





### **Policy document 1:**

### INEQUALITIES IN THE LABOUR MARKET IN THE CONTEXT OF DIGITALISATION

#### PREPARED BY:

Martina Rašticová Martin Lakomý Ondřej Pavelek Eva Šerá Nataliia Versal Mariia Balytska

Mendel University in Brno, 2023



Funded by the European Union

### Recommendations

01

02

03

04

05

06

07

Develop comprehensive anti-discrimination laws and enforce existing policies to ensure equitable treatment in the labor market.

Invest in digital literacy programs that are accessible to all, reducing the digital divide.

Create inclusive policies that support disadvantaged groups, including tailored job training and placement services.

Implement flexible retirement options to allow older workers to remain in the labor force as desired.

Enhance support for refugees' employment, including language training, recognition of foreign qualifications, and targeted job placement programs.

Best practices based on the experience of successful countries should be adjusted to the cultural specifics of each EU country.

National governments and the EU are responsible for making training and courses accessible to groups at risk, such as lower-qualified older adults. ••• ••• ••• ••• Context

Digitalisation, automation, and other processes connected to the inception of Industry 4.0 will profoundly impact the labour market. **The current workers will need to deal with job loss, job content or type changes, and a demand for constant learning.** Robust public policies are very needed in this situation, as neither motivation of individuals nor the effort of companies to develop their key members are sufficient to prevent rising inequalities, long-term unemployment, and instability in European societies (Leichsenring, 2018).

In a digital economy, the state should provide suitable conditions for individuals and companies to constantly develop new skills. These skills so needed for Industry 4.0 contain both hard (programming, software operation) and soft skills (critical thinking, empathy, conflict resolution, teamwork, creativity and innovation). While it is desirable to involve private enterprises in the system of lifelong learning, access for all social groups needs to be ensured by the EU, member states, and universities. The crucial aspect of lifelong learning is individual motivation to get involved, which should be developed through formal education and institutions supporting fair job access and proper working conditions for all groups of workers (Hardy et al., 2018). The competitiveness of the EU economy strongly depends on education and lifelong learning; national education systems should focus on developing the abovementioned competencies for the digital society, including teamwork, flexibility, and critical thinking.

# Societal and individual inequalities amid digital economies

Digitalisation takes a different pace in different environments, as illustrated by Figure 1. While a higher digitalisation relates to higher economic development, values of the DESI index indicate countries digitalised above (Estonia, Slovenia, Malta) or below (Italy, Greece) the level expected from their level of economic prosperity. It is desirable to set up the best practices and adjust them to the cultural specifics of each country.

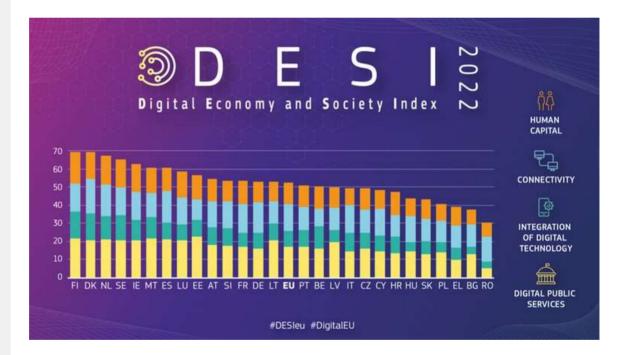


Figure 1: Values of the DESI index for members of the EU (European Commission, 2023)



# Societal and individual inequalities amid digital economies

The impact of digitalisation on the labour market is expected to differ across countries, regions, and individuals (Berger & Frey, 2016). The risk of job loss and earlier retirement is higher among workers with lower education, working in a lower-skilled occupation, especially in agriculture, industry, and administration (Hardy et al., 2018), and these inequalities may grow with the increasing importance of soft and digital skills. The current employment levels in the EU also show large differences based on sex and age (Figure 2). While the level of employment increased for all indicated groups over the last ten years, it remains low for the oldest group of workers.

Men aged from 15 to 24 years		Men aged from 25 to 54 years		Men aged from 55 to 64 years	
31.9% in 2013	37.0% in 2022	81.0% in 2013	87.0% in 2022	55.0% in 2013	68.7% in 2022
Women aged from 15 to 24 years		Women aged from 25 to 54 years		Women aged from 55 to 64 years	
27.6% in 2013	32.3% in 2022	70.1% in 2013	76.5% in 2022	41.3% in 2013	56.2% in 2022
8 8 8 8 8 8 8 8 8 8 8	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		0 0 0 0 0 0 0 0 0 0 0	8 8 8 8 8 8 8 8 8 8 8	

Figure 2: The level of employment in the EU as the percentage of the total population for each sex/age category (Eurostat, 2022)

# Societal and individual inequalities amid digital economies

The disparities in employment levels across age and gender groups can be attributed to factors such as the lower retirement age in some countries. However, they are also significantly influenced by persistent stereotypes and discrimination (McCann & Keaton, 2013), inadequate working conditions and management techniques, and, in some cases, lower digital skills among certain demographics. These issues present complex challenges for policymakers, company representatives, and other key stakeholders.

A notable response to these challenges was the implementation of the anti-discrimination act in the Czech Republic in 2009. This legislation was a significant step towards addressing workplace discrimination based on age, gender, and other factors. It aimed to create a more equitable work environment by prohibiting discrimination in areas including employment, education, and access to goods and services. The act also provided a legal framework for individuals to seek redress against discriminatory practices, thereby promoting a more inclusive workforce.

Despite such legislative advancements, there remain areas of concern, particularly regarding digital and social skills. **Many older workers find limited opportunities to develop these skills in their current roles. This gap, coupled with the increasing automation and digitalization of jobs, places them at a higher risk of unemployment.** Consequently, there is an urgent need for retraining programs tailored to the needs of lowerqualified older adults. Such initiatives should ideally be the responsibility of national governments, with coordination and support from the European Union, to ensure a comprehensive and effective approach to workforce development and inclusion.

#### References

Berger, T., & Frey, C. B. (2016). Digitalization, Jobs, and Convergence in Europe: Strategies for Closing the Skills Gap. Oxford Martin School and University of Oxford, January, 51. https://doi.org/10.1177/0002764217701217

Eurostat (2022). Employment - annual statistics. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php? title=Employment\_-\_annual\_statistics

European Commission. (2023). The Digital Economy and Society Index(DESI)2023.Retrievedfromhttps://digital-strategy.ec.europa.eu/en/policies/desi

Hardy, W., Kiełczewska, A., Lewandowski, P., & Magda, I. (2018). Job retention among older workers in central and Eastern Europe. Baltic Journal of Economics, 18(2), 69–94. https://doi.org/10.1080/1406099X.2018.1514562

Leichsenring, K. (2018). Ageing 4.0-Towards an Integrated Life-Course Approach to Population Ageing (Policy Brief 2018/9; An Integrated Life-Course Approach to Population Ageing). https://www.researchgate.net/publication/328225820

McCann, R. M., & Keaton, S. A. (2013). A Cross Cultural Investigation of Age Stereotypes and Communication Perceptions of Older and Younger Workers in the USA and Thailand. Educational Gerontology, 39(5), 326–341. https://doi.org/10.1080/03601277.2012.700822

Štěpánková, M. (2010). Antidiskriminační zákon. In Neviditelný problém: rovnost a diskriminace v praxi, sborník textů autorského kolektivu k problematice rovnosti a diskriminace v ČR (pp. 21-26). Gender Studies, ops.

### Acknowledgement



This publication is based upon work from COST Action CA21107 "Work inequalities in later life redefined by digitalization" (DIGI-net), supported by COST (European Cooperation in Science and Technology).

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

Recommended citation:

ww.cost.eu

Rašticová, M., Lakomý, M., Pavelek, O., Šerá, E., Versal, N., Balytska, M. (2023). "Inequalities in the labour market in the context of digitalisation". DIGI-net Policy Document 1. Brno: Mendel University in Brno.



