

# 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

4

## Requirements for qualifications and competences of company employees

### Expertise

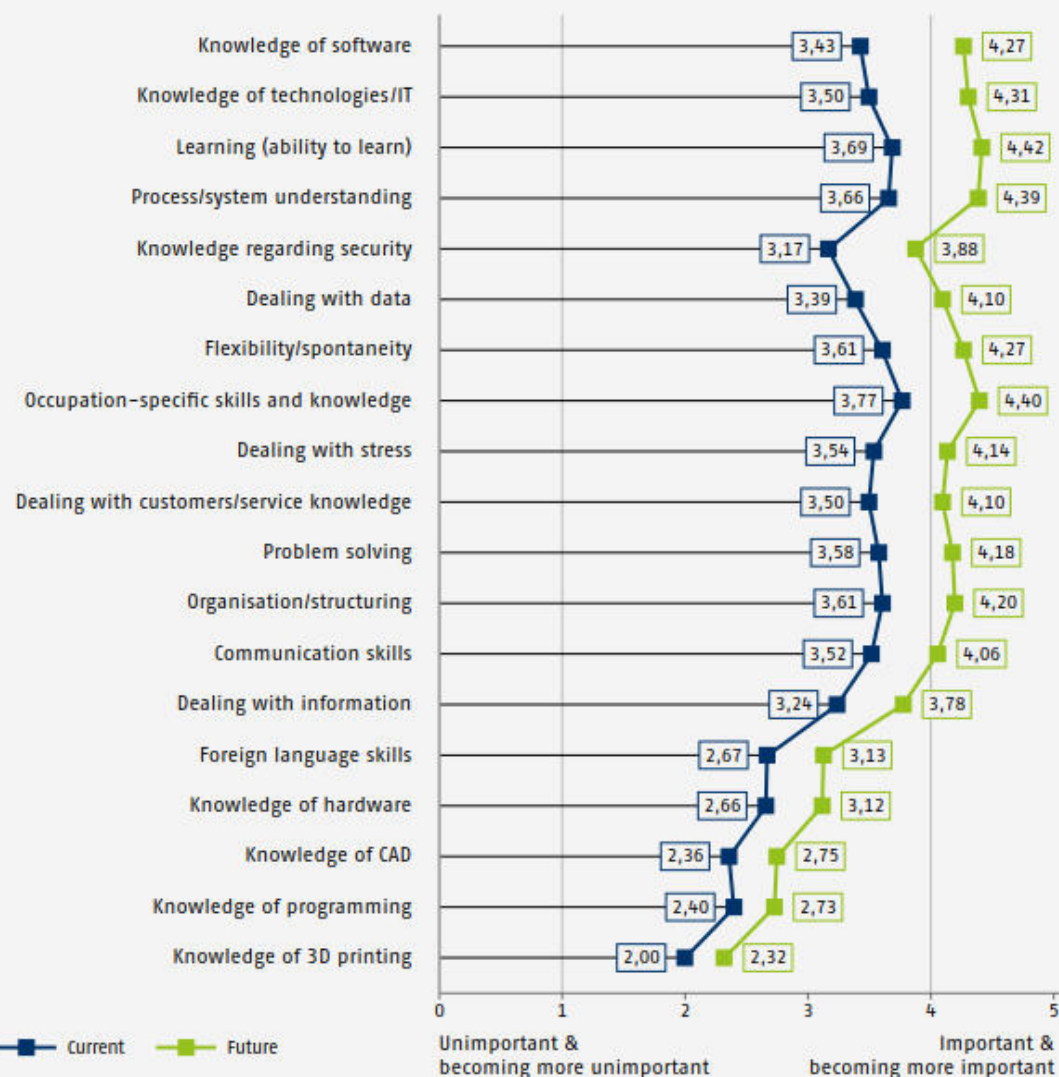
- **IT competence** (ability to work in complex database system environments, data protection and security, such as privacy or research and development results within a global network)
- **Přenositelné, soft kompetence (flexibilita při výkonu práce, samostatnost a schopnost řešit problémy, kreativita, 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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