Review of Socio-Economic Perspectives
ISSN: 2149-9276 e-ISSN: 2547-9385
Vol 11 No 1/2026

The Importance of Education for Successful Digital Transformation of Work

Maja Vizjak
Assistant Professor Ph.D. Maja Vizjak, Institute for Research Migration, Zagreb, Croatia
E-mail: maja.vizjak@imin.hr

DOI: 10.2478/rsep-2026-0004

Abstract

Workplace changes due to digitalization are intensive change management processes that are becoming the key to business success and sustainability. Continuous education of human resources is necessary for working in a digitally transformed work environment. This research compares the views of students as future employees and the real sector in Croatia on the need for learning and the importance of responsibility for human resource development. The methodology used in the research is combined quantitative features conducted through an interview survey. The aim of the research is to determine the awareness of openness to learning of the future and current workforce in the labor market of the Republic of Croatia. Change management and resilience development are possible if there is awareness of the need for continuous education and because those who do not successfully adapt to change will be significantly left behind. This research contributes to understanding the attitudes of future and current employees and can serve as a basis for adjusting organizational strategies and development policies in business

Keywords: student, real sector, education, change management, human resources in Croatia.
JEL Codes: I25, O15

© 2026 Author(s). This article is licensed under the Creative Commons Attribution-Non Commercial 4.0 license (https://creativecommons.org/licenses/by-nc/4.0/)

Article History: Received: March 12, 2026 | Accepted: March 24, 2026 | Published: June 30, 2026.

Cite as: Vizjak, M. (2026). The Importance of Education for Successful Digital Transformation of Work. *Review of Socio-Economic Perspectives, 11(1)*: 26-35. https://doi.org/10.2478/rsep-2026-0004.

1. Introduction

Seven new realities on the labor market: exponential organizations, learning organizations, change management and the ability to transform, innovation management, flexible forms of organization, flexible workforce, work ethics and social responsibility (Stockton, Filipov and Monahan, 2018). Exponential and flexible organizations are those that can implement new value and innovations that come with new technology, and the main resources are human resources. A learning organization is one that has embraced lifelong learning with an emphasis on talent development. Talent development will encourage continuity to rapidly shape new business models, improve output quality, generate new innovative ideas and improve cost management. Meeting the needs for resilience to the changes of the double transition to green and digital can be achieved using a strategic approach that focuses on human resources (European Commission, 2020). The Croatian Academy of Sciences and Arts (2022) provides a strategy for the further development of science, stating that people are the main bearers of ideas, information and new knowledge, they are the strategic basis and capital in modern society and economy. As the perception and attitudes in society change, the diversification of human resources and technology occurs in order to adapt to digitization (Vizjak, Paulišić and Mišević, 2024). Through lifelong learning, we adapt to changes because it is important for an individual to keep up with the times (Ekart Misleta, 2024). Education is key to the success of the organization along with change management, and the needs of human resource development will grow, and thus continuous training will become crucial for efficiency in business.

2. Literature Review

The main report for forming the basic assumptions for the research of this work comes from the Future of Jobs Survey (2025) document conducted by the World Economic Forum and concludes that the basic workforce development strategy points to the importance of investing in learning and training as a priority, while the biggest obstacles are skills shortages. Digitization makes the boundaries of business extraction more and more flexible, Tretter and Burns (2023) conclude in their research. Research by Musa and Haroon (2024) and Vizjak, Paulišić and Mišćević (2024) shows that digital transformation requires a new set of competencies, while Hoe (2024) lists some of the specific competitive digital skills that are needed and explains the roles of employees in understanding the wide range of possibilities of digital technologies (Cetindamar et al., 2021). The topics of skills of students and those required by employers in accordance with labor market requirements and future development trends focus on the importance of active collaboration between academia and employers (Anwar et al., 2025; Martzoukoua et al., 2020; Sánchez-Caballé et al., 2021). Organizations should prioritize effective employee training and development and use strategic planning to align HR policies with organizational goals (Ateeq et al., 2025). Agile organizations value the combination of human and machine potential with the development of self-aware talents at all levels as an essential element of strategic planning. Training and development programs aim to improve employees' abilities, preparing them for greater responsibilities and career advancement (Abro et al., 2024). The question that arises is who has the most important role for human resource management in an innovative environment where the only constant is change?! The most important role is played by those who think creatively and are open to lifelong education. The main overview of previous research can be found in Table 1.

Table 1. Main literature overview of previous research

Publication	Conclusion of the research
Future of Jobs Survey, 2025. World economic forum	Statistical report on changing workplaces and challenges for the future
Vizjak, M., Paulišić, M. and Mišević, P., 2024. Adapting to the Digital Shift: Skills Development and Workplace Transformation in the Era of Human-Technology Collaboration', Croatian regional development journal, Vol. 5, No. 2, pp. 92-110.	Analysis of statistical features. This research is a continuation of the previous research on the transformation of workplaces into remote work and the importance of developing digital workplaces.
Da, Q., 2025. Digital leadership improves organizational resilience by fostering job creation: The moderating role of organizational culture, Scientific Reports, Vol 15(1), DOI: 10.1038/s41598-025-09144-2	A study on the impact of digitalization on organizational resilience, a sample of 389 employees from different companies in China, using PLS-SEM
Dechawatanapaisal, D., 2024. How can retention of online remote workers be predicted?: Understanding the moderating role of personal resilience, Journal of Workplace Behavioral Health, 39(4), pp. 463–484.	Data was collected over two time periods from 418 employees who worked remotely. Research on the importance of resilience training programs to help workers acquire the skills needed to cope with change

Source: Author's analysis

3. Data & Methodology

This research is based on a combined methodological approach of quantitative methods. Research conducted on students in Croatia on the perceptions and attitudes of students in Croatia on digital forms of work conducted as part of the project "From real to virtual migrations" funded by the EUNextGeneration conducted by the research team of the project of the same name of the Institute for Migration Research in Zagreb, Croatia.

The methodology used in the research is a survey questionnaire distributed digitally to students in Croatia during the months of May and December 2025. The analysis was conducted on a sample of N = 1,205 students. The sample includes students from various fields of science, with the largest proportion coming from the social sciences. The gender composition of the sample is predominantly female (61.25%), and the most represented age group of respondents is 20–22 years.The research on employers was conducted by the Croatian Chamber of Commerce in the period from 22.2. to 7.3.2024. with the aim of detecting employee training practices with a sample of 600 employers.

The research was conducted according to the model of survey questions posted on the employment portal Posao.hr and on Facebook Voice of the Entrepreneur. The Facebook group Voice of the Entrepreneur is followed by 84,400 users and LinkedIn Posao.hr is a Croatian employment portal followed by around 44,000 users. The portal is designed as a public job classifieds in Croatia with active job advertisements in the country and abroad. The research questions were posted on LinkedIn Posao.hr in the second half of 2024, while they were posted in the Facebook group Voice of the Entrepreneur in the summer of 2023.

Table 2. Demographic data of the student population and employers

Total respondents	**1205 students**	**Total respondents**	**600 employers**
Gender		Age	
Male	38 %	18-25	15 %
Female	61 %	26-35	13 %
Other	0,1 %	36-45	23 %
Does not want to answer	0,9 %	46-55	25 %
		56-65	24 %
Age		Work experience	
18-19	16 %	Up to 1 year	6 %
20-22	38 %	1 - 5 year	16 %
23-25	21 %	6 - 10 years	12 %
26-30	9,6 %	10 - 20 years	21 %
Over 30	15 %	20 + years	43 %
Does not want to answer	0,4 %		
The field of science		Sector	
Natural Sciences	2 %	Private Sector	58 %
Technical Sciences	25 %	Public Sector	32 %
Biotechnical Sciences	2 %		
Biomedicine and Health	7 %		
Social Sciences	40 %		
Humanities	7 %		
Something else	6 %		
Does not want to answer	11 %		

Source: "From Real to Virtual Migrations" (2025) and Voice of the Entrepreneur (2023).

Table 3. Research question on the role of the highest responsibility for human resources development.

Comparison of student and employer responses through a survey conducted in collaboration with the Voice of Entrepreneurs Association.

	Student	**Voice of the Entrepreneur**
Total votes	816	267
State (should provide support and incentives)	16 %	3 %
Education system (align curriculum with labor market demands)	37 %	28 %
Employer (should invest in their employees)	25 %	11 %
Individual (care about personal development)	22 %	58 %

Source: "From Real to Virtual Migrations" (2025) and Voice of the Entrepreneur (2023).

Table 4. Research question about preferences on types of education for professional development.

Comparison of responses of students and employers through a survey conducted in collaboration with the Voice of Entrepreneurs Association. Question asked in summer, 2023.

	Student	**Voice of the Entrepreneur**
Total votes	805	27
Education organized by (future) employer	35 %	26 %
Education organized by higher education institutions	27 %	26 %
Informal forms of education (courses, seminars, workshops)	22 %	4 %
Independent research and experimentation	16 %	44 %

Source: "From Real to Virtual Migrations" (2025) and Voice of the Entrepreneur (2023).

Table 5. Research question of preferences on the implementation of professional development education.

Comparison of student responses and responses to a survey question posted on linkedIn Posao.hr. posted in summer, 2023.

	Student answers	**Answers Posao.hr**
Total votes	842	469
I prefer online education for my professional development.	11 %	36 %
I prefer live education for my professional development.	32 %	64 %
I prefer combined online and live education modules for my professional development.	55 %	
I do not plan to further educate myself for my professional development.	2 %	No, there's no need for that 7 %
		We don't have that 19 %

Source: "From real to virtual migrations" (2025) and Posao.hr (2024)

Table 6. Research question on the importance of supporting skills development and employee training by employers.

The research question was posted on linkedIn Posao.hr in May, 2024.

Total votes	1 449
Extremely important	66 %
Important	30 %
Less important	2 %
Not important	2 %

Source: Posao.hr (2024).

Table 7. Research question about preferences for business education and training.

The research question was posted on linkedIn Posao.hr in April, 2024.

Total votes	986
Yes, I like to get additional education	72 %
No, there's no need for that	2 %
Only if I have to	7 %
We don't have that here	19 %

Source: Posao.hr (2024).

Table 8. Research question about business education methods.

Total votes	600
Specialized company training services	34 %
Lifelong learning programs	27 %
Individual trainer training services	16 %

Source: HGK research (2024).

Table 9. Research question about business education methods.

Total votes	600
of employers educate employees internally	70 %
of employers do not conduct training for their employees	15 %

Source: HGK research (2024).

Table 10. Research question about using ChatGPT.

Research question was asked on linkedIn Posao.hr in May, 2024.

Total votes	1 092
Business only	7 %
Private yes, business no	11 %
Both business and private	26 %
I don't use	56 %

Source: Posao.hr (2024).

Table 11. Research question about satisfaction with the software you use to do your job.

The research question was asked on linkedIn Posao.hr in September, 2024.

Total votes	677
Very satisfied	22 %
Partially satisfied	46 %
Partially dissatisfied	17 %
Very dissatisfied	16 %

Source: Posao.hr (2024).

4. Discussion

The majority of respondents from the student population believe that the education system plays the most important role in the development of human resources, which is to be expected since they are part of that system and the learning outcomes are aimed at acquiring competences and knowledge. The majority of respondents in the Facebook Voice of the believe that each individual is responsible for personal development. Employees should be aware and self-motivated individuals for personal development, but employers are the ones who should actively create human resource development models through strategic policies. The majority of respondents from the student population prefer training organized by the (future) employer for professional development, while the majority of respondents in the Facebook Voice of the Entrepreneur consider independent research and experimentation to be key to professional development. The majority of respondents from the student population prefer combined online and live training modules for their professional development, while the majority of respondents in the Facebook Voice of the Entrepreneur prefer live training. The majority of respondents on the Posao.hr portal believe that it is extremely important to educate themselves and express a positive attitude towards education. The majority of respondents to the survey conducted by the Chamber of Commerce stated that the most common forms of education are those organized by specialized companies and carried out internally. The majority of respondents on the Posao.hr portal do not use ChatGPT and only 7% use it for business purposes. The majority of respondents on the Posao.hr portal are partially satisfied with the software they use to do their job.

We conclude that the agility of organizations in Croatia is questionable, which indicates the importance of greater engagement in informing and raising awareness about the importance of education, as respondents express interest. Respondents from the student population and those in the labor market prefer old-fashioned combined models or hybrid models Most for their professional development, which indicates resistance to new technologies. It is worrying that 2% of the student population declares that they do not plan to continue their education, and the responses of those in the labor market are that 7% do not need education and 19% do not have it in their business. Another worrying fact is that the majority of respondents stated that they do not use ChatGPT and that they are partially satisfied with the software they use to do their work, which indicates that there is a large space for learning and developing efficiency.

5. Conclusion

The digitalization of workplaces is changing perceptions and attitudes in society, leading to the diversification of human resources in order to adapt to changes. The key elements are change management processes and the openness of education. The practical implications of this research are the detection of the factual state of the Croatian business environment with guidelines on current trends. This research included respondents from the real sector and future employees of today's students from all fields. The results of the research show that the Croatian labor market needs to see significant changes in attitudes regarding the importance of education, which will also be reflected in a greater intensity of the change process, which is based on continuous education, for which the respondents show interest. Employers should actively develop policies for creating human resource development models, and not leave it to individuals to activate them on their own or to neglect their own development through continuous education. The limitations of this research are the availability of target groups and more precise targeting of key research topics. Further implications as a continuation of the research will be the detection of new factors and threats for the further development of human resources and change management as a result of digital transformation.

Acknowledgment

*The research was carried out as part of the project *From real to virtual migrations* - VRtualM is funded by the European Union – NextGenerationEU. The views and opinions expressed are solely those of the author and do not necessarily reflect the official views of the European Union or the European Commission. Neither the European Union nor the European Commission can be held responsible for them.*

References

Amaro, A. L., Oliveira, L. & Veloso, A., 2017. Intergenerational and collaborative use of tablets: communication, learning and interaction «in the medium» and «in the room» Observatorio , 11, 83 – 94, doi10.15847/obsOBS1102017995

Anwar Z., Djudiyah, D., Hasanati N. & Sulaiman, A. (2025). The Impact of Academic Digital Literacy on Career Adaptation Among Recent Undergraduate, Al-Ishlah Jurnal Pendidikan Vol. 17, 2. 3244 - 3253, doi 10.35445/alishlah.v17i2.7210http://journal.staihubbulwathan.id/index.php/alishlah

Ateeq, A., Garad, A., Almuraqab, N. A., Abdulmohsen, W. & Alden Riyadh, H., 2025. The effect of human resource management practices on job security: a case study of Awal Gulf Company in Bahrain, Discover Sustainability Volume 6 (86), doi: 10.1007/s43621-025-00869-8

Audrin, B., Audrin, C., & Salamin, X., 2024. Digital skills at work – conceptualdevelopment and empirical validation of a measurement scale. Technol. Forecast. Soc.Change 202:123279. doi.org/10.1016/j.techfore.2024.123279

Cetindamar, D., Abedin, B. & Shirahada, K. (2021). The role of employees in digital transformation: A preliminary study on how employees' digital literacy affects the use of digital technologies. IEEE Transactions on Engineering Management

Communication from the Commission to the European Parliament, 2020. the Council, the European Economic and Social Committee and the Committee of the Regions, European Commission, [Online]. https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:52020DC0274&from=HR

Da, Q. 2025. Digital leadership improves organizational resilience by fostering job creation: The moderating role of organizational culture, Scientific Reports, Vol 15(1), doi: 10.1038/s41598-025-09144-2

Dechawatanapaisal, D., 2024. How can retention of online remote workers be predicted?: Understanding the moderating role of personal resilience, Journal of Workplace Behavioral Health, 39(4), 463–484, doi: 10.1080/15555240.2023.2284691

Ekart Misleta, N., 2024. The importance of lifelong learning, Varaždin Teacher - digital professional magazine for education, No 7, Vol 16

ESCO 2019. Digital competences, European skills, competences, qualifications and occupations, https://esco.ec.europa.eu/hr

European Commission. 2010. A Digital Agenda for Europe, COM (2010) 245. Brussels: European Commission Press

Falloon, G., 2020. From Digital Literacy to Digital Competence: A Framework for Teacher Digital Competence (TDC) Educational Technology Research and Development , 68 (5), 2449-2472

Fraillon, J. Ainley, J., Schulz, W., Friedman, T. & Gebhardt, E., 2014. Preparing for Life in a Digital Age, Springer. doi10.1007/978-3-319-14222-7

Future of Jobs Survey, 2025. World economic forum, [Online]. https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf

Hoe, S. L., 2024. Digital transformation and the future of work: closing the digital skills gap, Development and Learning in Organizations, doi: https://doi.org/10.1108/dlo-06-2024-0167

Kryukova, N. I., Chistyakov, A. A., Shulga, T. I., Omarova, L. B., Tkachenko, T. V. & Malakhovsky, A. K., 2022. Adaptation of higher education students' digitalskills survey to Russian universities. Eurasia J. Mathem. Sci. Technol. Educ Vol 18, No 11. doi.org/10.29333/ejmste/12558

Martzoukou K., Fulton C., Kostagiolas P., & Lavranos C. (2020). A study of self-assessment of digital competences of higher education students for learning and participation in everyday life via the Internet. Journal of Documentation , vol. 76 no. 6 pp. 1413–1458, doi.org/10.1108/JD-03-2020-0041

Musa, M., & Haroon, M., 2024. Digitally Transformed Employees Crafting Tomorrow's Skills Cape through Modern HRD, Journal of Workplace Behavior vol 5(1), 108–123, June 2024. doi: https://doi.org/10.70580/jwb.05.01.0221

Olofsson, A. D., Fransson, G. & Lindberg, J., 2019. A study on the use of digital technology and its conditions with the aim of understanding what "adequate digital competence" can mean in a national policy initiative Educational Studies, 46, 1-17, 10.1080 / 03055698.2019.1651694

Peart, M., Gutiérrez-Esteban, P., & Cubo-Delgado, S., 2021. Empirical evaluation of the DIGISOC questionnaire, Mendeley Data, (v2), doi.org/10.17632/bkb66jfjgc.2

Portal.hr linkedIn profil survey research, [Online]. Available: https://www.linkedin.com/company/posao-hr/

Research by Croatian Chamber of Commerce, 2024. On the need for additional knowledge and skills in the labor market , Department of Education. Croatian Chamber of Commerce, Croatia,.

Research by From real to virtual migration, 2025. Perceptions and attitudes of students in Croatia , Institute for Research, Croatia.

Sánchez-Caballé, A., Gisbert-Cervera, M. & Esteve-Món, F. (2021). Integrating digital competence in higher education: a case study of a Catalan university. EDUCAR , 57 (1), 241–258. doi.org/10.5565/rev/educar.1174

Spante, M., Hashemi, S. S., Lundin, M. & Algers, A., 2018. Digital competence and digital literacy in higher education research: A systematic review of the use of the concepts, Cogent Education , 5 (1), 1519-143

Stockton, H., Filipov M. & Monahan, K., 2018. New realities facing today's leaders, Deloitte Insights.

The importance of knowledge and application of knowledge for the implementation of the National Development Strategy of the Republic of Croatia until 2030, 2022. Croatian Academy of Sciences and Arts. [Online]. https://www.info.hazu.hr/wp-content/uploads/2022/04/Izjava_Vaznost-znanja-i-primjene-znanja_strategija-HR-do-2030.pdf

Tourón, J. R., Martin, D. A., Navarro, E. M., Pradas, S. M. & Iñigo, V., 2018. Validation of the construction of a questionnaire for measuring teachers' digital competence (TDC) Revista Espanola de Pedagogia, 76

Tretter, E. & Burns, R., 2023. Digital transformations of the urban – carbon – labor nexus: A research agenda, Digital Geography and Society, Volume 5. [Online]. https://www.sciencedirect.com/science/article/pii/S2666378323000144?pes=vor

Tzafilkou, K., Perifanou. M. & Economides A. A., 2022. Development and validation of students' digital competence scale (SDiCoS). International Journal of Education Technology in Higher Education, doi.org/10.1186/s41239-022-00330-0

Vázquez-Cano, E., León-Urrutia, M., Parra-González, M. & López-M.enesi,E., 2020. Analysis of interpersonal competences in the use of ICT in Spanish, University context. Sustainability, 12(2), 476

Vizjak, M., Paulišić, M. & Mišević, P. , 2024. Adapting to the Digital Shift: Skills Development and Workplace Transformation in the Era of Human-Technology Collaboration, Croatian regional development journal, Vol. 5, No. 2, 92-110, doi: https://doi.org/10.2478/crdj-2024-0010

Voice of Entrepreneurs Association facebook survey research, [Online]. https://www.facebook.com/glas.poduzetnika