 35% of respondents (40 individuals) have a background in Information Technology. Respondents with degrees in engineering and technical fields account for 27% (31 individuals). Those with a background in economics represent 20% (22 respondents). Participants with a field of study in natural sciences and mathematics account for 9.5% (11 respondents), while those with a background in law make up 8.5% (10 respondents).

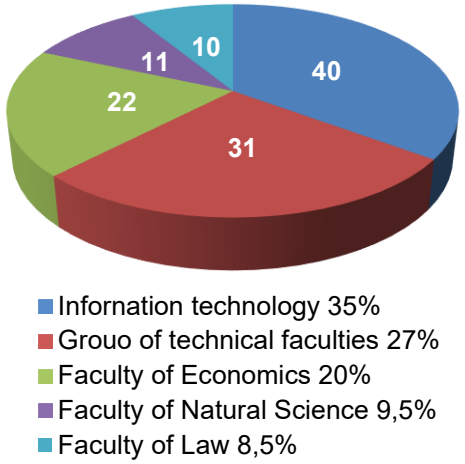


Figure 3. Education of respondents

The work experience of the surveyed employees is presented in Figure 4. The respondents show a relatively balanced distribution across experience categories. Employees with 0–5 years of experience account for 18,5% (21 respondents). Those with 5–10 years of experience represent

37% (42 respondents), followed by employees with 11–20 years of experience at 27% (31 respondents). The share of employees with 21–30 years of professional experience is 13% (15 respondents), while those with more than 30 years of experience account for 4.5% (5 respondents).

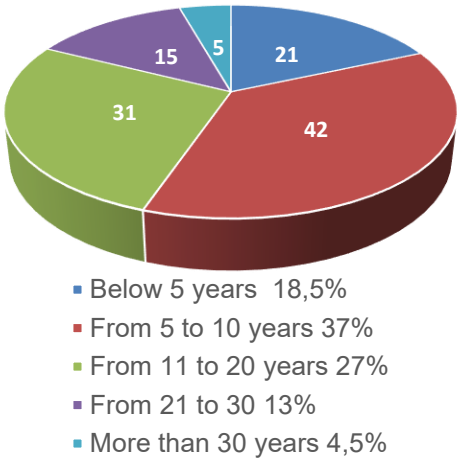


Figure 4. Work experience of the respondent

Figure 5. Anticipation and optimization of respondents

Anticipation and optimization among respondents are presented in Figure 5. A total of 35% of respondents (40 individuals) reported being committed to training to perform their tasks efficiently. The ability to adapt to organizational changes was indicated by 21% of respondents (24 individuals). The use of prior knowledge was reported by 17% (19 respondents). Seeking optimal performance in their activities was indicated by 14% (16 respondents), while continuous improvement of work performance was reported by 13% (15 respondents).

Personal flexibility of the respondents is presented in Figure 6. The ability to adapt to external changes was reported by 27% of respondents (31 individuals). The ability to reorient production processes was indicated by 22% of surveyed respondents (25 individuals). The ability to create value for the corporation was reported by 21% of respondents (24 individuals). The ability to understand employees was indicated by 16% of respondents (18 individuals). The ability to reduce labor costs was reported by 14% of respondents (16 individuals).

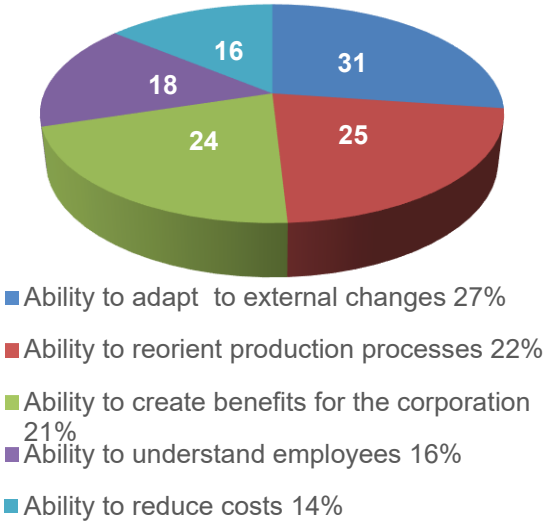


Figure 6: Personal flexibility of respondents

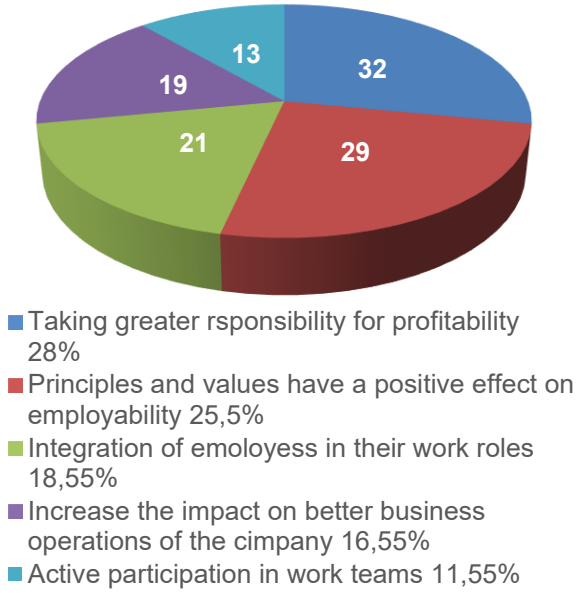
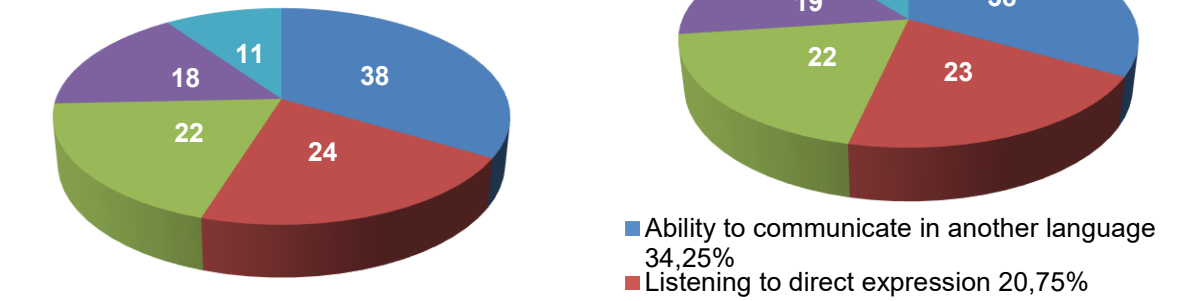


Figure 7. Corporate sense of belonging of respondents

The corporate sense of respondents is presented in Figure 7. A total of 28% of respondents (32 individuals) reported a willingness to take greater responsibility for profitability. The view that principles and values positively influence employability was expressed by 25.5% of respondents (29 individuals). The integration of employees into their job roles was indicated by 18.5% of respondents (21 individuals). The intention to increase influence on improving company performance was reported by 16.5% (19

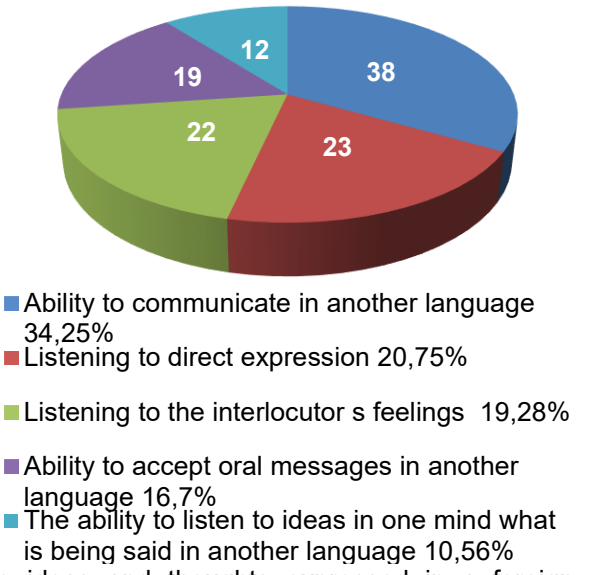


respondents), while active participation in work teams was indicated by 11.5% (13 respondents).

Figure 8. Balance in the employment of respondents

The balance in employment among respondents is presented in Figure 8. A total of 34.21% of respondents (39 individuals) stated that employability depends on individual skills and competencies. The view that employability depends on individuals' professional goals was expressed by 21% of respondents (24 individuals). The belief that employability depends on individual control was indicated by 18.2% of respondents (22 individuals). A total of 15.78% of respondents (18 individuals) stated that employability depends on current responsibilities, while 9.7% (11 respondents) indicated that employability depends on personal aspirations.

The foreign language communication skills of respondents are presented in Figure 9. A total of 34.25% of respondents (38 individuals) reported the ability to communicate in a foreign language. The ability to listen to direct expressions was indicated by 20.75% of respondents (23 individuals). Listening to the feelings of interlocutors was reported by 19.28% (22 respondents). The ability to understand oral messages in a foreign language was indicated by 16.7% (19 respondents), while the ability to listen



to ideas and thoughts expressed in a foreign language was reported by 10.56% (12 respondents).

Figure 9. Ability to communicate in another language of the examinee

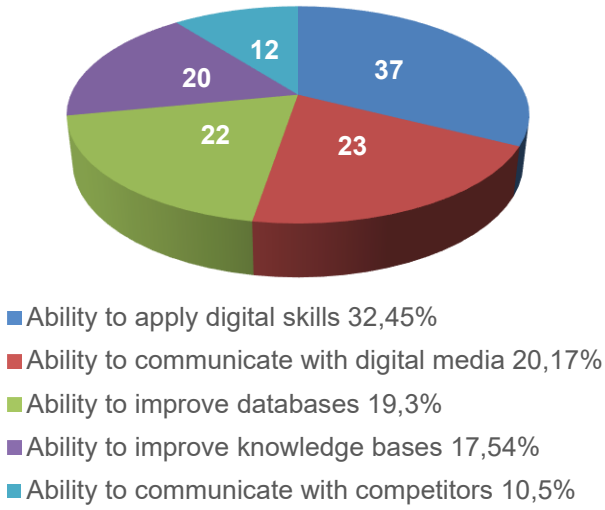


Figure 10. Respondents' digital skills

The digital skills of respondents are presented in Figure 10. A total of 32.45% of respondents (37 individuals) reported the ability to apply digital skills. The ability to communicate through digital media was indicated by 20.17% of respondents

(23 individuals). The ability to improve databases was reported by 19.3% (22 respondents), while the ability to enhance knowledge bases was indicated by 17.54% (20 respondents). The ability to communicate with competitors was reported by 10.5% (12 respondents).

5 DISCUSSION

The results obtained in this study provide key insights into the impact of digital skills on different dimensions of societal economic development and effective employment. Within the construct of professional experience, it was found that 34.21% of respondents stated that employability depends on individuals' skills and competencies. This highlights the relevance of these skills in the current work context, especially considering technological advancements that influence competitiveness and efficiency. This finding is consistent with the research of Ferreira et al. (2024), who emphasize the importance of digital training in empowering employees and improving their professional performance. In relation to the construct of employee flexibility, the ability to adapt to organizational changes (Figure 5) was identified as important when required, which aligns with the study of Joo et al. (2014), showing that employee proactivity is associated with their creative ability to align with organizational demands. Flexibility is defined as the ability of an organization to adapt to external changes, which is essential for managing employability and recruitment processes (Madero & Barboza, 2015). Understanding how employees incorporate flexibility into their work contexts is crucial for facilitating adaptation to change, creating benefits for both organizations and employees (Figure 6). These benefits include cost reduction, reorientation of production processes, and implementation of effective measures in response to economic crises (Ballina et al., 2015). Therefore, flexibility is a fundamental skill in a dynamic environment, contributing to the success and sustainability of enterprises in times of change.

Regarding respondents' corporate sense, the goal is to create a sense of belonging, which enhances societal economic development and fosters a work environment that strengthens cooperation and affiliation, as similarly found by Martínez-Caro et al. (2020). In relation to the corporate sense construct, the variable with the highest explanatory power is the ability to achieve a balance between fulfilling one's own work objectives and supporting colleagues and managers. This aligns with Hofaidhllaoui et al. (2014), who argue that employability cannot exist without a transparent exchange relationship between employer and employee, in which both parties balance their inputs and benefits.

In foreign language communication, the variable with the greatest influence is the ability to listen not only to what is directly expressed but also to the feelings, ideas, or thoughts underlying what is being said in another language. As suggested by East & Slomp (2023), goods and services always improve people's lives, especially when individuals need to relocate to a foreign territory, making comprehension of messages essential. The variable with the lowest influence is the ability to understand ideas and thoughts expressed in a foreign language.

Finally, in relation to digital skills, the variable with the greatest explanatory power is the ability to apply digital skills, which is closely related to the findings of Vial (2023), who states that the main goal of companies is to maintain market competitiveness through the use of general and specialized software.

The results obtained in this study provide key insights into the impact of digital skills on various dimensions of economic development and employability. Within the context of professional experience, it was found that 34.21% of respondents stated that employability depends on individuals' skills and competencies. This highlights the relevance of these skills in the current labor market, particularly in light of technological advancements that influence competitiveness and efficiency.
This finding may be interpreted because of the socialist legacy, in which humanism and a people-oriented approach were consistently emphasized, with particular importance placed on equality. Consequently, contemporary perceptions of digital competencies and employment in Belgrade continue to place high value on attributes such as concern for people, equality, and fairness, reflecting habits and values inherited from earlier periods. At the same time, the absence of these attributes leads to considerable dissatisfaction,

suggesting that employment practices related to digital competencies should be seen to avoid such shortcomings.

In today's rapidly evolving digital work environment, individuals need to develop a thorough understanding of the dynamic nature of the labor market. However, employees in Belgrade appear to exhibit somewhat different perspectives. Perceptions of digital competencies are becoming increasingly uncertain as jobs become more complex and less predictable. Developing awareness of the digital world of work is therefore a crucial factor, both in Belgrade and throughout Serbia.

The findings of this study indicate that the degree of work readiness among future employees may serve as a predictor of increased awareness of the contemporary digital work environment. The study also emphasized the importance of fostering employees' flexibility and their ability to adapt to organizational changes (Figure 5).

Džu et al. (2014) indicate that employee proactivity is associated with their creative ability to adapt to organizational demands. Flexibility is defined as an organization's capacity to adapt to external changes, which is essential for the effective management of recruitment and employability processes (Madero & Barboza, 2015). Understanding how employees apply flexibility within their work environments is crucial for successful adaptation to change, thereby generating benefits for both organizations and employees (Figure 6).

The perception of digital competencies includes the potential to reduce recruitment costs when hiring new employees, as well as the implementation of effective measures in response to economic crises (Ballina et al., 2015). Therefore, flexibility can be regarded as one of the key competencies in a dynamic business environment, as it contributes to organizational success and long-term sustainability under conditions of continuous change. About the research findings related to respondents' sense of corporate belonging, the primary objective is to foster a sense of organizational belonging, which positively contributes to social and economic development. The findings indicate that such a work environment promotes collaboration, interpersonal connectedness, and stronger organizational cohesion, consistent with the results reported by Martínez-Caro et al. (2020).

Within the corporate belonging construct, the variable with the greatest explanatory power is employees' ability to maintain a balance between achieving their own work objectives and supporting their colleagues and managers. This finding is consistent with Hofaidhllaoui et al. (2014), who argue that employability cannot be sustained without a transparent exchange relationship between employers and employees, in which both parties balance their respective contributions, responsibilities, and benefits.

Regarding communication in a foreign language, the variable with the greatest influence is the ability to listen not only to what is explicitly expressed but also to the underlying feelings, ideas, and thoughts conveyed in another language. As suggested by East and Slomp (2023), goods and services ultimately improve people's quality of life, particularly when individuals relocate to a foreign country, making the ability to understand messages in a foreign language essential. Conversely, the variable with the least influence is the ability to comprehend ideas and thoughts expressed in a foreign language.

Finally, with respect to digital skills, the variable with the greatest explanatory power is the ability to apply digital skills effectively. This finding is closely aligned with Vial (2023), who argues that the primary objective of organizations is to maintain market competitiveness through the effective use of both general-purpose and specialized software.

The research findings indicate that employees in Belgrade generally hold positive perceptions of digital competencies. However, the results also suggest that the application of digital competencies in recruitment practices in Belgrade differs considerably from prevailing international practices. This finding is particularly significant because employees' digital competencies represent a critical factor in organizational performance and employability. Therefore, adopting the best international practices in the development and application of digital competencies should be considered an important priority.

6 CONCLUSIONS

This study aimed to examine the relationship between digital skills and different dimensions of economic development, which ultimately contributes to faster employment of high-quality human resources.

The findings are consistent with previous studies suggesting that populations with higher levels of digital skills tend to be associated with stronger economic performance. Digital competencies enable employees to use new technologies to improve labor productivity and the competitiveness of enterprises. The digital economy, which depends on the digital knowledge of human resources, drives innovation and economic growth. Research emphasizes that investing in digital technology is not sufficient if human resources are not trained to use it.

This study shows that the implementation of efficient data collection, analysis, and training has a significant impact on research capacities and the productivity of enterprises in the manufacturing industry. Such a transition can reduce labor costs, shorten research cycles, and decrease downtime caused by accidents, while simultaneously increasing productivity at a higher level of precision. However, high maintenance costs may hinder the widespread adoption of digitalization among firms, slowing the incentive effect of this innovation. There is also a potential for conflict between the existing workforce and the new combination of computer engineers and artificial intelligence.

As for anticipation, it is recommended to invest in research in key areas to achieve the proposed goals. Personal flexibility is strengthened by promoting the ability to adapt to organizational changes. For corporate purposes, it is essential to develop competencies that contribute to forming a shared vision of values and objectives.

In addition, a balance should be sought between individual work goals and mutual support among colleagues in team management. Furthermore, this research shows that proficiency in a second language is optimized by developing listening skills not only for direct expressions, but also for the underlying feelings, ideas, and thoughts that shape communication.

The findings of this study provide important insights into the impact of digital skills on various dimensions of socioeconomic development and on improving employability within the context of human resource management (HRM). The study examined the relationship between digital competencies of employees in Belgrade and their contribution to socioeconomic development. This issue has gained increasing importance alongside the rapid advancement of digital technologies, the accelerated development of human resources, and the application of digital knowledge to economic growth. The primary objective of the study was to determine the strength of the relationship between employees' digital competencies and socioeconomic development, as well as to examine the extent to which qualitative and quantitative factors influence this relationship. The results indicate that 27% of respondents identified the ability to adapt to external changes as a key factor influencing employability and organizational performance. Furthermore, 22% of respondents highlighted the ability to reorient production processes as an important competency. In addition, 28% reported a willingness to assume greater responsibility for organizational profitability. Regarding employability, 25.5% of respondents stated that organizational principles and values positively influence employability, while 34.21% indicated that employability primarily depends on individual skills and competencies. Moreover, 21% reported that employability is influenced by individuals' professional goals. With respect to communication and digital competencies, 34.25% of respondents identified the ability to communicate in a foreign language as an important competency, 32.45% emphasized the ability to apply digital skills effectively, and 20.17% reported the ability to communicate using digital media.

Overall, the findings demonstrate that digital competencies represent an important driver of socioeconomic development in both Belgrade and Serbia as a whole. They contribute to creating conditions in which employees can actively participate, continuously learn, and develop their competencies in accordance with their abilities, thereby enhancing both individual employability and broader economic growth.

7 RECOMMENDATIONS FOR FURTHER RESEARCH

It is recommended that managers and administrators create opportunities for participation in the development of a shared vision of values and goals, as well as for exploring related work areas, to achieve the objectives set by top management, since this study has highlighted their impact on organizational competitiveness. In addition, employees must complete tasks on time, as this was identified as the variable with the greatest explanatory power within the professional experience construct.

Although significant progress has been made in the study of digital competencies in the country, important conceptual limitations remain. While key references on digital competencies and employability have been included, the literature review does not sufficiently integrate recent trends, such as artificial intelligence (AI) as an emerging dimension of these competencies.

A second limitation of this study lies in the exclusion of AI-related competencies from both the conceptual and empirical framework, which is recognized as a key constraint. Although this decision was based on exploratory interviews—where companies did not report the use of artificial intelligence as relevant—recent literature indicates an increasing adoption of AI applications, such as chatbots and automated systems, in economic development.

A third methodological limitation relates to the absence of predictive validity assessment procedures. Although this study focused on explaining the observed relationships, the inclusion of predictive metrics would have strengthened the model's ability to forecast outcomes in new or unobserved scenarios. This omission affects the external validity and practical applicability of the findings, particularly given the study's aim to inform human capital development, digital skills training programs, and managerial decision-making in human resource recruitment.

Future research could be improved by introducing digitalization as an individual factor into an adjusted economic model to enable more precise forecasting. Combining this with statistical evidence could further enhance the study by establishing correlations between digitalization and economic growth.

Finally, regarding the scope of the research, this study focuses on general business applications in order to examine the economic impact of digitalization. Future studies could narrow the scope to a specific business sector for a more detailed analysis or shift to a consumer perspective to explore the potential of e-commerce.

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