

CAMPUS TOOL



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Introduction

We all can agree – digital literacy brings countless benefits for our personal and professional lives. Unfortunately, digitally untrained people, in particular the adult 50+ generation, find it tricky to handle new technologies and therefore they often remain disadvantaged from the opportunities of the digital world.

That's why we are here – 19 partners from 8 countries (Austria, Bosnia and Hercegovina, Bulgaria, Czech Republic, Hungary, Romania, Slovenia, Ukraine) gathered in eDigiStars project, co-funded by Danube transnational programme.

Welcome to the eDigiStars journey and learn more about how to deal with 3 common issues in the Danube macro-region:

- Lack of skilled workforce in digital fields
- Ageing population & employability difficulties
- Lower competitiveness of the whole Danube region

The solution is hidden in eDigiStars' innovative ecosystem based on three tools:

- **POWERYOU tool** – how to reach people aged 50+ and their change mindset that they can learn and scale up their digital career
- **CAMPUS tool** – how to adapt training courses to the needs of adult 50+, which are practice-oriented and take into account prior IT knowledge and individual skills of persons concerned
- **LABEL tool** – how to build trust and prove Baby Boomers competences to employers

All tools are developed by professional cooperation of vocational training and adult training organizations, labour offices, NGOs, local governments, chambers of commerce, industry and economic development organizations and disadvantaged target groups.

Developed tools will be tested and adjusted according to the feedbacks. We will start with the POWERYOU tool and train the employees of labour offices or NGOs targeting people aged 50+ how to build positive attitudes towards Baby Boomers, how to engage and motivate adults 50+. In each territory, we will select one education provider who will, based on CAMPUS tool, adjust one existing training course. During the specification process, particular attention is paid to the needs and abilities of members of the adult 50+ generation, which are explored using a variety of modern tools (e.g. tests, personalised interviews). Afterwards this course will be carried out with the 40 unemployed people aged 50+ recruited / selected per territory (320 in total) at the end of POWERYOU tool pilot. Furthermore, certification of adults 50+ and building trust towards employers with the LABEL tool pilot is necessary. LABEL tool is targeting actors working intensively with industry or representing them, e.g. chambers of commerce, industry associations and other business supporting institutions. With the help of this tool two things will be achieved: First of all, widely recognized certificates for participants of eDigiStars. Secondly, trust in the (re-)qualified target group 50+ (in total 120 persons) will be established, that they are valuable contributors to the digitalised working environment.

We strongly believe that you'll find eDigiStars tools useful and one of the crucial part for changing Baby Boomers chances for a new career in the digital work.

Wishing you a pleasant eDigiStars journey in empowering the generation 50+ for a brighter future.

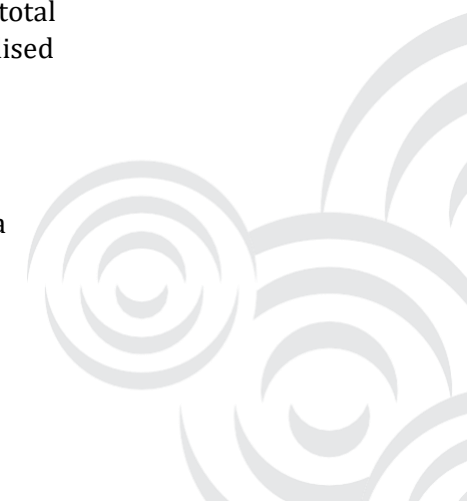
POWERYOU
tool



CAMPUS
tool



LABEL
tool



Chapter 1: Statistics – the actual situation of trainings and vacancies in our territories

The first chapter of the CAMPUS Tool aims to summarize the findings of a desk research conducted by the representatives of the partnership. The aim of the research was twofold. First, the partnership aimed to explore the status of adult education in our territories to better understand what courses, training programs and other educational initiatives are existing. Second, partners over-viewed the labour market of their territories to better understand what skills are needed in the market. The results of the research helped the consortium to define the skills that should be developed and courses that should be adopted to seniors (50+) needs.

The territorial research was guided by ACTA and collection of data was done by territorial partners in the period January-March 2021. The research was carried out in the following countries or territories: Upper Austria in Austria, Bulgaria, Czech Republic, Central Transdanubia in Hungary, North-West Region in Romania, Ivano-Frankivsk Region in Ukraine, and the Republic of Srpska/Bosnia and Herzegovina. The following section will provide an overview of the results from the partner territories.

1.1. Review of national and territorial inputs

1.1.1 Austria

In Austria, the collection of territorial data was based on the overview of available statistical data from the job market (for example Jobfeed study 2016-18, and other sources from 2018) as well as on discussions with relevant territorial stakeholders.

The so-called „Digital Skills Qualification Alliance” is a network that sets out to overcome challenges of digital change and offers more than 140 courses for digital skills building alone. Furthermore, there are more than 500 courses available at the WIFI training institute. These courses are not designed to target any specific age group, and available for everyone to participate. The identified training courses vary in terms of the level of digital skills they develop; it is possible to find courses for basic, intermediate, advanced, as well as expert level.

According to the Jobfeed study, there is a large number of vacancies in the territory that require digital skills. Many of them require office programs or coding knowledge (Figure 1.). It is not defined how many of these job vacancies are addressed to seniors or people from vulnerable communities. Due to anti-discrimination laws, in Austria it is not allowed to prefer one specific group over another. Therefore, in Austria job vacancies are open for all people looking for a job.

1.1.2. Bulgaria

According to the research carried out by BAA from Bulgaria, there is a great number and different levels of training courses of digital skills offered on the market by specialized training centres and academies. No statistics are collected on the number of training programs on digital skills as their exact number is difficult to determine due to market dynamics. However, in general the courses are targeting three different knowledge levels - advanced, intermediate, and professional. There was no evidence that any of the identified courses would target specific social groups (for example seniors), and overall, the courses welcome all interested people.

To better understand the situation of seniors in the country, statistical data was collected from the Bulgarian Employment Agency. According to the data 37% of the registered unemployed are people over 50, of which only 13% have higher education, and those who started working in 2020 from this observed group represent 30%. A study of the Employment Agency of Bulgaria shows that in the next 12 months the Bulgarian businesses will need nearly 321 thousand workers and 90 thousand specialists with legal capacity or higher education. According to the requirements of the employers, half of them must have a qualification. In the medium term (3 to 5 years), Bulgarian businesses will need more than 20 thousand computer scientists. In their recruitment requirements, employers set the need for knowledge and skills in new technologies with a weight of 51.0%. The study of the needs of employers covers proportionally enterprises with different numbers - from micro-enterprises with less than 10 employees to large enterprises with over 250 people. According to the economic activity, the largest share of the surveyed enterprises is from the sector “Trade, transport, hotels and restaurants” (34.5%).

1.1.3. Czech Republic

The research of the vacancies on the labour market in the Czech Republic was created from publicly available sources such as labour office statistics, job search engines, etc. Digital skills are needed in nearly all the positions except most of the manual labour positions.

The average knowledge of foreign language in the population of older adults is quite low, for that reason during the research, positions that required knowledge of foreign language were discarded.

The research of the training courses available in the Czech Republic was mainly created by searching through the retraining courses. These courses, if the necessary requirements are fulfilled, can be financed by the Labour office for registered unemployed people.

Majority of the retraining courses is potentially suitable for our target group of unemployed older 50+ adults. For the purpose of the project usually the courses on expert level are not suitable, they usually require highly skilled people in IT and are focused more on programming, software development, etc. Main focus during the research has been given to the retraining courses on intermediate level.





1.1.4. Hungary

In Central Transdanubia there are at least 75 digital courses available. Most of the identified courses are developing beginner, intermediate, and advanced levels, while expert level courses are rare. The largest provider of digital courses is a life-long learning centre that offers courses to strengthen digital literacy and provide intermediate level courses to gain more knowledge in certain fields (i.e., presentation skills, social media and business, excel, etc.). Vocational schools play a significant role in the digital education of adults as well with their advanced level digital programs. It is important to mention that a coding school is based in the region, and they offer several months to 2 years educational programs on advanced or expert level. In the region, only 7 courses are specifically designed for the 50+ adults which aim rather the development of digital literacy of seniors.

According to the research of job vacancies, CTRIA have estimated that there are at least 1000 positions open in the region that require some level of digital skills. Most of the vacancies require rather low level of digital knowledge. On the other hand, advanced and expert digital skills are needed on the market as well. Therefore, this can be the best described with a U-shape curve, where the number of job vacancies with basic and expert skills are the 2 sides of the U. Typical jobs that require expert skills are IT professional jobs, while basic skills are needed in general everyday office jobs. No job offers are directly targeting 50+ adults due to anti-discrimination.



1.1.5. Romania

In Romania, the collection of information about training courses covering digital skills had to directions: analysing the Vocational Training Providers Register published online twice a year by AJPIB Bihor Regional Agency and desk based online research for digital skills training providers. In North-West territory we have identified 45 trainings in the field of digital skills. Only two of these courses are certified and present in the Vocational Training Providers Register and these provide basic digital skills. Most of these trainings - 45% (see Annex 1) cover advanced digital skills. The research identified only one training provider that actively promotes and delivers digital courses dedicated to seniors: ECDL Romania, Digital literacy for seniors - ECDL Equal Skills (20 hours) covering basic digital skills. There are other various courses dedicated to seniors, but they are no longer active because they were unfolded through finalized European or National founded projects.

The approach to collect information about the vacancies who require digital skills in our territory had three directions: analysing the Job Vacancies List in Bihor published monthly by Bihor Regional Employment Agency, researching the main job offer sites and discussing with recruitment experts (see Annex 1). The research identified 750 job vacancies that require digital skills in our territory. Approximately 70% of these job vacancies are suitable for Baby Boomers, provided they have the qualification, language skills and expertise required. The majority of these require basic digital skills - 44% followed by intermediate digital skills - 34% (see Annex 1).

1.1.6. Slovenia

The data we collected was based on online research. The local partner collected data and information about different courses, which are provided in our region. Statistics about vacancies were gathered from The Institute for employment and from websites where they advertise vacancies.

There are 25 training courses on digital skills organized in our territory. There are 10 courses that teach basic skills, 10 on intermediate digital skills and 5 that teach advanced digital skills. Some of the courses (4) teach experienced digital skills. There are only three courses that target the 50+ adults in teaching digital skills. All of the courses are teaching basic skills. Some of examples of these courses are Digital literacy for Baby Boomers; the Internet and computers for beginners and Digital marketing (Google Search Console, Google Ads, Facebook Ads, Google Analytics, Mail Chimp, Google Apps & Scripts).

The data collected related to job vacancies shows an interesting pattern in Eastern Slovenia. The most common required knowledge is related to basic Office Programs - including word, excel. Nevertheless photo, video and audio editing knowledge, presentations and advanced knowledge of excel are also common requirements. An interesting fact is that coding isn't that much required. The Slovenian partners found it difficult to determine which and how many of these positions would be suitable for the 50+ adults as they are open to all people searching for a job.

1.1.7. Ukraine

In Ukraine, studies were carried out through questionnaires and surveys to analyse the situation with training programs and vacancies in their region. Government agencies and employment centres were involved in the study. The research shows that there are not a large number of digital skills training courses in the territory. In total, 5 courses were identified. In particular, two courses "Fundamentals of Computer Literacy" and "Entrepreneurship and Leadership" within the framework of the project "Norway-Ukraine. Professional retraining. Integration into the state system" for retraining ATO/ JFO participants, military personnel and their families. Trainings are held at the University of Oil and Gas in Ivano-Frankivsk and in a business incubator. The other 3 courses are not targeting any specific group and they are open to anyone. The training courses depend on the previous knowledge of the participants. After doing research, we categorized them according to the level of knowledge they provide - basic, intermediate and advanced knowledge.

Vacancies in the region between 2017 and 2019 were also considered. As a result, the following observations were made. There are approximately 4,000 vacancies available that require office knowledge. 2000 jobs require knowledge in coding, 2000 - in digital manufacturing, 750 - in ERP. There are 2,000 other vacancies that require a variety of digital knowledge.

Using the questionnaire, we determined that 2,548 vacancies should be suitable for seniors or vulnerable groups. More precise information was not obtained as anti-discrimination rules do not allow preference for one age group or gender. Therefore, we cannot determine how many of these positions would be suitable for 50+ adults as they are open to all job seekers. Job search only showed what qualifications they were looking for, not basic, intermediate, advanced, or expert level.





1.1.8. The Republic of Srpska/ Bosnia and Herzegovina

The collection of data in the Republic of Srpska/ Bosnia and Herzegovina was based on the questionnaire methodology which was submitted to all AG members and a number of IT service providers recognizable in the market, as well as on online desk research of available statistical data. According to the research carried out by RARS, over 77 different trainings in the field of digital skills are always offered on the market by specialized training centres and academies from basic to expert level, of which are 26% teach basic, 33% intermediate, 23% advanced digital skills, while 18% are targeting experts. However, the research found that there are no specially created courses for 50+ persons or vulnerable categories, except for a few that are organized through domestic and international projects, so all trainings are available to all interested persons.

The research of vacancies shows that almost all jobs, except manual ones, require some level of digital skills of which 52% require basic, while 18% require intermediate digital skills. Also, 70% of those vacancies are addressing people from the vulnerable community, of which 58% of positions would be suitable for the 50+ adults. According to data from the Employment Institute of the Republic of Srpska, 33% of the total number of registered unemployed persons are 50+ persons, of which only 4% have a university degree. As many as half of all unemployed people have been unemployed for at least five years, and a quarter of them are even over ten.

When it comes to enterprises, one in three enterprises organized training related to the improvement of ICT skills for their employees. In 2019, as many as 67.1% of enterprises that employed ICT professionals had job vacancies that were difficult to fill, and now the situation is even worse.



1.2. Key findings of national and territorial inputs

The desk research of the partnership related to available courses and job vacancies provided essential inputs to the development of the CAMPUS Tool. It helped us to set the directions and develop a Tool that is more synchronized with the market needs and is based on the available training courses in the countries.

The number of available courses in the partner territories range on a wide scale. It seems that most of the training courses are available in Upper Austria, while digital training courses are scarce in the Ivano-Frankvisk Region in Ukraine. In other territories the number of available courses varies between 25 and 100. The research showed that in most of the territories there are courses available to the public ranging from basic to expert level. However, most of the courses are providing basic and intermediate level, and advanced or expert level digital courses are not too numerous. One reason behind this pattern could be that the development of advanced or expert courses is more complex and the demand for these courses might not be as significant as for basic or intermediate course.

The overview of job vacancies provided an interesting lesson to the partnership as well. Although, the research was done during the period of the global pandemic, the number of vacancies requiring digital skills was high. In some cases, partners based their research on data available from the past years, to have a better overview of the general trends than focusing completely on the current situation. The most common skills that are needed could be categorized into three groups. It seems that in each territory basic digital skills are essential to find a job, and the knowledge of office pack (Word, Excel, others) are required by employers. There are many vacancies that require more specific but not too complex knowledge as well, for example digital content editors and others. However, the number of vacancies is significantly lower than in the case of the first group. The third group of vacancies require expert level of knowledge, mostly related to computer programming and software development and the number of vacancies are significant, but less than in both previous categories. Most of the trainings start with an intermediate level, meaning some basic knowledge must exist, but there are no trainings specially tailored for older adults. All training courses are in average between 30 to 40 hours long.

While using the CAMPUS tool it is necessary to explore available IT training courses in your territory. Updated digital skills needs of adults 50+ and demand in the labour market should be considered when defining the themes and methodology of the training.



Chapter 2: The content of courses targeting digital skills in 50+ adults

2.1 Training modules and their combination

Training modules were selected based on the research in all countries described in Chapter 1. The aim is to prepare participants for a variety of job positions where digital skills are needed.

Modules can be chosen and combined based on the territorial needs. The training course will have minimum 40 teaching hours. The content of each module is divided into categories based on the level of knowledge the participant will gain after completing the training (if possible): basic level, extensive level and expert level. For the basic level previous experience with respective tool is not needed. Extensive and expert level expect the knowledge of the previous level. Also, an estimation of the number of training hours needed for completing each level is listed at each module.

The modules can be chosen, combined and adapted based on the decision of each territory. However, a minimum of 40 training hours must be taken into consideration.

The aim is to present the general overview of the level of knowledge that older adults can acquire by completing the eDigiStars training.

Modules 1 – 3 are mainly preparing participants for the following positions: clerk, receptionist, general office support, customer service agent and specialist, online support specialist, digital marketing specialist, digital content specialist, etc. There are necessary tools and applications for creating various content, text and spreadsheet documents, photos, videos, ability to provide their adjustments, collaboration within the company and with other business partners, creating and publishing content in social media.

Module 4 is focused on PLC programming (Programmable Logic Controller). The world of manufacturing becomes more and more dependent on various types of robotic processes, automation and the need for workers skilled in the programming of such systems grows exponentially in demand. This module is ideal for participants with electrotechnical background.

Module 5 is related to IT security. It's a general module focused on protection of content, personal data, privacy and to understand risks and threats in digital environment.

Table 1. Estimated length per each learning topic (in hours):

		Basic	Extensive	Expert
Microsoft Office	MS Word	12	12	12
	MS Excel	12	12	12
	MS PowerPoint	10	10	-
Digital Marketing and Social Media		12	12	12
Communication & Collaborative Tools		8	-	-
PLC Programming		40		
IT Security		8		

The estimated length of each learning topic is a minimum. It is recommended to extend the length according to the learning abilities of the participants.

2.2 Overview of training modules

Module 1 Microsoft Office (Word, Excel, PowerPoint)



Module 2 Digital Marketing and Social Media Management (Principles, Platforms, Strategy, Tools, Ads)



Module 3 Communication and Collaborative Tools (Video conf. platforms, shared documents)



Module 4 Introduction to PLC Programming (Electrotechnical, PLC hardware)

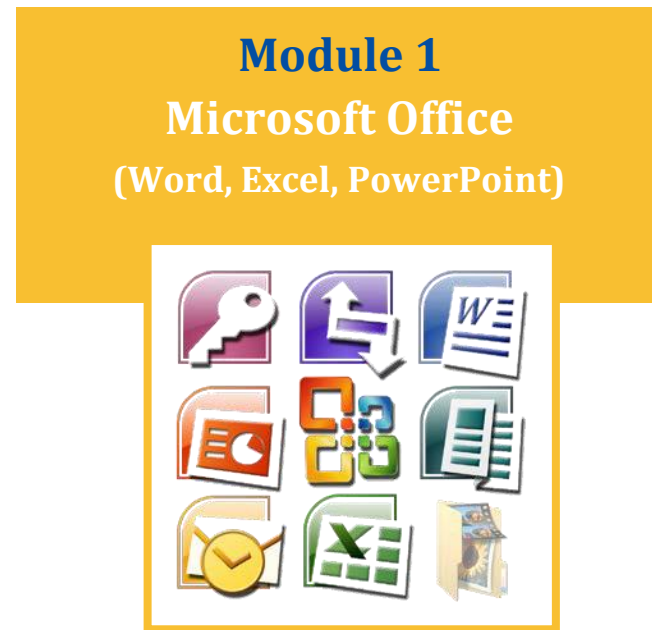


Module 5 IT Security (Personal data and privacy protection, cyber threats)



2.3 Description of individual modules and their content

2.3.1 Microsoft Office – Microsoft 365



Microsoft Office is a leading platform for office applications. Their knowledge is essential for any office work.

Microsoft Word is a program for creating and formatting of any types of documents. The training is designed for participants that have a basic knowledge of Word. They will learn to create documents with more complex formatting, with pictures, tables and graphs.

Microsoft Excel is a program for creating and formatting of tables, statistics, charts, etc. The training is designed for beginners who have not yet worked with Excel or know only the basics. Participants will learn to create and format a spreadsheet in Excel containing simple calculations, use basic functions, create simple chart and modify its appearance. They will be also introduced to print settings and online collaboration.

Microsoft PowerPoint will help to create any kinds of presentations using templates and various effects. The training is intended for beginners who have so far created only a few simple presentations in PowerPoint or have not used it at all. Participants will get acquainted with the principles and recommendations for creating presentations. They will learn to create a presentation containing text, pictures, tables and graphs. They will learn to effectively format slides, text and objects using pre-set themes and simple animations.

2.3.1.1. Microsoft Word training content

BASIC KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Getting started with Word - introducing the ribbon and tabs
- Navigation in Word
- Creating and saving the document, using the templates
- Formatting the document, bullets and numbering
- Preview and printing of document
- Work with tables – insert, modify and format the table
- Saving the document in different formats
- Spell and grammar check



EXTENSIVE KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Organizing content using tables – creating a table, work with rows and columns, merging cells, table formatting, styles, data sorting
- Charts – creating and customizing a charts
- Formatting using styles – pre-set styles and their adjustment, pre-set themes and their effect on the appearance of the document.
- Advanced paragraph formatting – line spacing and spacing settings, keyboard shortcuts to speed up formatting and scrolling in text, text flow, text in columns, bullets and paragraph numbering.
- Header/Footer – insert page numbering, insert page break.
- Objects – inserting images, screen cut out, inserting graphs and tables from Excel.
- Tools for working with text – automatic repairs, spell check, text search.
- Printing and publishing a document – print and printer settings, saving to PDF format.
- Online collaboration



EXPERT KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Creation and design of forms and templates
- Mail merge to create recipient lists, mailing labels and sending of merged emails with Outlook
- Managing large documents, comparing and combining documents, adding book-marks, references
- Track changes including accepting and rejecting changes
- Protection of documents



2.3.1.2. Microsoft Excel training content



BASIC KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Getting started with Excel – introducing the ribbon and tabs
- Workbook – open, save, switch
- Worksheet – editing cell content, creating/renaming/deleting worksheets
- Basic work with tables - inserting/deleting cells, columns, rows; copy/move, formatting with styles, filtering.
- Cells formatting – formatting numbers, date and time, styles, borders, cell merging, wrapping text.
- Basic calculations and formulas – introductions to functions; create basic formulas (sums, averages, totals)
- Printing, page layout.



EXTENSIVE KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Tables – creating and modifying tables, sorting, filtering, formatting, conditional formatting.
- Pivot tables and charts – creating various types of pivot tables and charts, filtering, formatting, creating of calculated column
- Functions – using absolute/relative cell references, logical functions (and, or, if),
- Data – sorting and filtering, removing duplicates, drop-down menu for data entry, splitting and joining text
- Protection of workbooks and worksheets
- Online collaboration – configuring for shared use, track changes



EXPERT KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Functions – nesting functions, multiple conditions with the IF function, lookup functions, text functions
- Working with multiple worksheets, workbooks – using links, external references
- Tables, graphs – working with sparklines
- Macros – creating and using macros
- Tips & Tricks, shortcuts

2.3.1.3. Microsoft PowerPoint training content



BASIC KNOWLEDGE

COURSE LENGTH: 10 HOURS

- Introduction to PowerPoint – navigation in PowerPoint, screen layout, different screens
- Preparation of presentation – methods, choosing the appropriate way of presentation, guidelines for presentation and slides.
- Creation of presentation – using template, blank presentation, motives.
- Working with slides – pasting, deleting, moving and copying images, image layout
- Working with text – text boxes, font formatting, paragraph formatting
- Working with objects – inserting and deleting images (photos), screen cut out, grouping objects, using SmartArt objects.
- Tables and graphs – inserting and editing tables, table styles, inserting tables/charts from Excel.
- Appearance of the presentation – colour schemes, background frames, header/footer
- Preparation before the presentation – comments, printing

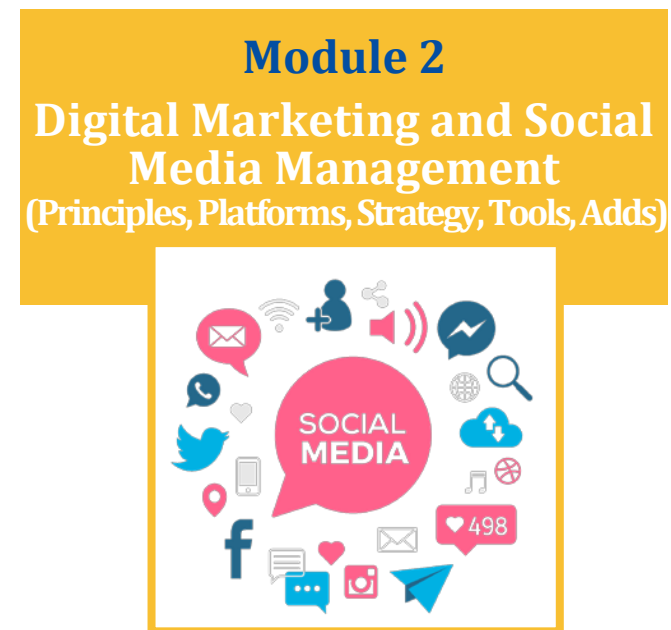
EXTENSIVE KNOWLEDGE

COURSE LENGTH: 10 HOURS

- Inserting audio and video objects, troubleshooting
- Effects and animation – set and customize animation effects, set text animations, animate elements in charts, sound effects
- Transitions – creating and managing transitions
- Creating agenda, summary slides, using notes
- Interactive slide shows, action buttons
- Inserting and managing linked objects, embedded objects, hypertext links
- Importing/ exporting slides



2.3.2 Digital Marketing and Social Media Management



Digital marketing, also called online marketing, is the promotion of brands to connect with potential customers using the internet and other forms of digital communication. This includes not only email, social media, and web-based advertising, but also text and multimedia messages as a marketing channel.

The training is intended for participants with basic understanding of marketing tools. Participants will learn about the many tricks and methods used to advertise in today's digital age. They will know who their audience is, how to write content that appeals to them and how to use digital tools to reach them.

Social media management is the process of creating, publishing, promoting, and managing content across social media channels like Facebook, Instagram, Twitter, LinkedIn, YouTube, Pinterest. Social media management goes beyond just posting updates to company's social media profiles. It also includes engaging with the audience and looking for new opportunities to increase reach and visibility.

The participants will familiarize themselves with what social media is, how to manage them and what their added value is. They will know the most common social media for their specific target group, how to choose the best platform, how to create a social media strategy and plan and manage different social media profiles.

2.3.2.1. Digital Marketing and Social Media Management training content

BASIC KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Basic marketing
- Social networking platforms
- Preparation of a strategy for the management of social networks by platforms
- Posts planning (when to post - hours, days, keywords, hashtags)
- Basics of website editing



EXPERT KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Basic graphic design, video and photo editing
- Advertising Google Ads
- Advertising on social networks (FB, IG)
- Content preparation (copywriting, social media writing, ad writing, web page writing)
- Traffic monitoring and use of analytical tools



EXTENSIVE KNOWLEDGE

COURSE LENGTH: 12 HOURS

- Website optimization (SEO)
- E-mail marketing and use of interfaces (MailChimp, pop-ups)
- Marketing through social networks (social media campaigns, auctions, AdsManager, audiences, targeting and returning customers)
- Advertising on other networks (instant messaging platforms)
- Analytics and monitoring (Google analytics & audiences, Facebook Analytics)
- Social Networking Editing Applications (HootSuite)



2.3.3 Communication & Collaborative Tools



This module is necessary for those working in the business environment and their importance grew dramatically due to the pandemic situation when many people started working from home or need to be in contact with others remotely. Meetings, webinars and conferences are organized through various video conferencing tools, people communicate via chat, text messages and trainings and lessons are provided using communication and online tools.

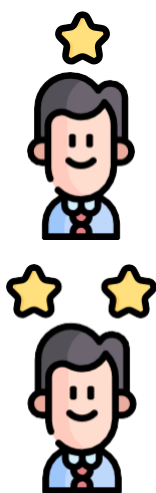
Training participants will understand the principle of cloud data storage, will be able to create and manage shared documents. They will be able to handle and manage their video conferences through active involvement and also use polls or quizzes.

2.3.3.1. Communication & Collaboration Toolstraining content

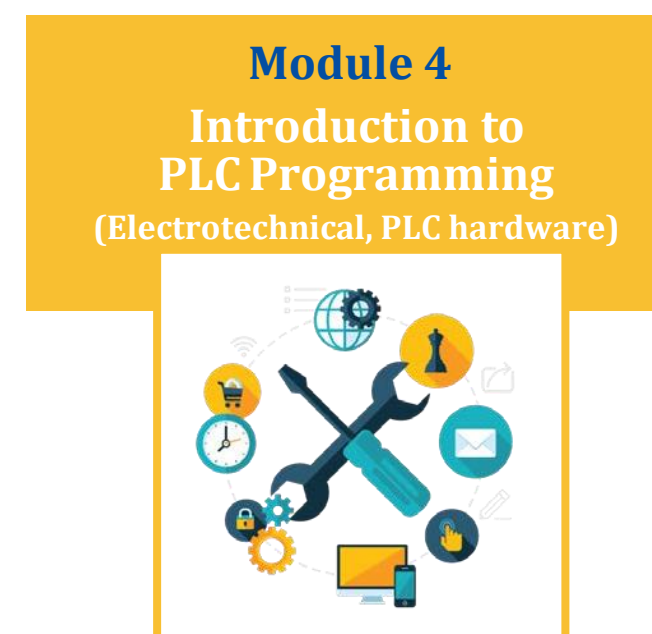
BASIC AND EXTENSIVE KNOWLEDGE

COURSE LENGTH: 8 HOURS

- Familiarize with video conferencing platforms and their main functionalities – screen sharing, chat, involvement of participants.
- Troubleshooting - microphone, camera
- File sharing tools
- Use of clouds and shared spaces for data storage
- Creating forms, polls and quizzes, collecting results, exporting to tables and charts



2.3.4 Introduction to PLC Programming *



ϣProgrammable Logic Controller (PLC) module targets electrotechnics and electricians that want to expand their knowledge and skills of automation technology. Knowledge of PLC programming will help the older adults to find an employment in a field that is in great demand on the market today.

In the course “Introduction to PLC Programming” participants will learn the basics of PLC programming according to the IEC 61131-3 standard (the international standard for industrial control programming) and get an insight into the syntax and semantics of the IEC programming languages. In the first part of the course, participants will gain basic knowledge in the field of electrical engineering and automation and will be well prepared for PLC programming.

3.3.4.1. PLC Programming training content

BASIC KNOWLEDGE

COURSE LENGTH: 40 HOURS

- Electrotechnical hardware (buttons, relays, contactors...)
- Basic electrical circuits (self-retaining, reversing contactor...)
- Basic working methods of a PLC
- PLC hardware (Siemens)
- Basics IEC 61131-3
- Software structure
- Data structure (data - declaration)
- Configuration
- KOP - Ladder diagram
- FBD - function block diagram
- IL - Instruction list
- ST - Structured text

* Translation of the following course offer: <https://www.wifi-ooe.at/kurs/5310-einstieg-in-die-sps-programmierung> [19.03.2021]



2.3.5 IT Security



Participants will learn about types of cyber threats, how to recognize them and how to prevent them. This module is based on the ECDL course for IT security and presents the general knowledge for secure use of the internet.



2.3.5.1. IT Security training content

BASIC AND EXTENSIVE KNOWLEDGE

COURSE LENGTH: 8 HOURS

- Security concepts – Data threats, value of information, personal and file security
- Malware – types and protection
- Secure web use – web browsing, social networking
- Communication – email, instant messaging

Chapter 3: Basic Financial, Legal Skills and Practical Tips for older adults Digital Entrepreneurs

It is recognized that a significant group of trainees may have realistic chances and ambitions as **self-employed** or micro-entrepreneurs. It is therefore the goal of the CAMPUS tool to reinforce the introduction of the basic concepts of self-employment in the eDigiStars course and include **actionable tips and practical knowledge** in all of them. At the same time, it is also appreciated that proper coverage of this learning area exceeds the bounds of any selected courses, and therefore a compromise is necessary.

It is therefore proposed that the selected training **include a module (at least 3-5 hours long) dedicated to self-employment** from the list of topics presented in Annex 2. The range of topics is believed to be wide enough to fit and be adapted to any course. Depending on the course structure, this module may be either integrated into the original course length or offered as additional material. It should be developed as a review information section, with an application for work in an informal discussion environment. For this purpose, the person presenting the information does not need to be a lecturer/trainer but a practicing mentor: entrepreneur, accountant, lawyer or expert in administrative institutions. They will be able to present and share the boring, but much-needed legislative information through their personal experience. In this way participants achieve a higher level of trust, motivation and confidence.

The list of topics was structured to explain the different forms and opportunities to put in practice the acquired digital skills, within legal frame. Through it the participants gain a basic knowledge in the field of regulations and legislation in both the EU and their countries. At the same time, these topics offer practical advice on how to make business decisions, how to find information and be better at what they do, **because nothing can compensate the losses derived from lack of knowledge.**

This section is designed to provide the methodology for the construction, type and volume of information to be provided to project participants. It contains the basic knowledge and explanations related to concepts and norms, dividing them into two: **European Legislation** and the **Legislation specific for each Country**. Annex 2 presents a brief review of the main topics to be covered by this module. If you decide not to include this module as a component of the training, the participants may be advised to contact the organizations and institutions that provide information for starting entrepreneurs in each country (see Annex 3).



Module Entrepreneurship

Participants will have the opportunity to get acquainted with the basics of entrepreneurship, the entrepreneur and the entrepreneurial process, entrepreneurial competencies, characteristics of entrepreneurship over 50 years of age.

During this module, the positive stories of entrepreneurs who started their own business in the digital field after the age of 50 in the countries participating in the project (chapter 2 of the POWERYOU tool – successful stories from eDigiStars countries) will be presented to the participants.

The module will include a lot of interactive work, discussion and practical examples and exercises.

The module also predicts participation of an entrepreneur who started his own business after 50 years of age in the digital field who will share with the participants his experiences in his journey from an idea to his own business.



"Dream big. Start small. But most of all, start."

- Simon Sinek (British-born American author and motivational speaker)

Making the decision to go for it is a step that many people never get to. It's the most overwhelming part. Once you decide to move on to the next steps, everything will start flowing from there. You will face every new challenge as they arise.

Content of entrepreneurship training

BASIC AND EXTENSIVE KNOWLEDGE

COURSE LENGTH: 8 HOURS

- Introduction to entrepreneurship;
- Presentation of entrepreneurs and the entrepreneurial process;
- Entrepreneurial competences;
- Characteristics of entrepreneurship for 50+ years and positive examples from abroad;
- The word of an entrepreneur: from idea to business.



Chapter 4: Information processing in 50+ adults – golden rules to adapt the training to 50+ adults' needs

1. Develop working alliance with senior trainees

Extrapolating from the field of psychotherapy, the working alliance can be conceptualized as a secure holding relationship between trainer and trainees that involves two phases (Luborsky, 1976): 1) in a first phase the trainees' belief in the trainer, they see him/her as a potent source of help, and the trainer provides a warm, supporting, and caring relationship; 2) in the second phase, the trainees invest and faith in the training process itself, they are committed to understand the core concepts of the training and they are willing to active participate into the learning process. Socioemotional selectivity theory (Carstensen et al., 1999) posits that with age, adults want more satisfying emotional contact. Consequently, older adults prune their social ties to weed out unsatisfying relationships and to retain satisfying relationships, so the trainer need to build satisfying relationship with trainees. Having a good working alliance means to have a good emotional bond with trainees, agreeing on teaching aims and on learning tasks.

Based on previous research, we suggest some advice to build constructive working alliance with older trainees:

- Develop trainees' expectancy of positive learning outcome and the sense of efficacy
- Offer what is considered the standards of good care: hope and optimism
- Normalize worry and provide perspective on the role of the trainee as part of the learning process
- Give counterarguments for the dysfunctional beliefs of 50+ adults that "they are not able to learn digital skills", challenge this faulty belief (Where is the evidence? Were they able to learn other new skills or information? How is this way of thinking helping them learn the digital skills?)
- When appropriate, use distraction methods (jokes) but be very cautious about your audience, use encouragement coping statements (It is difficult, but I am here to help you. I can ask for my trainer's help anytime. It is difficult, but not impossible to learn it.).
- Go through the agenda of each course with the participants; make a short introduction of the internal structure of the session; take repetitions and reruns of the educational materials if needed, let the audience repeat what has just been said and review the content of the previous lecture
- Present the principles underlying the learning process and repeat them over the session to foster retention; gather feedbacks, possibly use the "Masterclass method"

- Emphasize the benefits of the training - give practical examples such as how to develop a digital holiday diary, cookbook, anniversary presentation, household budget, family tree, scoreboards for sports etc. across the modules
- Show respect and allow the trainees room for expressing concerns (regarding learning) and being heard; ask participants about their hobbies and needs in order to personalise the training
- Encourage them to express their concerns, their emotions in the time of the training
- Be persuasive and solicit commitment
- Communicate in a friendly way about needed resources, both external and internal. The external resources are trainer's support, other participants' support, social support. For internal help, the trainees may resist the "student" role, so empower their beliefs that are co-producer of the learning outputs, and that they are trainer's collaborators. Help them identify the internal resources, their potential repertoire, their strengths, their daily living skills that may help them in the learning process.
- Respond with empathy to trainees' frustration, slowness, confusion and blame.

CHECKLIST

- q Develop trainees' expectancy of positive learning outcome and the sense of efficacy
- q Offer hope and optimism
- q Normalize worry
- q Challenge the faulty beliefs
- q Use distraction methods (jokes) when appropriate
- q Encourage them
- q Go through the agenda of each course with the participants; make a short introduction of the internal structure of the session; take repetitions, let the audience repeat and review
- q Present the principles underlying the learning process and repeat them over the session to foster retention; gather feedbacks
- q Emphasize the benefits of the training - give practical examples
- q Show respect and allow the trainees room for expressing concerns (regarding learning) and being heard; gather information about participant's needs and interests
- q Encourage them to express their concerns, their emotions in the time of the training.
- q Be persuasive and solicit commitment
- q Communicate in a friendly way about needed resources, both external and internal
- q Respond with empathy to trainees' frustration, slowness, confusion and blame.



2. Adaptation of learning environment

Because information processing is a central element of every consumer decision, this part reviews the knowledge regarding 50+ consumers' information processing and offers tips to training providers how to meet the needs of their trainees. At a sensory level, individual sight is drastically reduced from age 40 onwards (Lyon et al., 2002).

For this reason, educators are encouraged to:

- Use enlarged labels and the font of messages
- Use an easily readable font that is at least 19 pixels or 14 points (Redish, 2012)
- Choose a mainstream font (serif fonts) that will feel familiar to users and don't use more than 3 fonts (Bishop, 2014)
- Use boldface to emphasize a word or a small group of words
- To maximize readability, use a line height that is 130% to 150% larger than the font size (Everdell, 2014)
- Differentiate colours according to their intensity
- Use non-reflective surfaces and colour combinations that are not too dark (green, blue and purple)
- Use contrasts signs, and enlarge illustrations
- Use large monitor sizes in order to prevent tiring the participant's eyes too early
- Avoid poor, or blinding lighting conditions in displays which can have a negative effect on attention and even on short-term memory.

Muscular functions also suffer a decline in Baby Boomers. For this reason, trainers are encouraged to use:

- Computer keyboards for seniors whenever appropriate (age 65+ is recommended for this feature)
- Friendly keyboards and icons for android
- Trackballs whenever appropriate (age 65+ is recommended for this feature).

We can learn from apps' development:

- Create clear linkage between icons' use and their functionality
- Avoid unfamiliar symbols
- Use simple interfaces
- Use diverse learning materials such as audio / video materials, graphics, diagrams that are easy to grasp, prepare (or use prepared) tutorials, toolbars for easier navigation
- Include printing option of the materials
- Integrate accessibility features
- Provide further instructions.

The chronological age is the passage of time measured by the number of years since one's date of birth. The cognitive age is individual's perceptions of the age group (decade) he or she belongs to. The average discrepancy between them is about 15 years and becomes increasingly greater with age (Szmigin & Carrigan, 2001).

For this reason, trainers are encouraged to:

- Involve younger spokespersons than the average chronological age of the target 50+ adult audience
- Differentiate between people who feel young and people who feel old – trainees who feel younger than their chronological age tend to be less anxious toward new technologies, seek more information about high-tech products and are more willing to adopt such products (Wei & Lin, 2005) and are more likely to use internet (Eastman & Iyer, 2005)
- Use information that would help reduce perceived risk and anxiety in using the internet and technologies - trainees who feel younger than their chronological age are less anxious in relation with technology and innovation (Chéron & Kohlbacher, 2018)
- Assess the cognitive age of trainees.

CHECKLIST

- q Enlarge labels and the font of messages
- q Use a readable font that's at least 19 pixels or 14 points
- q Choose a mainstream font (serif fonts) that will feel familiar to users and don't use more than 3 fonts
- q Use boldface to emphasize a word or a small group of words
- q Use a line height that is 130% to 150% larger than the font size
- q Differentiate colours according to their intensity
- q Use non-reflective surfaces and colour combinations that are not too dark (green, blue and purple)
- q Use contrasts signs, and enlarge illustrations
- q Use large monitors
- q Avoid poor, or blinding lighting conditions in displays which can have a negative effect on attention and even on short-term memory
- q Use computer keyboards for seniors, friendly keyboards and icons for android and trackballs with caution whenever appropriate
- q Create clear linkage between icons' use and their functionality or toolbars for easier navigation
- q Use diverse learning materials, graphics, diagrams; also include printing option
- q Avoid unfamiliar symbols
- q Use simple interfaces
- q Integrate accessibility features
- q Involve younger spokespersons than the average chronological age of the target 50+ audience
- q Differentiate between people who feel young and people who feel old
- q Assess the cognitive age of trainees.



3. Adaptation of teaching

Regarding attention, Yoon's (1996) research suggests that people aged 50+ better able to process information during the morning hours.

To improve their accessibility to messages:

- Slow down the talking speed
- Ensures constant pauses between the sentences, all without altering the voice intonation.



The ability to understand messages declines in general with aging largely because of the mental effort required for the Baby Boomers to engage in cognitive processes of interpretation. In conclusion:

- Facilitate 50+ adults' understanding (trainers should use an easy and accessible language and provide detailed information to communicate the advantages of their training, product or service.

Aging has been identified with cognitive slowing or sensory deficits, cognitive deficits, especially in memory and fluid intelligence tasks, so the trainer could:

- Use different sensory modalities
- Repeat themes or concepts both verbally and visually, as well as having the participants take notes
- Provide a tape recording of the session for review between sessions, particularly for those participants exhibiting more severe sensory or cognitive impairment
- Handouts and written feedback are also effective tools
- Use summarization
- Behavioural activation means to involve older people in action, so plan the training in term of "doing" more than lecture only. Monitor each trainee's progress. Respond with empathy to trainees' frustration, slowness, confusion and blame.

People aged 50+ have a reduced capacity to actively maintain information in memory. They have difficulties processing language, particularly of technical variety. They have a limited prospective memory, that is, the capacity to maintain a given behaviour in the future (such as taking a prescribed medicine at the same hour every day). So:

- Provide instructions in an easier and interactive format
- Providing step-by-step and numbered instructions with figures and a jargon-free language
- 50+ adults understanding information is easier when it is presented in a frequently asked questions format (containing responses).

Because of their reduced ability to correctly analyse information, the Baby Boomers are often victims of misleading advertising and frauds, especially on internet. They often express greater concerns about security issues when shopping on-line. Consumers aged between 50 and 69 years are likely to spend more money and made online purchases more often than individuals aged between 18 and 25 years, whereas consumers aged over 70 years rarely make online purchases (Leppel & McCloskey, 2011). However, older generations are not likely to look for information before purchasing, which can make them more vulnerable to frauds and scams (Balazs et al., 2017). It is desirable to teach the 50+ adults notions of internet security.

For Baby Boomers, long or dense information is typically more difficult to codify than clear and concise information. The information presented verbally (only) is more difficult to be proceed than visual information. For this reason, trainers are encouraged to use only one or two messages about the concept, presented in a printed form too (manuals).

According to Spotts and Schewe (1989), aging does not affect the ability to learn as much as it does the learning speed. With limited time to process a stimulus, the trainees can struggle to discern relevant from irrelevant information, especially when it is presented in a verbal rather than visual form. For this reason, trainers are encouraged to:

- avoid presenting information too quickly
- give trainees time to process the information
- give printed training support materials
- use meaningful stimuli, associate new concepts with the familiar ones
- the trainees should be provided with visual elements that clarify the verbal information (Hawkins & Yoon, 1998).

Yoon et al. (2005) found that semantic memory (knowledge accumulated throughout our life) shows greater longevity and stability with advancing age than episodic memory (everyday events). However, if associated with emotions, and especially positive ones, episodic memories can also acquire greater significance with age. Repetition may reinforce information recall. It is important to build confidence in trainee, boost their motivation by noticing their competencies and their active involvement.

Most mnemonic strategies used with older adults treat the to-be-remembered material as declarative knowledge that needs to be consciously encoded and then recalled. This is true for both verbal material and numeric material (Verhaeghen, Marcoen & Goossens, 1992).



Use mnemonic technics.

- The method of loci (places) is the classic mnemonic, first invented by the ancient Greeks. Using a place the person knows very well - perhaps a familiar route, his/her house, or a particular room in it – he/she mentally visualizes the items that want to remember in particular places.
- Keyword method – one of the most effective mnemonic strategies is the keyword method. This is particularly effective for learning new words.
- Face-name associations (memory of names) - Perhaps the most widely used mnemonic is the face-name association method. This strategy involves choosing something distinctive about the face, finding a word or phrase (the “keyword”) that is similar to the name, and creating a visual image that links the distinctive feature with the keyword.



CHECKLIST

- q Slow down the talking speed
- q Ensure constant pauses between the sentences, all without altering the voice intonation
- q Use an easy and accessible language
- q Provide detailed information to communicate the advantages of their training
- q Use different sensory modalities
- q Repeat themes or concepts both verbally and visually
- q Provide a tape recording of the session for review between sessions, particularly for those participants exhibiting more severe sensory or cognitive impairment
- q Provide handouts and written feedback
- q Use summarization
- q Plan the training in term of “doing” more than lecture only
- q Monitor each trainee’s progress
- q Provide instructions in an easier and interactive format
- q Provide step-by-step and numbered instructions with figures and a jargon-free language
- q Present the information in a frequently asked questions format (containing responses)
- q Teach the trainees notions of internet security
- q Give 50+ adults time to process the information
- q Give printed training support materials
- q Use meaningful stimuli, associate new concepts with the familiar ones
- q Use mnemonic strategies.

4. Adaptation of testing

Creating homogenous group for the course delivered is an important aspect to take in consideration that could significantly influence the course impact and results. In order to group participants such as to maximise the training efficiency, the training supplier could draft and apply a short questionnaire addressing three dimensions: **personal information**, **scope of interest** and a **self-appraisal of digital knowledge**. Examples of questions that could be used:

- personal information (name, age, contact, latest professional development, profession, working/ retired, etc)
- scope of interest (Why are you interested to acquire digital skills? What digital skills could help you perform better at you job/ find a new job? etc)
- self-appraisal of digital knowledge (Using the 1-5 rating scale where 1 is I have no experience in this area and 5 is I am an expert in this area, assess your digital skills on each of the six areas)

	1 I have no experience in this area	2	3	4	5 I am an expert in this area
Microsoft Office (Word, Excel, PowerPoint)					
Social Media Management (Platforms, Strategy, Adds)					
Digital Marketing (Principles, tools, strategy)					
Communications and Collaborative Tools (Video conf. platforms, shared documents)					
Introduction to PLC Programming (Electrotechnical, PLC hardware)					
IT Security (Personal data and privacy protection, cyber threats)					

Generally, a deterioration in the encoding stages of mnemonic processes is found in healthy older subjects. Moreover, age-related decline is especially observed in tasks that require the explicit and conscious recollection of information, as in free recall of a word list that had been presented previously. Ageing affects both the encoding and retrieval stages of explicit memory, but that **implicit memory** is largely intact (priming, associations). Teaching digital skills in 50+ adults may **involve implicit memory** methods.

Errorless learning - elimination of errors during learning is more efficient than trial-and-error learning (Kessels, & De Haan, 2003).

Trial - and - error learning: The image is presented for 5 seconds, and the first letter of the to-be-remember name was verbally given by the trainer, serving as a cue. The subject is instructed to guess the correct name during the presentation of the card, and no feedback is given. Subsequently, a second card is shown containing the image together with the correct name, which was also read aloud by the trainer.

Errorless learning - the errors is not incorporated into the mental representation of the knowledge, while this does happen in the guessing condition. Use cards or images (icons) – present them to trainee. Presented for 5 seconds with the instruction to study the image. For each item, a second card must be available showing the to-be-remembered name below the photograph as well. Read loudly the name, or the label. The trainees are instructed to remember the associations between the image and the name (label).

The vanishing-cues learning method (Glisky, 1986) is another implicit learning method, consisting of:

- Expose each definition (10s): programs that the computer carries out
- Show (display) the first letter of the corresponding word together with hyphens indicating the number of missing letters. S_____
- Ask the participants to try to produce or guess the target word.
- If they failed to produce the correct word (in 10s), add the next letter of the word and the subject again had 10s to produce or guess the word. SO_____
- Continue this procedure until the participants either correctly produced the word, or until the word had been displayed (showed) in its entirety: SOF-, SOFT-, SOFTW- "SOFTWARE".

The table below presents some examples of definitions.

Table 2. Examples of definitions (Glisky, 1986)

HARDWARE	the computer and its physical devices
STRING	a sequence of characters
INPUT	information transferred to the computer from an external source
LOOP	a repeated portion of a program
MENU	a list of choices presented by a program
VARIABLE	a name assigned to a piece of information in a program
MEMORY	the computer's storage area
BASIC	a programming language
SAVE	to store a program
TEXT	information presented as readable characters
CATALOGUE	a disk's table of contents
PROCESSOR	it carries out instructions
REMARK	it describes what is going on in a program
DRIVE	it reads and writes information on a disk
LOAD	to transfer a program from storage to computer

Older adults have a great deal of difficulty remembering **numeric material**, partly because, unlike verbal stimuli or names and faces, numbers are abstract. However, the abstract nature of numbers makes them poor candidates for declarative mnemonic strategies that are commonly based upon verbal association, visualization, or elaboration, all of which are deficit in older adults. What is needed is a strategy that places fewer demands upon declarative processes. Gardner, Hill and Was (2011) suggested procedural learning methods (learning by doing) that can be used to help 50+ adults learning numeric information.

CHECKLIST

- q Use implicit learning and testing methods
- q Use procedural learning and testing methods



Annex 1: Additional information for trainings and vacancies in the partner territories

1. Job vacancies in Upper Austria

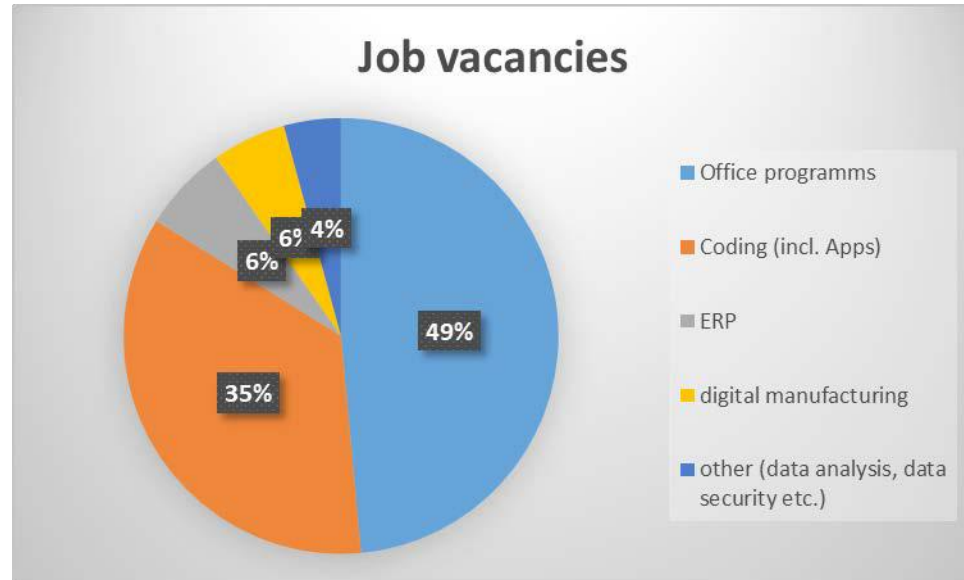


Fig. 1. Different digital knowledge needed in job vacancies in Upper Austria between 2016-2018 (source: Jobsfeed study 2016-18)

2. Labour market trends in Bulgaria

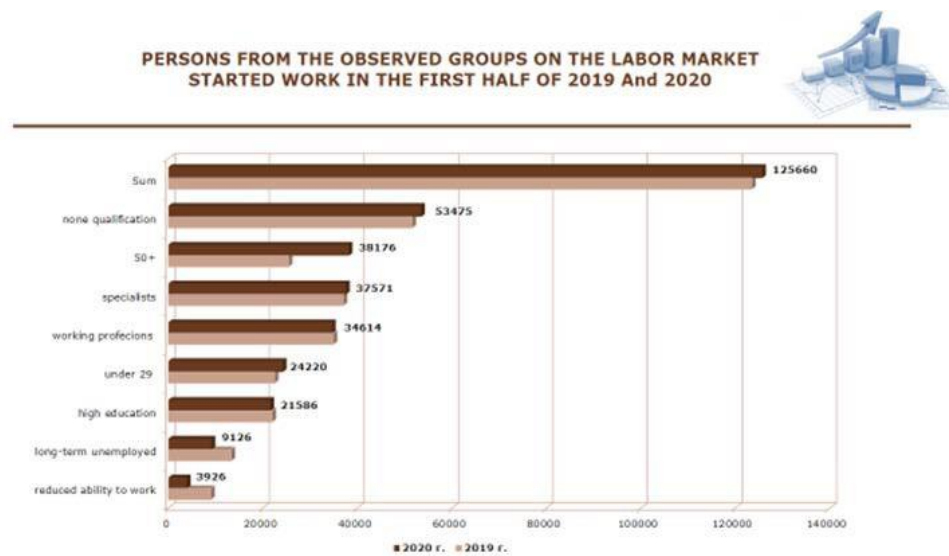


Fig. 2. The number of unemployed seniors in Bulgaria



Fig. 3. The structure of the registered unemployed people in the labour offices in Bulgaria

3. Vacancies and training courses in the Czech Republic

Type of Vacancies	Number of Vacancies
Suitable for vulnerable/with disabilities	250
Suitable for people aged 50+	180
Require basic digital skills	70
Require intermediate digital skills	70
Require advanced digital skills	20
Require expert digital skills	10
Vacancies with digital skills requirements	1000

Table 3. Vacancies based on digital requirements

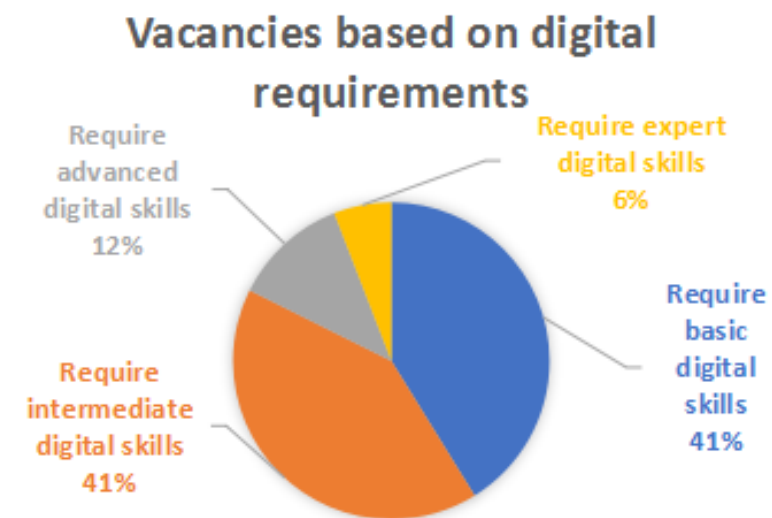


Fig. 4. Vacancies based on digital requirements in Czech Republic

3. Vacancies and training courses in the Czech Republic

Course level	Number of courses
Basic level	10
Intermediate level	10
Advanced level	26
Expert level	5
Courses suitable for older adults	40
Total number of courses	51

Table 4. Courses based on level of knowledge

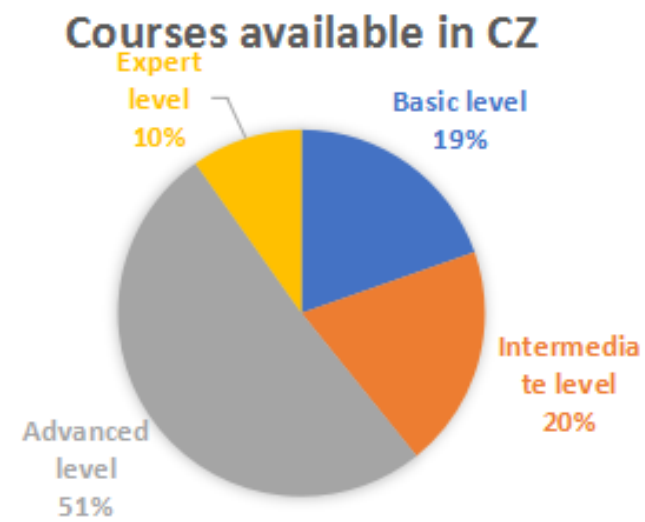


Fig. 5. Courses available in Czech Republic

4. Digital courses and vacancies in Central Transdanubia, Hungary

COURSES AVAILABLE IN CENTRAL TRANSDANUBIA, HUNGARY

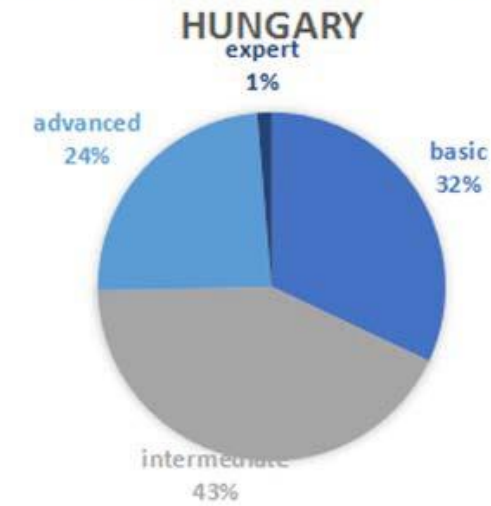


Fig 6. Courses available in Central Transdanubia, Hungary

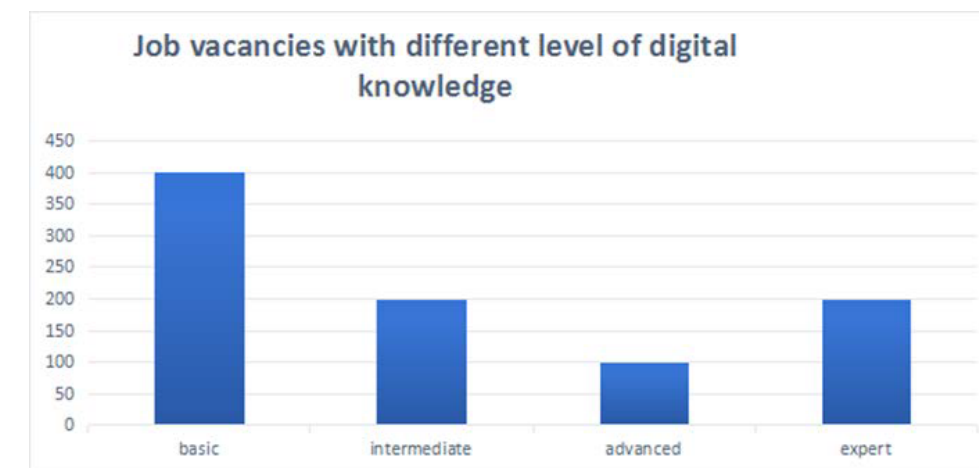


Fig. 7. Job vacancies with different level of digital knowledge, Hungary



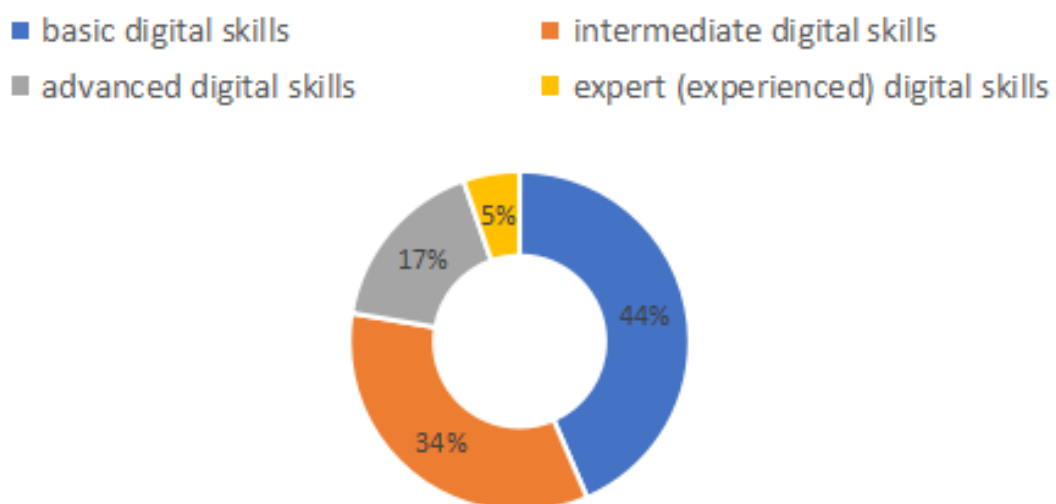
5. Digital skills trainings and job vacancies in North-West, Romania



Figure 8 – Digital skills trainings by levels

JOB LEVEL	Digital skills required
Blue collar	80 % not required 20 % basic digital skills (Operate PC or smartphone, Microsoft Office – Word)
Middle Management	Intermediate digital skills (Microsoft office – Word, Excel, Power Point, Networking – using email, various applications)
Top Management	70 % Advanced digital skills (Microsoft office – Word, Excel, Power Point, Networking) 30 % Expert digital skills (specific IT jobs)

Table 5. Digital skills required by job levels



6. Digital skills and job vacancies in Slovenia

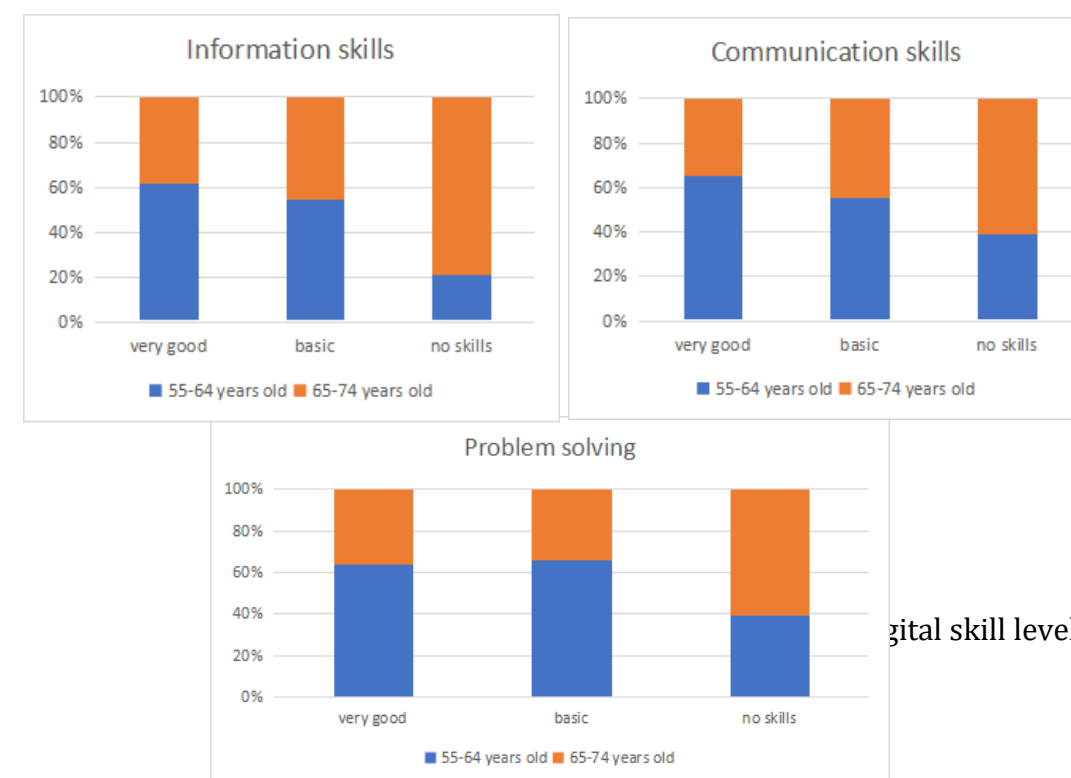
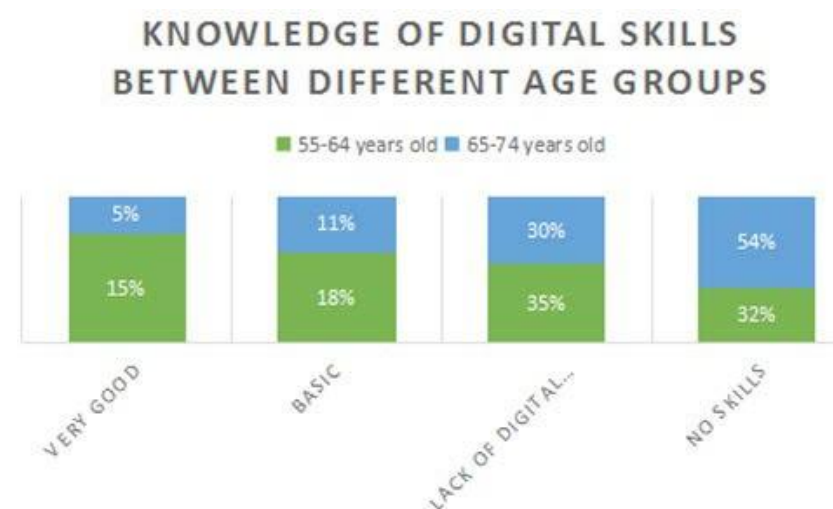
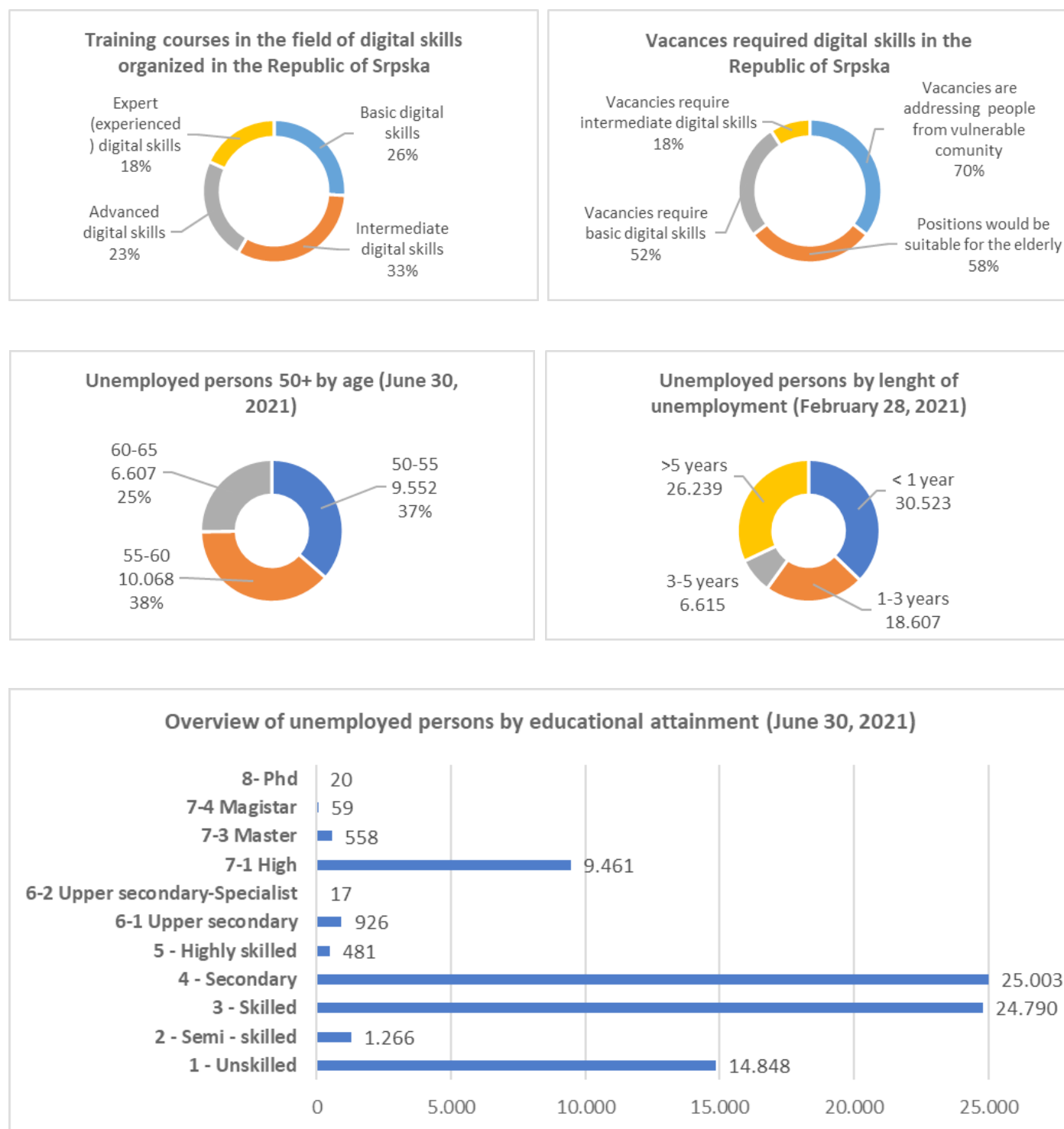


Table 6. The required digital skills, Eastern Slovenia, Data by: stat.si

Fig 10. Collected data for having digital skills in Eastern Slovenia

Writing programs (Word, Open office, etc.)	388.882
Working with tables (Excel, etc.)	315.068
Advanced tables work (sorting, using filters, formulas, graphs, etc.)	218.543
Using programs for photo editing, video and audio editing	197.312
Making Presentations or documents with photos, tables or graphs	223.593
Coding	26.099

7. Digital skills and job vacancies in the Republic of Srpska



Source: AG Members, The Republic of Srpska Institute of Statistics

Fig 11. Collected data in the Republic of Srpska

Annex 2: Forms of legislative framework

Types of normative documents	EU legislation:	Legislation of the specific country developed for each country separately
Directive	Types of bodies. Types of EU legislative norms, which apply;	
Regulation	Ratification and fulfilment by the individual members of the Union Common norms for all member states	
Commercial Law:		<ul style="list-style-type: none"> • Scope of the law, obligors, terms, sanctions, various forms of registration • Comparative SWOT analysis of the forms and different ways of company registration, according to: Commercial Law and The Law on Obligations and Contracts • Types of trade companies.
Financial legislation:		<ul style="list-style-type: none"> • What this law covers, obligors, deadlines, sanctions, various forms, types and forms of contribution • Types of laws • Tax procedure code, Value Added Tax Act, Corporate Income Tax Act, Individual Tax Act. • Types of taxes and amount of contribution • Income tax, Individual and corporate, Dividend tax, Income tax • VAT • Tax relief.
Labour law and social security		<ul style="list-style-type: none"> • Scope, obligors, deadlines, sanctions, various forms of registration • Type of law: Labour Code, Social Security Code, Health insurance, Supplementary, compulsory pension insurance, Pension insurance, Income tax • Amounts of compulsory social security contributions for the Pensions Fund • Health Insurance and Differences and advantages between employment contract and self-employed contract.
Administrative legislation		<ul style="list-style-type: none"> • Rights, obligations, ways and forms for providing administrative information, Sanctions, Limitation periods • The statute of limitations under the Law Obligations and Contracts under the Tax Procedure Code, the Law on Administrative Violations and Penalties. General terms and differences.
Types of financial documents		<ul style="list-style-type: none"> • For small business and self-employed • Deadlines for submission, forms of completion, requirements, sanctions • Social security declarations, tax returns documents, ways of filing.
Licensing regime		<ul style="list-style-type: none"> • Requirements for specific business.
Insurance legislation		<ul style="list-style-type: none"> • Types of insurance, obligatory for performing certain activities • Insurance Statute book

Annex 3: Institutions providing information for starting entrepreneurs in each country

Country	Institutions
1. Austria	Founder Service of Chamber of Commerce (www.gruenderservice.at) on national and regional level. Regarding Start-Ups in Upper Austria Tech2B (www.tech2b.at) is able to assist additionally
2. Bulgaria	National Agency of Revenue https://inetdec.nra.bg/ Registry Agency of Bulgaria https://www.bulstat.bg/ EU platform https://europa.eu/european-union/business_bg Commercial register https://portal.registryagency.bg/ Bulgarian Association of Entrepreneurs
3. Czech Republic	Czech Chamber of Commerce: https://www.komora.cz/ Ministry of Industry and Trade: https://www.mpo.cz/cz/podnikani/ Financial administration: https://www.financnisprava.cz/ Dedicated sites for new entrepreneurs: https://www.podnikatel.cz/pruvodce/jak-podnikat/ , https://www.jakpodnikat.cz/
4. Hungary	Hungarian Chamber of Commerce and Industry: https://mkik.hu/en and the regional chambers: https://mkik.hu/en/regional-chambers Network of Open Learning Centers (called NYITOK): https://nyitok.hu/index Department of Employment of Government Offices - these county departments offer, among other things, free training for job seekers to become an entrepreneur: https://www.kormanyhivatal.hu/hu
5. Romania	Chamber of Commerce - at national level https://ccir.ro/ and regional levels like https://ccibh.ro/ National Trade Register Office https://www.onrc.ro/index.php/ro/ Associations and federations for entrepreneurs - https://anaa.ro/ , https://fpbihor.ro/ Dedicated sites for entrepreneurs (resources, ideas, support, founding, etc) - https://www.startupcafe.ro/ , https://startarium.ro/
6. Slovenia	Spirit Slovenia entrepreneurship website: https://www.podjetniski-portal.si/programi SPOT – Slovenian business point: https://spot.gov.si/sl/portal-in-tocke-spot/tocke-spot-in-notarji/seznam-tock-spot-svetovanje/ Website for young entrepreneurs: https://mladipodjetnik.si/
7. Ukraine	Site for young entrepreneurs https://sme.gov.ua/ Starting your own business with the assistance of the state employment service http://bit.ly/2wgVRjA https://ifr.dcz.gov.ua/ State aid to economic entities http://bit.ly/2ijlQ2V PRO effective regulation platform https://regulation.gov.ua/
8. The Republic of Srpska/ Bosnia and Herzegovina	Ministry of Economy and Entrepreneurship of the Republic of Srpska https://vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mpp/Pages/default.aspx Development Agency of the Republic of Srpska (RARS) https://www.rars-msp.org Entrepreneurial Portal of the Republic of Srpska http://www.preduzetnickiportalrpske.net/ Chamber of Commerce and Industry of Republic of Srpska https://komorars.ba/ Chamber of Crafts and Entrepreneurship of the Republic of Srpska https://zanatskakomorars.com/ Intermediary Agency for IT and financial services (APIF) https://www.apif.net/

Annex 4: Weighted checklists for trainer consideration

The checklists below reiterate the ones found in Chapter 4 and offer some guidelines for choosing from among them in case their bulk application is not feasible. The scores mean the following:

- **Optional age** – age level where the introduction of this feature can be considered beneficiary (**years, ALL, N/A**)
- **Recommended age** – age level where the omission of this feature can be significantly detrimental to the learning experience of the trainee (**years, ALL, N/A**)
- **Power score** – 1-10 score signifying the expected impact of the introduction of this feature on the learning experience of the target trainee audience (ages 50-65). 1 means little impact, 10 means very significant impact. The impact levels are to be considered relative to each other.
- **Ease score** - 1-10 score signifying the expected ease of the introduction of this feature into a working training environment. 1 means very difficult, 10 means very easy. The ease levels are to be considered relative to each other.

Weighing the features for feasibility depends on the possibilities of the training organization, and they may already be using some or many of the checklists. It is generally advisable for any training organization to achieve at least a **60% global application rate of the features** for the course selected for eDigiStars revision (i.e.: **33 of the 54 proposed features** applied to the course).

Therefore, the Ease scores are to be independently weighed and should inform the decisions to introduce the features case by case. Power scores work a little differently and inform the global selection strategy. It is advisable to keep the average **Power score of the total feature selection over 6.5 for significant impact**.

A4.1. Developing a Working Alliance

	Description	Optional age	Recommended age	Power score	Ease score
1.1	<input type="checkbox"/> Develop trainees' expectancy of positive learning outcome and the sense of efficacy;	ALL	ALL	6	5
1.2	<input type="checkbox"/> Offer hope and optimism;	ALL	ALL	4	6
1.3	<input type="checkbox"/> Normalize worry;	ALL	ALL	8	4
1.4	<input type="checkbox"/> Challenge the faulty beliefs;	ALL	ALL	6	6
1.5	<input type="checkbox"/> Use distraction methods (jokes) when appropriate;	ALL	ALL	5	5
1.6	<input type="checkbox"/> Encourage them;	ALL	ALL	9	8
1.7	<input type="checkbox"/> Go through the agenda of each course with the participants; make a short introduction of the internal structure of the session; take repetitions, let the audience repeat and review;	ALL	ALL	6	9
1.8	<input type="checkbox"/> Present the principles underlying the learning process and repeat them over the session to foster retention; gather feedbacks;	ALL	ALL	7	8
1.9	<input type="checkbox"/> Emphasize the benefits of the training - give practical examples;	ALL	ALL	5	8
1.10	<input type="checkbox"/> Show respect and allow the trainees room for expressing concerns (regarding learning) and being heard; gather information about participant's needs and interests;	ALL	ALL	6	7
1.11	<input type="checkbox"/> Encourage them to express their concerns, their emotions in the time of the training.	ALL	ALL	4	9
1.12	<input type="checkbox"/> Be persuasive and solicit commitment;	ALL	ALL	8	4
1.13	<input type="checkbox"/> Communicate in a friendly way about needed resources, both external and internal;	ALL	ALL	4	6
1.14	<input type="checkbox"/> Respond with empathy to trainees' frustration, slowness, confusion and blame;	ALL	ALL	9	5

A4.2 Learning Environment Adaptation

	Description	Optional age	Recommended age	Power score	Ease score
2.1	<input type="checkbox"/> Enlarge labels and the font of messages;	ALL	65+	6	8
2.2	<input type="checkbox"/> Use a readable font that's at least 19 pixels or 14 points;	ALL	70+	6	8
2.3	<input type="checkbox"/> Choose a mainstream font (serif fonts) that will feel familiar to users and don't use more than 3 fonts;	ALL	65+	3	9
2.4	<input type="checkbox"/> Use boldface to emphasize a word or a small group of words;	ALL	ALL	7	9
2.5	<input type="checkbox"/> Use a line height that is 130% to 150% larger than the font size;	ALL	70+	4	8
2.6	<input type="checkbox"/> Differentiate colour according to their intensity;	ALL	50+	6	6
2.7	<input type="checkbox"/> Use non-reflective surfaces and colour combinations that are not too dark (green, blue and purple);	ALL	50+	6	3
2.8	<input type="checkbox"/> Use contrasts signs, and enlarge illustrations;	ALL	65+	7	7
2.9	<input type="checkbox"/> Use large monitors;	ALL	ALL	4	2
2.10	<input type="checkbox"/> Avoid poor, or blinding lighting conditions in displays which can have a negative effect on attention and even on short-term memory;	ALL	ALL	5	2
2.11	<input type="checkbox"/> Use computer keyboards for seniors, friendly keyboards and icons for android and trackballs with caution whenever appropriate;	ALL	70+	4	2
2.12	<input type="checkbox"/> Create clear linkage between icons' use and their functionality or toolbars for easier navigation;	ALL	65+	3	7
2.13	<input type="checkbox"/> Use diverse learning materials, graphics, diagrams; also include printing option;	ALL	ALL	7	5
2.14	<input type="checkbox"/> Avoid unfamiliar symbols;	ALL	ALL	6	8
2.15	<input type="checkbox"/> Use simple interfaces;	ALL	65+	7	4
2.16	<input type="checkbox"/> Integrate accessibility features.	65+	70+	6	2
2.17	<input type="checkbox"/> Involve younger spokespersons than the average chronological age of the target audience;	50+	65+	4	5
2.18	<input type="checkbox"/> Differentiate between people who feel young and people who feel old;	50+	70+	6	4
2.19	<input type="checkbox"/> Assess the cognitive age of trainees.	ALL	ALL	5	5

A4.3 Teaching Adaptation

	Description	Optional age	Recommended age	Power score	Ease score
3.1	<input type="checkbox"/> Slows down the talking speed;	55+	65+	7	6
3.2	<input type="checkbox"/> Ensures constant pauses between the sentences, all without altering the voice intonation;	60+	70+	5	6
3.3	<input type="checkbox"/> Use an easy and accessible language;	ALL	50+	7	7
3.4	<input type="checkbox"/> Provide detailed information to communicate the advantages of their training;	ALL	65+	5	9
3.5	<input type="checkbox"/> Use different sensory modalities;	ALL	50+	8	6
3.6	<input type="checkbox"/> Repeat themes or concepts both verbally and visually;	ALL	ALL	8	7
3.7	<input type="checkbox"/> Provide a tape recording of the session for review between sessions, particularly for those participants exhibiting more severe sensory or cognitive impairment;	ALL	70+	6	4
3.8	<input type="checkbox"/> Handouts and written feedback are effective tools;	ALL	N/A	7	5
3.9	<input type="checkbox"/> Use summarization;	ALL	ALL	9	9
3.10	<input type="checkbox"/> Plan the training in term of “doing” more than lecture only;	ALL	ALL	9	4
3.11	<input type="checkbox"/> Monitor each trainee’s progress;	ALL	ALL	8	5
3.12	<input type="checkbox"/> Provide instructions in an easier and interactive format;	ALL	ALL	6	5
3.13	<input type="checkbox"/> Providing step-by-step and numbered instructions with figures and a jargon-free language;	ALL	50+	5	6
3.14	<input type="checkbox"/> Present the information in a frequently asked questions format (containing responses).	ALL	60+	4	5
3.15	<input type="checkbox"/> Teach the notions of internet security;	ALL	ALL	6	3
3.16	<input type="checkbox"/> Give trainees time to process the information;	ALL	60+	7	7
3.17	<input type="checkbox"/> Give printed training support materials;	ALL	N/A	7	5
3.18	<input type="checkbox"/> Use meaningful stimuli, associate new concepts with the familiar ones	ALL	ALL	8	4
3.19	<input type="checkbox"/> Use mnemonic strategies	ALL	ALL	7	4

A4.4 Testing Adaptation

	Description	Optional age	Recommended age	Power score	Ease score
3.1	<input type="checkbox"/> Use implicit learning and testing methods;	ALL	65+	6	3
3.2	<input type="checkbox"/> Use procedural learning and testing methods.	ALL	65+	6	3

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