

Involvement of employers and the CCZ CC in the modernisation of education

European conference of the CVETNET project

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Impacts of Industry 4.0

- Impacts on employment structure, forms and organisation of work in individual sectors;
- The disappearance of up to 50% of jobs that can be replaced by robots and automated processes;
- Creation of new, more skilled jobs related to automation - *65% of the jobs that today's pupils will work in do not yet exist*

Source: Future of Jobs World Economic Forum Study

Situation in Czechia: employers lack qualified people when introducing Industry 4.0!

Questionnaire survey EY - HK ČR (2018): 183 companies from the manufacturing / processing industry from the HK ČR member base - regional activity: 47% in the Czech Republic, 47% in Moravia 6% in Silesia - Company size: 6% 0 -10 employees; 19 % 11 - 50 employees; 38 % 51 - 250 employees; 37% over 250 employees

- Exactly half of the companies surveyed plan to **support** the deployment of Industry 4.0 tools and technologies mainly **on their own** (using their own department) and 43% of respondents plan to put more than **10% of their investment expenditure into Industry 4.0 tools or technologies in the next 3 years – internal data analysis**
- 44% of companies expect the **state** to support them in introducing Industry 4.0 technologies in the form of **investment incentives**
- **62% of respondents consider the lack of qualified staff to be the biggest obstacle to the implementation of Industry 4.0 tools and technologies**

What measures do employers in the Czech Republic need for the implementation of Industry 4.0 tools?

In addition to upgrading workplaces, employers emphasize the **DEVELOPMENT OF THE SKILLS OF THEIR EMPLOYEES**

Specific results of the *EY – HK ČR questionnaire*

- 62% Modernization of production sites
- 34% Development of employee skills**
- 21% Change your work organization
- 13% Change the organizational structure of a company
- 9% Development of information sharing programs

Source: *EY – HK ČR, 2018*

Název prezentace

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Requirements for qualifications and competences of company employees

Expertise

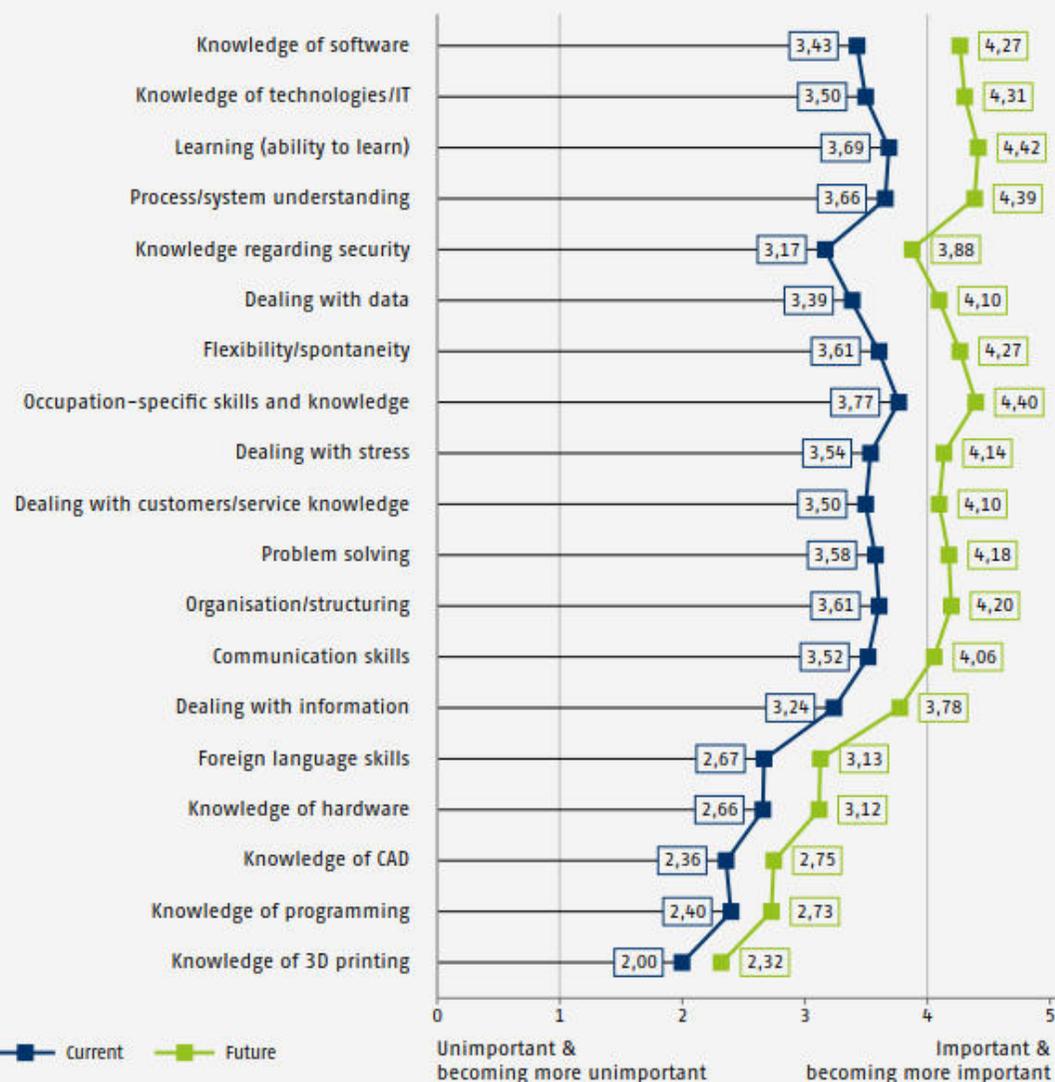
- **IT competence** (ability to work in complex database system environments, data protection and security, such as privacy or research and development results within a global network)
- **Přenositelné, soft kompetence (flexibilita při výkonu práce, samostatnost a schopnost řešit problémy, kreativita, spolehlivost, odpovědnost, schopnost týmové práce, výměny a sdílení znalostí a dovedností; ochota učit se - schopnost informálního a formálního učení)**

Zdroj: SKILL NEEDS ANTICIPATION: SYSTEMS AND APPROACHES. Šetření OECD, ILO, CEDEFOP a ETF - Respondenti: ministerstva (školství a práce), služby zaměstnanosti, reprezentanti zaměstnavatelů i odborů, vzdělávací instituce a jejich asociace

The greatest impact of digitalisation on competences :

- readiness to learn;
- specific expertise;
- understanding processes, linking activities within an organisational structure;
- knowledge of SW, IT, data sharing;
- Customer approach, communication skills;
- flexibility, problem-solving ability

Source: BIBB and BMBF VET 4.0 occupation survey - Qualifications and competences of qualified workers for digitised work of tomorrow (2016 – 2018)



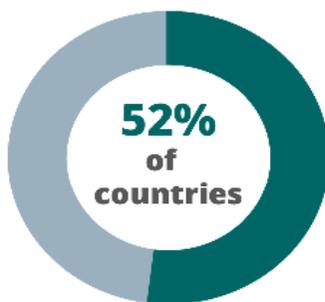
Define the problem: lack of demand for competences with current workforce qualifications

- Digitalisation changes knowledge, skills and competence requirements – impulse for lifelong learning

In 2021, countries have increased their budget for employment policies



increased support
for jobseekers



increased support
for matching skill needs and talent

Source: OECD (2021), Active Labour Market Policy Measures to Mitigate The Rise in (long-Term) Unemployment

New Skills Agenda for Europe - shift to a more comprehensive concept of competence and intervention development strategy and policy

What needs to be changed? Aims of the New Skills Agenda for Europe:

- Increase the relevance and comparability of the competencies
- Improve competence awareness - career guidance as a support for lifelong learning
- **EK - Up skilling, re skilling - introduction of skills guarantee**
 - **skill assessment** (what skills adults have and what they need to acquire),
 - **what skills** adults have and **individual education** offer tailored to the specific needs of each individual and the local labour market,
 - **opportunities for verification and recognition** of acquired skills

Key cooperation between social partners and adult education providers

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European vocational training policy until 2035

- increasing emphasis on increasing the relevance of education to labour market requirements - **linking the content of vocational training with professional qualifications**,
- educational programmes based on **learning outcomes**,
- strengthening **practical teaching carried out directly in companies**,
- expansion of **educational offer at higher levels of education** (higher vocational education and professionally oriented study programmes of higher education institutions)

Sample survey of CEDEFOP Changing VET 2035

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Key topics for companies

- **Maintaining up-to-date workforce skills = condition for success in the ongoing technological transformation**
- Investing in employees and their training
- **Benefits of intergenerational learning in the learning of digital competences** - many younger workers have grown up with digital technologies - adopting them may require more effort in learning and adapting to older generations

The importance of mapping competences to increase the relevance of education to labour market requirements

Targets of the KOMPETENCE 4.0 project (OP Z) - HK ČR, SP ČR, TRX: creation of a tool for mapping future competences, updating the Central Database of SAI Competences, from which the NRQ also draws

Selection of sectors based on analysis of foreign labour market trends, interviews with industry leaders 4.0, support for selection of sectors (intensity of digitization, National and regional RIS3 strategies): Chemistry, Construction, Mechatronics, Modern Industrial/Engineering Production, ICT Activities (Cybersecurity Focus), Creative Industry (With a Focus on the Gaming Industry), Wholesale, Retail and E-Commerce and Food Industry) - **working groups** (representatives of the corporate, research, development, innovation and education spheres) - identification of competences, creation of competence pyramids - **modernization of the content of educational programs - re(up)skilling**

CCZ CC projects to support the training of company employees

OP Z project - increasing the level of expertise, skills and competences - increasing the adaptability of especially older employees of our member companies

- Education offer: general IT, soft skills and management, language education, special IT, accounting, economic and legal courses and last but not least technical and other vocational training.
- Learning courses (realisation 2020 till 31. 3. 2022) - tailor-made according to the requirements of individual companies

CVETNET project (ERASMUS+) focused on further training of SME employees in the digital field, improving cooperation between initial/in-service training bodies and companies and, last but not least, promoting intergenerational learning in companies.

Why intergenerational learning in companies

- Population in large countries with advanced economies is ageing rapidly - OECD economies - **the share of the population aged 50+ will increase from 37% in 2020 to 45% in 2050**
- **Multigenerational workforce** - connect workers of different ages to a greater extent than in the past

Benefits for employers

- combination of strengths and different employee perspectives, knowledge and experience transfer, stronger talent stock, increased "resilience" and improved workforce continuity, stability and retention of know-how

Development of digital competencies of company employees

Digital competence

- increase the flexibility of employers and employees, facilitate remote work - key to the COVID-19 pandemic;
- changes the nature of cooperation and the functioning of teams - networking promotes cooperation between collaborators from disparate parts of the organization - both in content and geographical terms;

Advantage of older workers - many years of experience - good moderation skills

Strengthening the role of employers in the lifelong learning system

Lifelong learning in the Czech Republic - fragmentation, weak coordination between interested departments

Objective of the lifelong learning system management partner model based on cooperation between the state, employers and trade unions :

- contribute to the interconnection of existing tools to promote the mobility of skilled labour,
- **strengthen the coordination of a number of hitherto isolated activities: from predictions of the development of individual economic sectors, through the identification of competences, innovation of occupational standards and qualifications, to their projection into further and initial professional/vocational training,**

Key role of the Alliance of the National Network of Sector Councils

Role of employers in the lifelong learning system

- Validation of labour market analysis data and conclusions as a support for conceptual and strategic decision-making in the field of education and employment (in education Strategy 2030+, DZ)
- Defining labour market needs, including employment forecasts (prediction models using statistical, administrative data)
- Definition of form, content of occupations and qualifications in NSP and NSK standards
- Professional qualifications as a starting point for innovation of the system of disciplines, updating and modernising secondary vocational training programmes

Thank you



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