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Digital job onboarding: an Erasmus+ project for digital upskilling of youth

Eirini Papageorgiou

Published online: May 2023

Digital Job Onboarding: the Erasmus+ project for youth's digital upskilling

Eirini Papageorgiou[a]

[a]SYNTHESIS Center for Research and Innovation, Nicosia, 1101, Cyprus. eirini@synthesis-center.com

Abstract

For many people, digital working has become a reality, especially through on-the-job training during the COVID-19 pandemic. Students were home-schooled, and companies and offices operated distance working. Digital skills became a key determinant in the employability of young people, and dealing with these new digital job realities is assumed by potential employers. Millions of jobs requiring digital skills already exist, and more will be created in the coming decade. The demand for digital skills in the workplace has never been greater. However, unemployed (young) people, school leavers in the transition to work, who are not embedded in a supportive institutional framework, have widely missed this capacity-building opportunity. The target group for this project is youth not in employment, education or training (NEET), as well as other young people at risk of marginalization. This project aims to help job-seeking young people adapt to the "new normal" after COVID-19 by improving their digital skills.

Keywords: Social impact, Innovation, Digital upskilling, Job onboarding, NEET, Youth, Unemployment, Employment, Education, Training, Young people

Introduction

Digital Job Onboarding (DJO - www.dj-training.eu) is an Erasmus+ project funded by the European Union which aims to familiarize youth with forms of new digital professional life, to upskill young people and to activate their career potential with a special focus on new forms of digital working. DJO's overall objective and scope is to close the gap of the digital divide during job onboarding for vulnerable target groups, especially young unemployed people without academic educational backgrounds, by developing, testing and delivering a training programme.

The programme is led by FH Joanneum Gesellschaft, one of the leading universities of applied sciences in Austria. Other members of the consortium are DEX Innovation Centre in the Czech Republic, which is a private innovation centre raising funds, creating new products, building startups and providing educational services, Fondazione Fenice Onlus, a training and research centre in Italy with specific skills in designing and implementing didactical and training activities in sustainable development, HAAGA-HELIA AMMATTIKORKEAKOULU, the second largest university in Finland, Jugend am Werk Steiermark GmbH in Austria, a non-profit organization providing social services to support children, young people and adults in all the ups and downs of life and SYNTHESIS Center for Research and Education in Cyprus, which initiates and implements social impact projects with a focus on social inclusion. All participating organizations are experienced in the fields of social innovation, education and training.

Methodology

As part of the project, an online survey was conducted, and several best practice examples have been collected in each partner country. The 3-month survey was held online via LimeSurvey and focused on current and future needs related to digital competencies in the workplace. It was addressed to representatives of the project's target groups. During the survey, the consortium reached

out to 252 employers, 238 companies and 233 unemployed young people in 5 countries: Austria, Cyprus, the Czech Republic, Finland and Italy. The main research questions were intended to inquire about what kind of digital skills are needed from the point of view of employers, as well as what kind of digital skills unemployed young people think they need to meet the demands of the current job market.

Towards evaluating the importance of job fitness competencies, the best practice examples collected through interviews, concerned the following main categories: 1) Dealing with computer programs and PC software, 2) New forms of work and requirements for job duties in the future, 3) Personally organising the demands of present-day jobs, 4) Professional use of social media in professional applications and 5) Safe use of computers and the internet.

Onboarding
Onboarding is a process of adult learning. It often involves a series of training and orientation programmes providing new employees with knowledge of the organization's vision, mission, operations, products, services and processes to build strong links between the employees and the organization. Onboarding is necessary for new employees to enable them to perform well in the new job and meet the organization's expectations. Training also allows employees to improve their knowledge and skills, attitudes and confidence at work.

Digital skills at the workplace: an overview
Different definitions of digital skills or competencies exist, and different terms such as "digital literacy", "digital competencies", "ICT-related skills" and "e-skills" are often used synonymously and/or interchangeably.

Digital skills are broadly described by UNESCO (2018) as the ability to use digital devices, communication application, and networks to access and manage information:
Basic or essential digital skills are considered to be the following:
•   Email and instant messaging
•   Word processing
•   Social media for business
•   Web-based research and problem-solving
•   Data entry and handling
•   Behaving safely and legally online
Advanced digital skills are considered to be the following:
•   User experience design
•   Coding
•   Programming, web, and app development
•   SEO, SEM, and content creation
•   Data analysis

At the same time, digital competence is one of the *Key Competences for Lifelong Learning* (Council of the European Union, 2018). Based on its updated (2018) definition:

> *"at work and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including*

digital well-being and competencies related to cybersecurity), intellectual property related questions, problem-solving and critical thinking ..."(Council of the European Union, 2018)

Findings of the online survey: Current state in partner countries

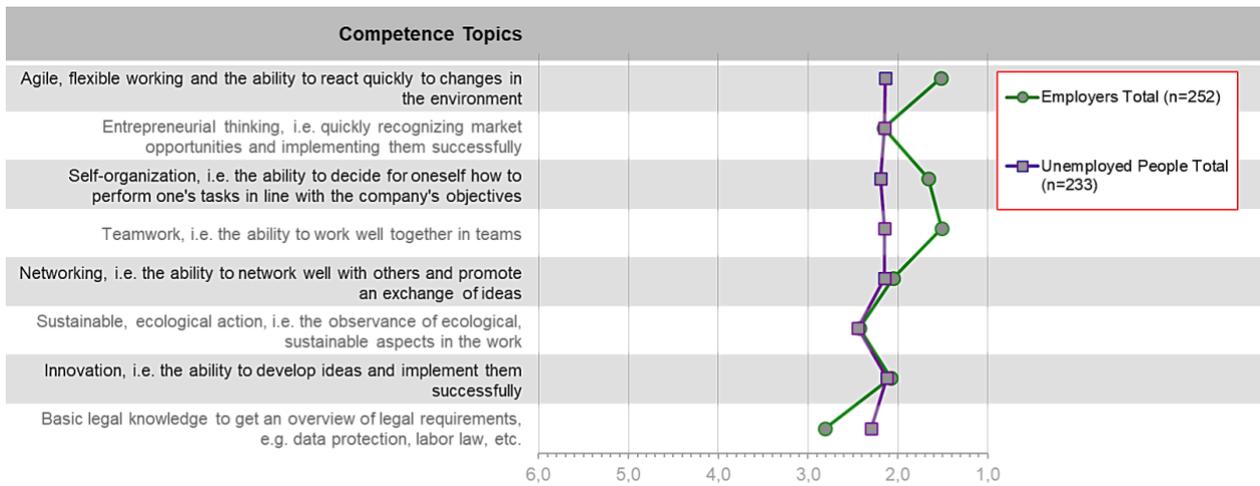1. *Dealing with computer programs and PC software*
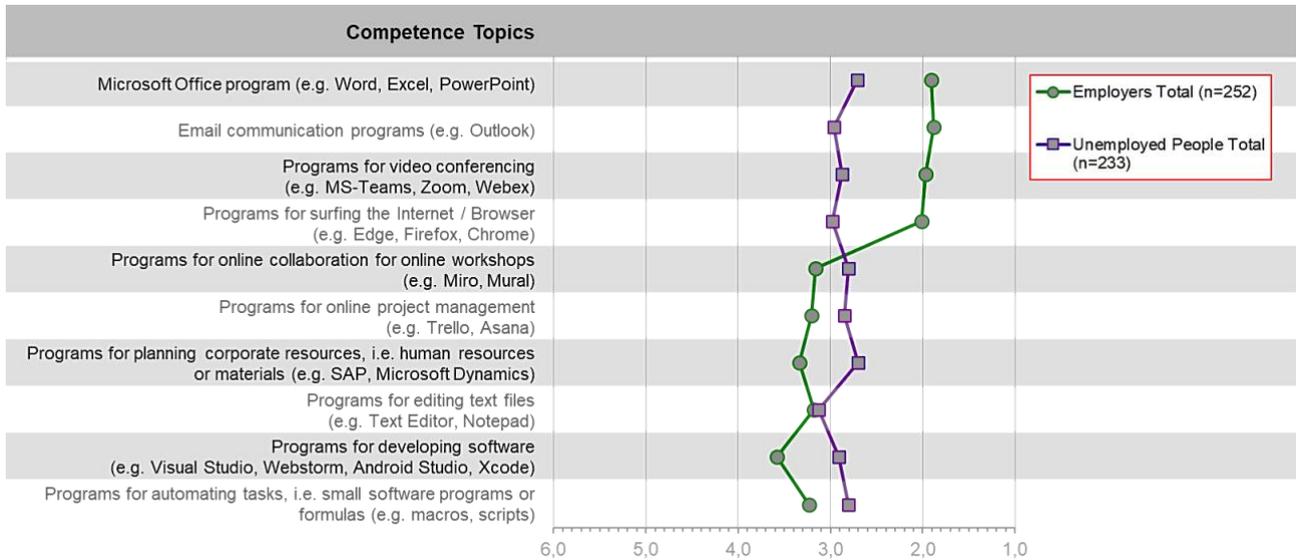
1 = Training/Competence for recently hired employees would be extremely important for me.
6 = Training/Competence for recently hired employees would not be important for me at all

Figure 1: Dealing with computer programs and PC software.

For both target groups (employers and unemployed people) the average importance ratings are relatively low (employers = 2.75; unemployed people = 2.87). In the area of dealing with computer programs and PC software, there are clear differences between the target groups of employers/companies and unemployed people:

- While the importance of training using a wide variety of software tools is expressed homogeneously among unemployed people, there is a clear preference among companies.
- Classic software programmes for day-to-day work (office, mail programmes, online communication and browser programmes) are preferred from the company's point of view as basic skills are important.
- High-end programmes (online collaboration, project management, ERP solutions …), on the other hand, are losing their importance from the companies' point of view, in contrast to unemployed people.

2. *New forms of work and requirements for the job duties in the future*

Figure 2: New forms of work and requirements for the job duties in the future.

1 = Training/Competence for recently hired employees would be extremely important for me.
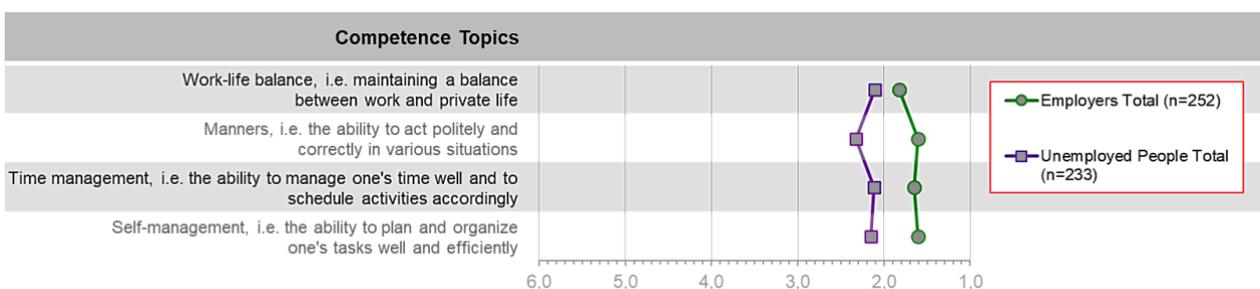6 = Training/ Competence for recently hired employees would not be important for me at all

Figure 2: New forms of work and requirements for the job duties in the future.

For both target groups (employers, and unemployed people), the average importance ratings are high (employers = 2.03; unemployed people = 2.21). In the target group of unemployed people, the various aspects of competences for new forms of work and requirements for job duties in the future are considered little differentiated in relation to their training needs. On the other hand, there are clear priorities from the point of view of the companies:

- Competence in agile and flexible working
- Competence in working in teams and
- Competences in self-organization.

Interestingly, the crucial global challenge of sustainable, ecological actions is regarded with more or less low relevance from the point of view of both target groups.

3. *Personally organising the demands of present-day jobs*

1 = Training/Competence for recently hired employees would be extremely important for me.
6 = Training/Competence for recently hired employees would not be important for me at all

Figure 3: Personally organising the demands of present-day jobs.

For the employers, the importance ratings are on average higher than for the unemployed people (employers = 1.67; unemployed people = 2.18).

When it comes to skills for personally organising the demands of present-day jobs, there is a clear difference between the assessments of companies and unemployed people.

- Companies say that these skills are more important than unemployed people estimate their need for further training.
- While in the case of work–life balance both groups express relatively uniform importance, aspects such as politeness/manners, self-management and time management are assessed with higher importance by the group of employers.

4. Professional use of social media in professional applications
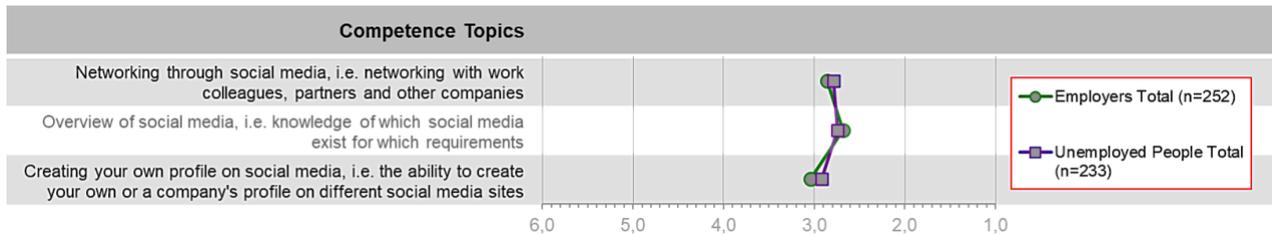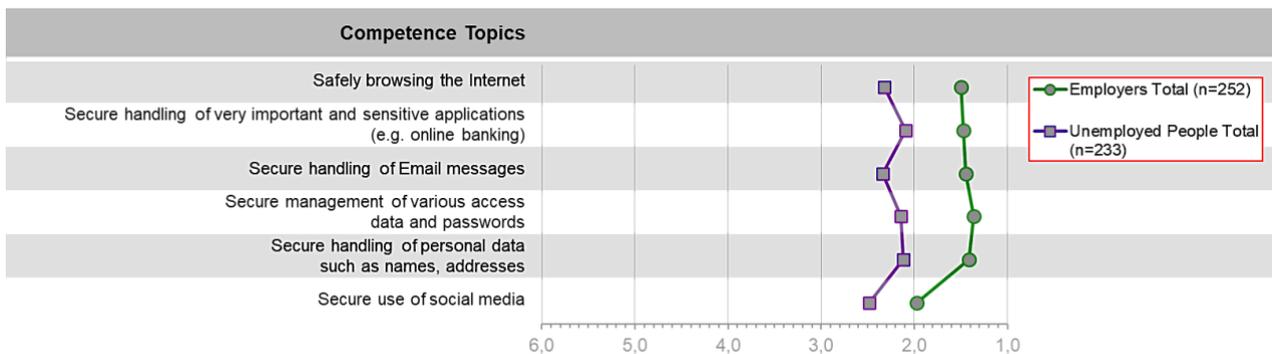

1 = Training/Competence for recently hired employees would be extremely important for me.
6 = Training/Competence for recently hired employees would not be important for me at all

Figure 4: Professional use of social media in professional applications.

For both target groups, the importance ratings are on average low (employers = 2.86; unemployed people = 2.82).

When it comes to skills for using social media professionally (e.g. Facebook, Instagram, Snapchat, LinkedIn, Xing, Twitter ...), the assessments of importance are for companies (in the direction of their employees) and unemployed people in terms of their need for further training exactly at the same level. However, the absolute level of importance in this area is generally relatively low.

5. Safe use of computers and the internet

1 = Training/Competence for recently hired employees would be extremely important for me.
6 = Training/Competence for recently hired employees would not be important for me at all

Figure 5: Safe use of computers and the Internet.

For the employers, the importance ratings are on average higher than for the unemployed people (employers = 1.52 = high score; unemployed people = 2.25).

When it comes to skills for the safe use of computers and the internet, the assessments of importance for companies (in the direction of their employees) and unemployed people in terms of their need for further

training are very different. For companies, these competences are the most important of all five topics. They expect their employees to have very high qualifications in almost every aspect. For unemployed people, in contrast, there is less need for further training in these skills.

Findings of the online survey. Current state in partner countries

1. *Dealing with computer programs and PC software*

The first competencies group is comprised of competencies for using computer programs and PC software:

a) Microsoft Office (e.g. Excel, Word, PowerPoint)

b) programmes for video conferencing (e.g. Teams, Zoom, Webex)

c) programmes for surfing the internet/browsers (e.g. Firefox, Chrome, Edge)

d) programmes for online collaboration (e.g. Miro, Mural, Google Docs)

e) online project management (e.g. Trello, Asana)

f) programmes for planning corporate resources (e.g. SAP, Microsoft Dynamics)

g) programmes for editing files (e.g. Text Editor, Notepad)

h) developing software (e.g. Visual Studio, Webstorm, Android Studio)

i) programmes for automating tasks (e.g. macros, scripts)

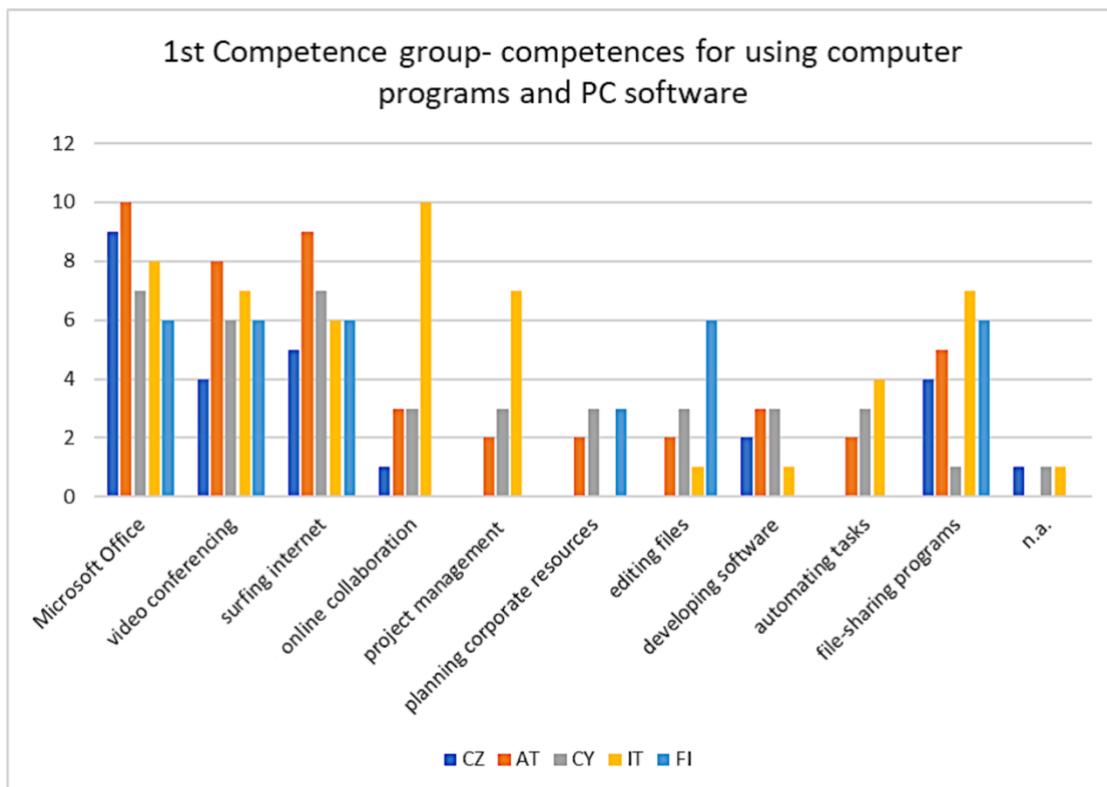j) file-sharing programs (e.g. OneDrive, Google Drive)

Figure 6: 1st Competence group - Competences for using computer programs and PC software.

Most of the companies have the opinion that the competencies of Microsoft Office, video conferencing and surfing the internet are very important. The competencies of online collaboration and project management" seem to be very interesting only for Italian companies. Only three companies from the Czech Republic, Cyprus and Italy believe that this competence group is not important. All three companies belong to the production sector.

2. New forms of work and requirements for job duties in the future

The second competencies group deals with new forms of work and requirements for job duties in the future. In the interviews the following points were raised:

a) agile, flexible working

b) entrepreneurial thinking

c) self-organization

d) teamwork

e) networking

f) sustainable & ecological action

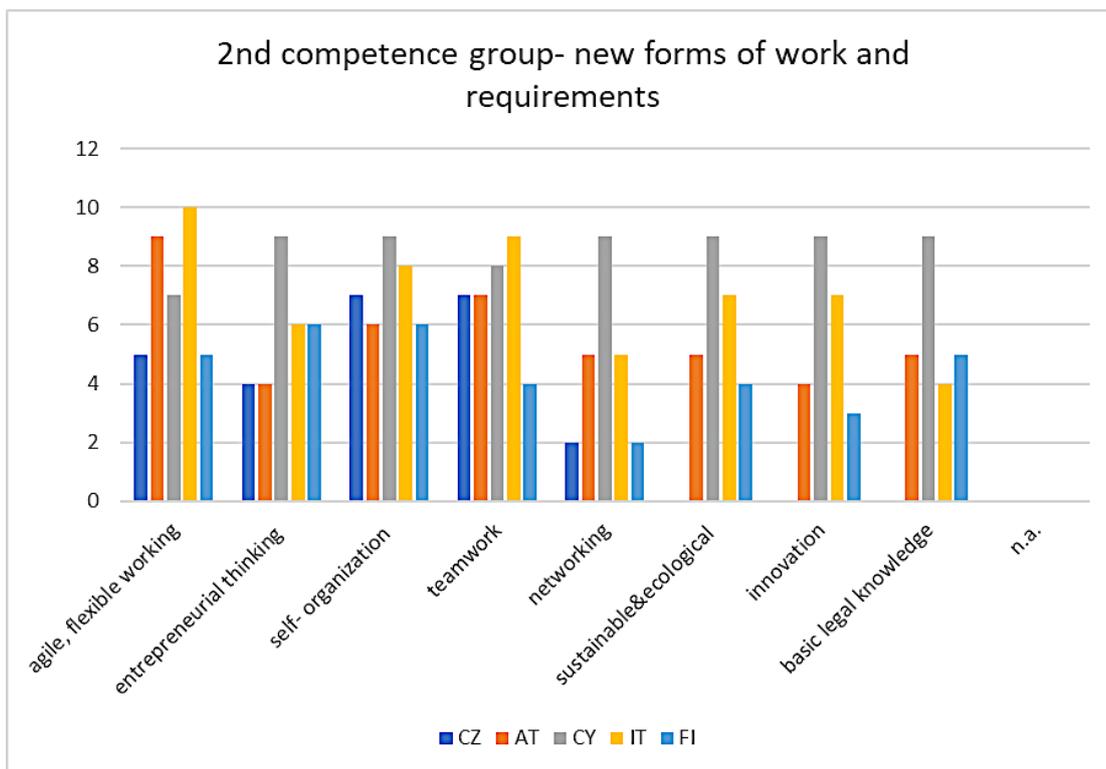g) innovation and

h) basic legal knowledge

Figure 7: *2nd Competence group – New forms of work and requirements.*

Overall, all competencies are important for the companies in all participating countries. Only the competencies of networking and innovation have slightly less interest amongst the companies, and Czech companies in particular showed no interest in these subjects.

3. Personally organising the demands of present-day jobs

The third competencies group deals with the demands of present jobs and personal organising:

a) work–life balance

b) manners/netiquette

c) time management

d) self-management

e) crisis management and

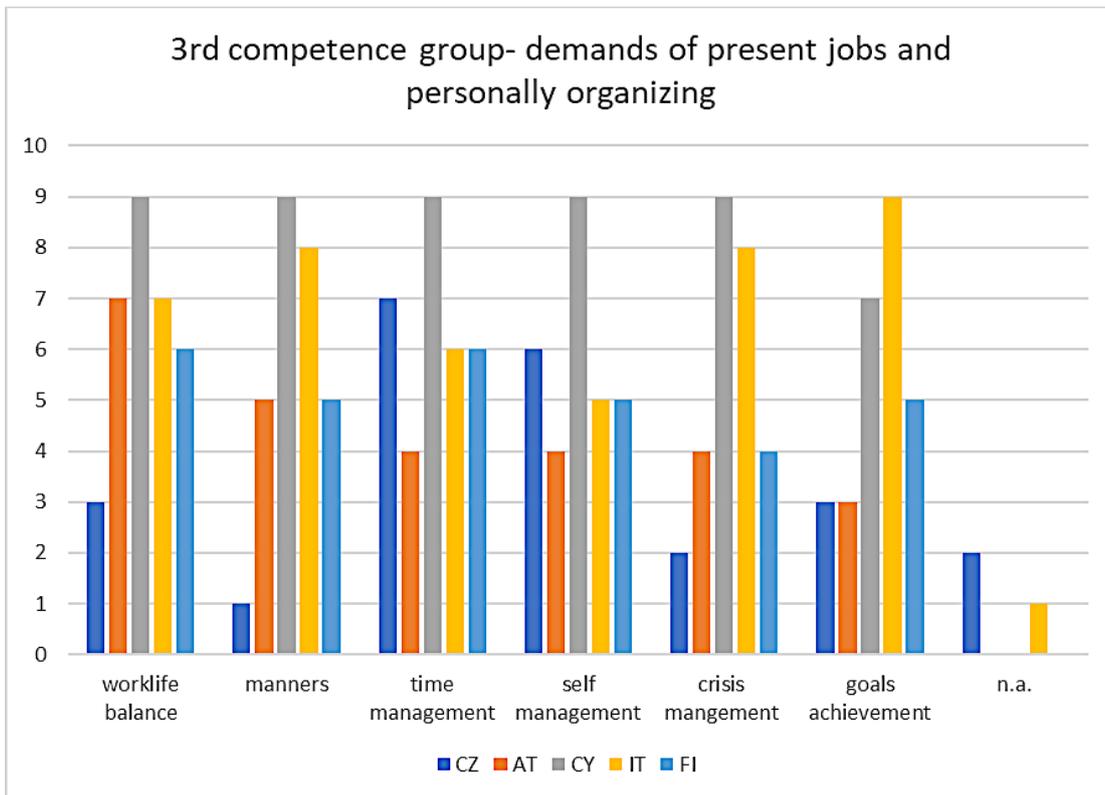f) goals achievement (i.e. ownership and decisiveness, prioritising and coping with uncertainty)

Figure 8: 3ʳᵈ Competence group – Demands of present jobs and personal organising.

The companies' views towards this competence group show quite interesting national differences. In Italy, all competencies are of significant importance, while Czech companies see only time management as very important. Finnish companies are very interested in all sub-competencies of this competence group.

4.   Professional use of social media in professional applications

The fourth competencies group is about competencies for professional use of social media in professional applications (e.g. Facebook, Instagram, Snapchat, LinkedIn, Xing and Twitter). The following issues were discussed:

a) networking through social media

b) overview of social media and

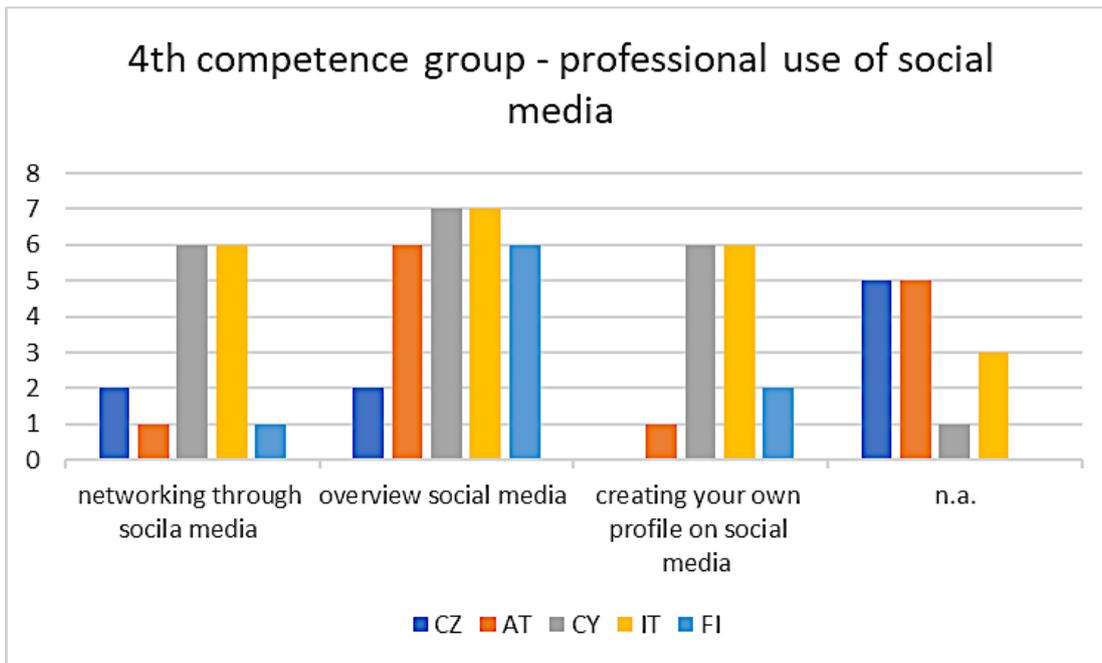c) creating your profile on social media

d) not used in the company

Figure 9: 4th Competence group – Professional use of social media.

5. Safe use of computers and the internet

The fifth and last competences group concerns the safe use of computers and the internet, and the following issues were raised:

a) safely browsing

b) secure handling of sensitive applications like online banking

c) secure handling of emails

d) secure management of passwords

e) secure handling of personal data

f) secure use of social media and

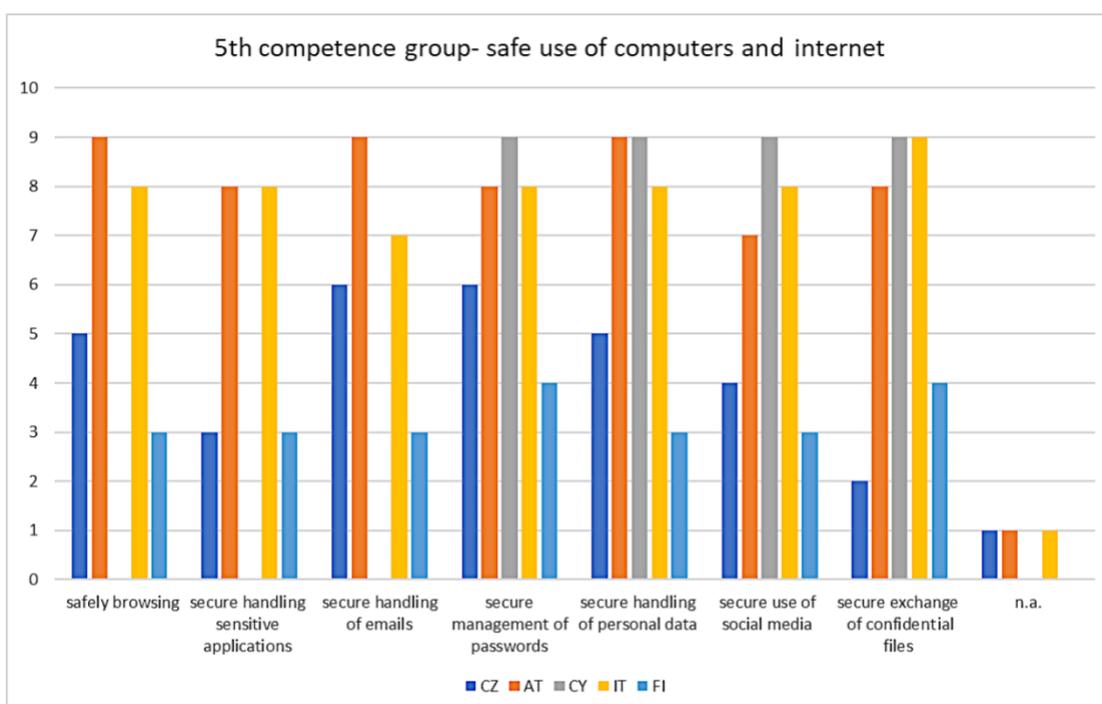g) secure exchange of confidential files

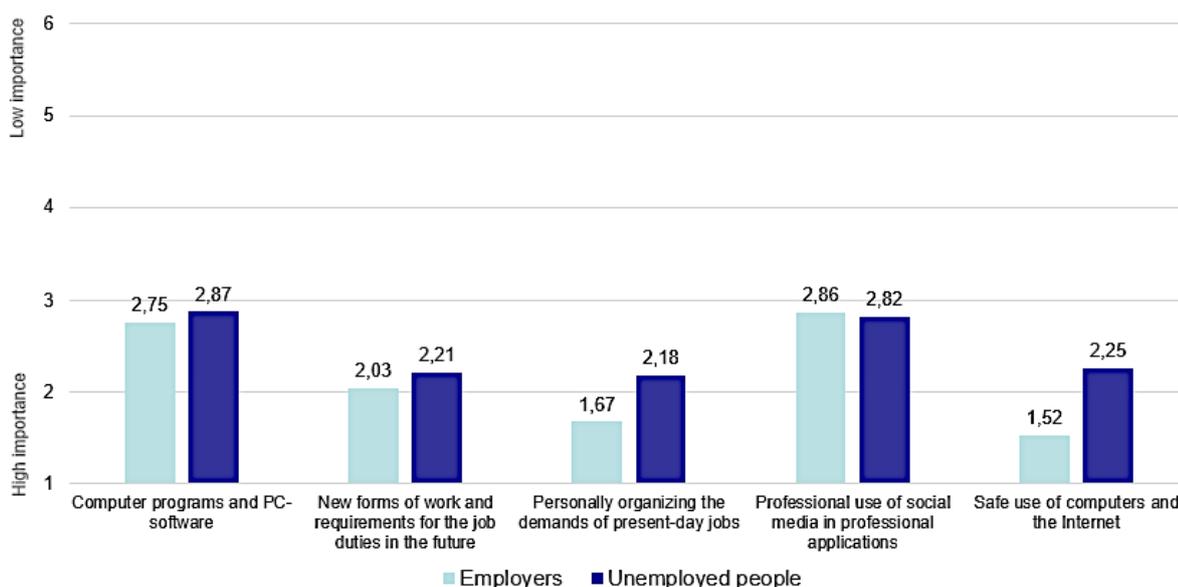*Figure 10: 5th Competence group – Safe use of computers and the Internet.*

This competence group shows the greatest interest from all participating companies and nearly all companies. The companies that have shown a great deal of interest in these topics do not belong to the production sector.

Conclusions

Average importance ratings in the 5 competency areas

Values = mean scores for the respective items per competence area

1 = Training/Competence for recently hired employees would be extremely important for me.
6 = Training/ Competence for recently hired employees would not be important for me at all

Figure 11: Average importance ratings in the 5 competency areas.

Organizations value the importance of the five competency areas towards their employees. Unemployed people, on the other hand, value the importance of further training in these skills areas. We can still compare both importance ratings, as they also reveal an interesting picture:

- The importance of training is rated relatively equally among unemployed people across all five competency areas.
- It is different in companies: there are major differences between the individual competencies. From the point of view of the companies, three topics of competence are particularly important (ranking):
    1. Safe use of computers and the internet
    2. Personally organising the demands of present-day jobs (work–life balance, manners, self- and time management)
    3. New forms of work and requirements for job duties in the future or skills managing new forms of work (agility, entrepreneurial thinking, self-organization, teamwork, networking, sustainability, innovation and basic legal knowledge)

Next steps

The completed study on (new) digital professional life and the current situation at workplaces, alongside the needs of employers and employees, will serve as the basis for the formulation of the content of a curriculum for a training programme targeted especially at 18-25-year-old unemployed youth. The curriculum will consist of 5 modules. This training programme will be implemented in the form of eLearning with links to physical learning (blended learning), suitable for learning at home but also in the workplace context. The curriculum will be streamlined according to the feedback collected during the implementation phase through work-related sustainability projects.

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