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## I. General description of the project and the partnership

The “Mapping Digital Methods Applied in Adult Education in Partnership” project (MAP) consists of an international cooperation initiative that answers the challenges that the fourth industrial revolution and digitalization have produced in adult education across Europe. Moreover, the COVID-19 pandemic emphasized the urgency of improving digital skills, both for educators and trainers in order to develop better skills required for the labour market and training.

The 2-year project recognizes the need for new training pathways and it aims to ensure that partner organisations can expand their methods and tools to develop digital competences and digital awareness of adults. It also targets networking organisations interested in adult learning and employment.

The partner consortium is made up of:

- Békés Megyei Kormányhivatal Gál Ferenc Egyetem (Hungary): the government office of the county of Békés in Hungary.
- Technikum, Szakképző Iskola, Gimnázium és Kollégium (Hungary): an educational institution offering secondary education and vocational training programmes.
- Kodolanyi Janos Egyetem (Hungary): higher education institution.
- EFCC Estonian Fielbus Competency Centre OÜ (Estonia): a company operating in the field of education and training.
- Tallina Polütehnikum (Estonia): higher education institution.
- Volkshochschule im Landkreis Cham e.V. (Germany): a centre for adult education.
- AJOFM COVASNA (Romania): an entity that is part of the system of County Employment Agencies.
- University of Valladolid (Spain): higher education institution.

With the project’s implementations, employment agencies aim to enhance their ability to address labour market needs by developing human resources, updating existing methodologies and integrating innovative approaches into daily operations. This involves focusing on developing digital skills and adopting modern teaching methods, requiring specific teaching competencies and preparation. The partners’ purpose is improving the methodological training of their teaching professionals in terms of increasing knowledge related to digital competence development and digital awareness of adults. The two Hungarian, German, Spanish and Estonian partner organizations, providers of adult education, share a common goal to increase the quality of their institutions by using digital technology. They also aim to enhance the methodological knowledge of adult education professionals to harness the benefits of innovation.

Over the project’s two-year duration, a continuous training of the professionals of these entities will be carried out through the professional exchange of experience within transnational meetings. During these five meetings, project management tasks will be conducted, and good practices from the host institution and partners will be shared, emphasizing knowledge transfer. These documents will be written in English.

The project’s expected results include:



- A good practice booklet where each partner country featuring four relevant training methods in skills development adaptable to adult education systems in any country.
- A digital competence-training framework for professionals to ensure their methodological preparation in adult education.

After the development, partners will propose necessary improvements tailored to their countries, considering their adult education systems, organizational needs, professional field gaps, and experiences from project implementation. In the implementing the project at local level, we expect each partner organisation to incorporate the good practices and methods learned from the partners. The use of innovative methods can contribute to the development of adults' digital competence, improve access to higher-level training, reduce dropouts, and support labour market integrations. In the long time, it is expected that people's digital awareness will increase and the institutions will offer training in a more effective and flexible way according to individual needs.

## **II. General overview of the national situation of the basic education development for adults in the partner countries**

### **Estonia**

In Estonia, Adults can choose between full- or part-time learning and acquire both formal education, or basic education, secondary education and higher education, and gain knowledge through informal education or refresher training.

#### *General secondary education*

Adults can acquire basic education and general secondary education at adult upper secondary schools. Education can also be acquired at non-stationary learning departments that have been opened at general education schools. The acquisition of basic education and general secondary education in state and municipal educational institutions is free of any tuition fees.

Both people who have recently exceeded the age of compulsory school attendance and older people can study at adult upper secondary schools; people can also study according to their own needs –study single subjects or according to individual curricula. The students have the right to take a leave of absence from studies for one year once every three years.

#### *Vocational education*

Schools provide different stationary and non-stationary study options (different options for cyclical studies, which take place during weekends or in evenings, at a reduced load, or over an extended period) for adults who have jobs and families based on their needs and demands. It is therefore recommended that you contact the respective school directly to receive information on study options. The acquisition of vocational education is generally free for students, but private schools also have paid student places.



Concurrently with vocational studies, students can finish their unfinished basic education, but this is not mandatory. Basic education can also be acquired after the acquisition of vocational education.

Information about vocational schools is available via the Estonian Education Information System or the vocational education portal.

### *Higher education*

Both institutions of professional higher education and universities offer flexible forms of study to adult students, and full-time or part-time courses of study, or studies as an external student are available.

Students mostly have to pay for the acquisition of higher education in the form of part-time courses of study or as an external student.

When enrolled in full-time studies, a need-based study allowance can be applied for; a student loan can be applied for both when studying full-time or part-time.

The Unemployment Insurance Fund supports the studies of both unemployed and employed persons in vocational and higher education. The allowance for participation in formal education is offered to persons who have no vocational or professional education, who obtained it many years ago or whose health does not allow them to continue working in their current position.

### *Refresher training*

Refresher training helps improve your professional knowledge and skills. Private educational and training institutions, vocational educational institutions, institutions of higher education, and professional associations provide refresher training.

The Unemployment Insurance Fund's career counsellors give advice on making professional decisions and planning your career. Counselling covers topics related to studying, the workplace and choosing an area of specialisation. Everybody can obtain career counselling and the service is free of charge.

In most cases, the student or their employer shall pay for vocational training. In the event that a person pays for their refresher training, the person is entitled to an income tax refund in the amount paid for the education.

Free training courses are provided by the Ministry of Education and Research, which take place at vocational educational institutions and institutions of professional higher education. Adults without a professional education or secondary education can attend these courses. Free courses help people aged over 50 renew and improve their knowledge and skills, and people with lower levels of education or outdated qualifications are especially welcome to attend free courses.

The Unemployment Insurance Fund provides free labour market training to unemployed people.

The Estonian Education Information System (EHIS) provides data on the education licences issued to and notices of economic activities submitted by general education schools, vocational schools, institutions of higher education, and refresher training institutions for adults.



Informal education training courses enable people to study what they are actually interested in. Completing such courses does not normally result in a qualification, and the students must pay for these courses.

Training centres of informal education, folk high schools, culture centres, and many other centres provide informal education courses.

## Germany

According to the German Educational Council (“Deutscher Bildungsrat”), adult education and continuing education are defined as the “continuation and resumption of organised learning after completing a first phase of education varying in length”. Therefore, the purpose of this form of education is to deepen, expand, update or acquire knowledge, skills and competences targeting people who are know either working, are currently looking for work or are dedicated to their families.

Adult education implies continuing education in various fields like vocational and company-related education, training and retraining, general education political education, trade union education and cultural education. In Germany, there are various suppliers and responsible bodies for adult education/continuing education, among them the following:

- Volkshochschulen, there are nearly 1.000 all over Germany, organised in associations
- Various social bodies, like churches, trade unions, business and welfare organisations
- Vocational bodies, like Chambers of Industry and Commerce, Chamber of Crafts
- Formal schools, like vocational secondary schools, technical secondary schools, universities
- Private providers

In Germany, adult education is based on a wide range of regulation and laws that are intertwined, but also follow different aims. The reason for that large field of rules is that in Germany education is not organised on federal level, but on state level. This means that the individual states are allowed to make their own rules and so, e.g. adult educational laws in Bavaria might slightly differ from them in Berlin. Although the laws could be distinct between the states, in general, they follow specific aspects: 1) Securing the basic structure of adult education through institutional support. 2) Organisational independence. 3) Qualifications of teachers and their further training. 4) Cooperation with other educational institutions at municipal and state level. 5) Open access for everyone.

Regarding digitalisation in the past years several, one of the most important strategies was presented in 2016 in the Conference of the Ministers of Education: “Education in a digital world”, which provided the basis for an action plan on how to incorporate digital aspects in education (initially in school education, but later the strategy was expanded to adult education). Surveys conducted in regards to this strategy showed that among adults, especially women, people with a migration background, low-level formal education or elderly people are affected by a lower level of digital competences.



Furthermore, the Initiative D21, one of the main research institutions in Germany referring to digitalisation, revealed within its “digital skills gap” report from 2020/2021 that:

- Many citizens use digital applications and devices with confidence, but only a few understand the mechanisms behind them.
- Almost everyone knows how to obtain information on the internet, but many people often find it difficult to make critical judgements.
- Almost all of the younger generation can "post" content, but very few know whether content is legally protected.
- Those who tend to be digitally marginalised in particular do not have the confidence to acquire digital skills on the internet themselves.
- People who would particularly benefit from digital services are less familiar with them and see less need to develop their digital skills

To counteract these developments and to improve digital competences, in 2022, the German Federal Ministry for Education and Research developed a so-called “digital strategy”. Research showed that people in Germany mainly have basic skills referring to computer applications and the internet, but they are missing digital competences (e.g. big data, data analytics) – and the use of media currently being very heterogeneous in society – the aim of the digital strategy is to imply digital competences as a part of general education. Strengthening digital competences in adult education also aims at improving participation in a society that increasingly relies on digital media. This is why the Ministry in cooperation with Volkshochschulen promotes digital education in the following way: 1) course offers to learn in a digitalised world. 2) Mediating media competence. 3) Improving digital competences of trainers to professionalise them in their function as multipliers. These aims – among many others formulated in the “digital strategy” – are supposed to be achieved until 2030 to contribute to a more digitally competent German society.

## Hungary

Since 2010 Hungary has been significant developing and digitalization is no exception. Super-fast internet was installed in almost the entire territory of the country, so the proportion of households with access to broadband infrastructure increased from 50% to 96.7%. The proportion of households that actually use the Internet rose from 50% in 2010 to over 83% by 2021. Thanks in large part to the rise of smartphones and the spread of the mobile internet, the proportion of people who withdraw from the world of the internet has dropped below 10%. The number of businesses that use state-of-the-art digital solutions has also increased.

However, based on the data included in the DESI (Digital Economy and Society Index) 2022 country report, Hungary is only in 22nd place overall. According to the overall results, the rate of development in Hungary is similar to the rate of growth in the EU. In the last 5 years, Hungary has achieved the most significant development in the dimensions of internet access (75% increase compared to 2016) and the integration of corporate digital technologies (60.8% increase compared to 2016), while practically stagnation can be seen in the human capital dimension, and there was a smaller increase in the field of digital public services.



In the case of the Human capital dimension, according to the 2022 report, Hungary ranks 23rd among the EU member states. The Hungarian data for this dimension have been lower than the European Union average every year since 2016, with the exception of one indicator (ICT graduates), there is no data in which Hungary is not lagging behind. According to the survey, less than half of the affected Hungarian population (49.1%) has basic digital skills, while this ratio hovers around 53% considering the average of the EU countries.

In 2022 Hungary has the 25th place overall in the competition of the European Union member states in the Integration of digital technology dimension. Till nowadays Hungary has the worst indicators in the business (especially SMEs) segment.

In recent years, mainly with the help of EU funds, a significant number of target groups have been reached with various training programs.

In 2017, the Digital Welfare Program supporting digital knowledge development was launched, one of the most important objectives of which is to give every citizen and every business a chance to advance in their digital preparedness. Citizens and businesses should not be protected from digitization, but should be prepared for it. The reader can find more detailed information about the program in the good practices chapter of this publication.

In the 2014-2020 programming period, within the framework of the GINOP-6.1.2-15 priority project, nearly 260,000 people obtained certificates in training aimed at developing the digital competence of the population. Within the framework of the EU program supporting company training, 138 large companies implemented ICT training, a total of 6,514 people were trained in IT. 1,011 employees of 55 large companies took part in IPAR 4.0-themed trainings, and 13,374 employees of 657 SMEs received IT-related training.

In the recent years and decades, digitization and digital solutions have been appeared in educational institutions as processing that improve the efficiency of learning. The renewal of the digital competence of more than 40,000 teachers was realized in the priority project launched to promote the introduction of information communication technologies and digital education into daily practice. In addition to methodological strengthening, the project also ensured the provision of IT tools to educational institutions and teachers, contributing to the development of a quality and fair public education system, reducing school leaving without a qualification, successful participation in lifelong learning.

In the period 2021-2027, the "Improving the adaptability and productivity of employees and companies through workforce development" program provides a total of HUF 70 billion for developing the skills of nearly 70,000 employees. ICT courses play a prominent role in the program. It is expected that from 2024 it will be possible to provide support for participation in training within the framework of priority programs that support the development of jobseekers' adaptability to the labor market, including the development of their digital skills.

According to the vision of the National Digitalization Strategy adopted by the Government in 2022, Hungary recognizes the necessity of digital transformation and places modern, high-speed broadband infrastructure, the digital economy, the development of digital competence and digital public services at the center of its competitiveness and modernization efforts.



## Romania

Romania, like other EU states, is facing a series of labour market challenges primarily driven by declining birth rates, an aging population, labour migration, and a negative natural population growth. Additionally, overlapping crises in healthcare, energy, and geopolitics have generated additional tensions that require appropriate actions and measures to counteract.

In this context, adult education is a crucial tool to address these turbulences and to promote social inclusion and cohesion.

The professional training of adults includes both initial and continuous professional training organized in forms other than those specific to the national education system.

Initial professional training for adults provides the necessary preparation to acquire the minimum professional competencies required to secure employment.

Continuous professional training follows initial training and ensures that adults either develop the professional skills they already possess or acquire new competencies.

Adult professional training is organized through programs such as initiation, qualification, requalification, improvement, and specialization.

Forms of adult vocational training implementation include:

- Courses organized by vocational training providers.
- Courses organized by employers within their own units.
- Internships and specialization programs in domestic or foreign units.
- Other forms of professional preparation (e.g., through centres for evaluating professional competencies obtained through pathways other than formal education).

Workplace vocational training based on an apprenticeship contract is organized at the initiative of employers, by authorized vocational training providers in accordance with legislation concerning adult vocational training. The qualifications acquired through apprenticeships are included in nationally recognized qualification frameworks, using the European Qualifications Framework as a reference point.

The vision on education and training in Romania is: "In 2020 the education and training system in Romania will meet the demands of the labour market and the needs of the beneficiaries direct by capitalizing the competences and abilities of the human resources"

Romania is the lowest-ranking (27th) EU Member State the 2022 Digital Economy and Society Index (DESI). The country is struggling in the human capital dimension, with a very low level of basic digital skills compared to the EU average but maintaining high rankings in the proportion of female ICT specialists in employment (ranking 2nd) and ICT graduates (ranking 4th). To meet the Digital Decade target on basic digital skills and ICT specialists, Romania urgently needs to accelerate its digital skills readiness.

Developed by the Ministry for Information Society, the Strategy for the Digital Agenda of Romania 2020 was established with the support of other government agencies and public institutions, including agencies from the Romanian Ministry of Health, Ministry of National Education, Ministry of Finance and Ministry of Transport.



In 2020, The Strategic Initiative for Digitization of Education in Romania SMART-Edu 2021-2027 was developed and went into the public consultation stage. The objective of the Strategic Initiative is to reduce digital gap and increase socio-economic integration by enhancing digital skills and internet usage among the general public and disadvantaged groups. This will be achieved by organising training sessions tailored to the needs of the community.

## **Spain**

In Spain, adult education aims to provide individual over 18 years of age with the opportunity to acquire, update, complete, or extend their knowledge and skills for personal and professional development. It also includes both formal and non-formal education and is mainly intended for people over 16 years of age who may not have completed their studies, lack qualifications, or wish to broaden their education. Over the past 15 years, education in Spain has been constantly evolving and adapting to meet the needs of society, increasing thus 12.18% in the average education level.

In the context of digital competences, there is a need to develop citizens' digital competences so that they can use technological resources to achieve their personal and professional goals. In Spain, there is a lack of basic digital skills among adults, but in the case of workers, it is one of the European Union countries where 47 % are interested in training to improve their skills.

Therefore, digital skills training for adults is important to prevent their digital exclusion, promote their social inclusion, and improve the economy, education, public services, financial inclusion, security, and political participation.



### **III. Good/best practices applied in the field of digital competences development for adults**

#### **Estonia**

#### **1. Baltic Computer System Koolitus - Basic Digital skills for building Digital Society**

##### **Aim and background of the program**

Digital skills strongly support employment and well-being in the society. Without digital skills the access to government services and possibilities in the labor market are limited.

So, for the whole society it is critical to address the digital divide and reduce the share of non-users of computers and the internet.

Examples: Large-scale digital literacy training programs (basic computer and Internet skills - how to run nationwide training programs engaging 1/10th of the adult population provided by Look@World initiative.

##### **Target group of the program**

All those people who see the "E-Citizen" training as an opportunity to learn new tricks and make their computer use more convenient and efficient are welcome.

The training participant is not expected to have previous IT or computer skills.

##### **Activities implemented during the program**

E-Citizen program for systematic and continuous development of general public digital skills via hybrid, needs based workshops.

As part of the "E-Citizen" course, one will learn how to use various online tools such as e-mail service, Google calculation and word processing programs and map applications are also looked at.

Communication in social networks and e-safety are also not overlooked, it becomes clear that we should take a critical view of the information found on the Internet and it is reasonable to review our writing or images before uploading them to the web.

##### **Results of the programme**

Uses a computer and other smart devices (tablet, smartphone, etc.) independently at a basic level.

Has basic knowledge of more common computer hardware, software (including free software) and file management.

Knows the risks of cyberspace and knows how to avoid them.

Can search for information on the Internet (including the websites of state and municipal authorities).

can use the e-mail address; can use more common social software and networks; composes and formats simple text documents independently; constructs and processes simple spreadsheets using the manual.

## 2. Tallinn Central Library (Tallinna Keskraamatukokku)

Tallinn Central Library is a public library that serves all the inhabitants and visitors of Tallinn. Tallinn Central Library opened its doors to the public on the 27th of October 1907. The first branch library was opened in 1926 and a network of branch libraries started to spread through Tallinn. Today Tallinn Central Library has 17 branch libraries and a mobile library Katarina Jee. Tallinn Central Library is open to everyone, offering access to information, knowledge, skills and culture.

### Aim and background of the programme

Library offers free classes to all readers who wish to develop their digital information literacy skills. Classes in the library are free for readers.

All the branch libraries and departments of Tallinn Central Library offer library tours, private or group classes for our present and future readers, teachers, elementary and high school classes and kindergarten groups.



Needs, interests and desired outcome are specified in pre-registration.

Offered classes are:

- Computer basics (includes creating an email account)
- Counseling for job seekers
- E-services
- Facebook basics
- Homework help
- How to use graphics tablets
- How to use the eReader
- How to use Table Scanner
- Internet and information sources
- Introduction to e-libraries
- Library Web Page
- Music classes in the library



### Target group of the programme

Within the rich program of courses offered by the Library, it is possible to recognize classes specially meant for elderly persons.



In particular, the Computer basics class is meant for elderly persons with little to no computer skills. In pre-registration the prior computer experience is specified. Accordingly a personal training program is set up.

Purpose of the class is to teach computer skills taking account of the prior experience of a reader.

Main subjects are:

- Getting acquainted with the computer, keyboard and mouse
- How to find information on the internet
- How to create an email account and how to use it
- Getting acquainted with e-catalogue ESTER
- How to use library`s website
- 

A reader who has passed the training is able to find necessary literature using e-catalog ESTER, find information on the Internet, use the library`s website and communicate over email.

Duration is 1-1,5 hours.

The Internet and information sources class offers to elderly persons the knowledge and the ability to use internet and different information sources enables to find rapid answers to all questions emerging in everyday life. The knowledge acquired can be used in studies, work and leisure activities.

The aim of the training is to give the reader knowledge and experience that will enable to find necessary information on a particular subject, book or article.

Main subjects are:

- Defining information necessary to carry out tasks within a field of work or study
- Comparison of Google and NETI: differences and similarities
- Getting acquainted with Tallinn Central Library web site. Overview of possibilities and services the library has to offer and what kinds of materials are available.
- How to use e-catalog ESTER
- Database of Estonian articles ISE and how to use it
- Database EBSCO
- Information literacy

At the end of the class, the participant can differentiate between sources of information and is able to use them.

Duration is 1 hour

The E-services class is meant for readers with little or no experience using ID card based e-services.

The purpose is to provide readers with necessary skills and knowledge that enable them to use different e-services independently.

Main subjects are:

- Public e-services (ID-ticket, e-School etc)
- E-banking (SEB, Swedbank etc)

- State institutions (e-Tax Board, eSTAT etc)
- E-services of companies (EMT, Eesti Energia etc)
- City of Tallinn`s e-Services
- Library`s e-Services (ELLU, Minu ESTER)
- Digital history (My eHealth – prescriptions, information about the family doctor, survey results etc)
- State portal Eesti.ee
- Web pages with ID support

The participant will be able to distinguish between different e-Services and use them.

In the Tablet and Smartphone basics class, readers will get acquainted with the general principals and ways of operating these devices. Helpful hints for using a Smartphone or a Tablet are given and suitable apps for download recommended.

Main subjects are:

- For what are those applications meant?
- How does a smart device simplify your life?
- What is Android, iOS and Microsoft Windows?
- What is an application and how to use it?
- What is Google Play?
- What is mobile ID and how to use it?

The participants can either use their own Tablet or librarys device Google Nexus 7 (16 GB).

A final example is the Counseling for job seekers class

This class provides instructions on where to look for a job, what to keep in mind when looking for a job, and how to have a successful job interview. A valid email address is required to participate in the class. If the reader doesn't have an email address, one can be created in the class.

Main subjects are:

- Job seeking portals – where and how to look for a job
- Creating a CV or curriculum vitae in job seeking portals or word processors
- Applying for a job and going on a job interview – general requirements
- Literature on the subject



### Activities implemented during the programme





The Department of Literature in Foreign Languages offers consultations for new arrivals in English, French, German, Russian and Ukrainian. They will talk about library use and services, finding necessary information sources, e-services and a variety of other topics that might interest the customer.

People who do not speak Estonian as their native language can practise Estonian in language cafés.

How to use a computer? What public e-services are available to use? How to order food from e-stores? New arrivals will find the answers to these and many other questions in suitable classes.

### Activities of the Tallinn Central Library

The Library offers and develops library services according to the needs of the users, helping to increase people's activity in community, helping them to be informed and enabling them to be worthy members of society. The Library mission is to promote lifelong learning, to increase joy of reading in all generations, to offer inspiration and experiences, to create opportunities of self-expression and – development and communicating with each other and with the world.

The library services include home lending service (inc e-book readers, sports equipment), in-house use (including graphic tablets), reference service, computer use, patron training, home delivery service, literature events etc.

Readers only need one unified library card or their Estonian ID-card/recidence permit card to use the services in any of our departments or branches.

Internet workstations are available in the Department of Literature in Estonian, in the Department of Foreign Language Literature and in all our branch libraries.

The computers are equipped with Open Office or Libre Office software, which are both mostly compatible with MS Office documents. Every branch library has at least one computer with MS Office 2007 or 2010 software.

## Results of the programme

Public library has a very important role in a community. Either consciously or unconsciously people expect the Library to be there for them, to help them to be part of a community and society. In order to do that the Library has to notice what is happening around. Estonia is known as an IT based country. There are a lot of things you can do electronically: buy a bus or a train ticket with your ID-card, vote, book a time to a doctor, give a digital signature (for instance if you want to use ID-card as Tallinn Central Library's library card) etc. However, a lot of elderly people don't even know how to use a computer mouse, children, youngsters and parents don't know about internet dangers etc; people who are looking for a job, don't know how to find job ads from the internet, how to compile a CV and how to post it to different job portals. Therefore, the Central Library offers all kinds of user trainings and had an important part in a project called "Come along!" (Ole Kaasas!), which aimed to provide basic and advanced computer training to 100 000 people and to connect 50 000 more families to the Internet. An innovative approach of the "Come along!" project was the use of Mobile training boxes, like the one shown below.

Come Along! training projects:  
**Mobile training boxes (5)**

Mobile training box in Tallinn Central Library



Come Along! training projects: Support centers for the use of e-services Advising, training and obtaining feedback from potential users of e-services in service bureaus of organisations and enterprises providing public e-services, practical personal ID-training. Support centers for the use of e-services in the service bureau of Tallinn.

Come Along! training projects:  
**Support centers for the use of e-services**



Advising, training and obtaining feedback from potential users of e-services in service bureaus of organisations and enterprises providing public e-services, practical personal ID-training.

Support centers for the use of e-services in the service bureau of Tallinn City Office

Come Along! training projects:  
**eBus**

Training on the use of e-services and ID matters in a bus/computer class riding through Estonia



Another innovation brought in by the “Come along!” project was the eBus, to bring computer classes and education services in any part of the Country.

Finally, the Tallinn Central Library has gathered seniors to its virtual chat rooms, where in addition to new knowledge, new friendships have been made.

They take on different subjects, talk about everyday life, nature, theatre, culture, and books, computer subjects are very important. This is a great opportunity for strangers to get together and start communicating more and more.

The chat club runs from Monday to Friday from 11 a.m. to 12 p.m. More information is available on the website of Tallinn Central Library in the section Õnnelik senior raamatukogus ("Happy senior in a library").



### **3. Tallinn Folk High School**

#### **Aim and background of the program**

Tallinn Folk High School is an educational institution administered by Tallinn City Government. It offers every adult person possibility for continued education in the form of theoretical and practical courses in Tallinn.

Our aim is to place a great value on life-long studies providing highly qualified schooling and opportunities to get acquainted with new people, their ideas and experience.

The forerunner of Tallinn Folk High School was first opened in 1959. At present, there are approximately 90 experienced and inspiring teachers who teach at our courses every year. We provide about 300 courses every year to 3500 participants during the academic year.

We are delighted to offer courses in the following fields: culture and society, psychology and self-development, languages, art, handicrafts, nature and environment, health and beauty, cookery, computers and digital skills, theatre and drama, movement, dance and music.

The selection of courses is constantly changing; however, some are repeated from year to year like several courses in art, calligraphy, handicrafts, learning to play musical instruments.

The majority of the courses are in Estonian, although time to time we run some in English and Russian.

The schooling takes place in the city center – at 5A Estonia Avenue, at 6 Vene Street and 56 Telliskivi. In addition, we are now offering many courses via online.

#### **Target group of the program**

Tallinn Folk High School offers adults of all ages a wide range of opportunities for self-development and leisure.

#### **Activities implemented during the program**

The volume of training is measured in academic hours. One academic hour corresponds to 45 minutes. Courses usually last 2–3 academic hours at a time. The duration of training varies from a few hours to several months.

The volume of physical activity courses and hobby trainings that continue throughout the academic year is measured in astronomical hours of 60 minutes. As a rule, hobby trainings start in September and end in May, and it is possible to join the groups throughout the year.

#### **Results of the program**

Tallinn Folk High School has been assigned to the European Quality Mark (EQM) which designates a system which guarantees the quality of the educational institutions that provide unofficial education all over Europe. Quality is our priority.



## 4. EFCC Estonian Fieldbus Competency Centre

### Aim and background of the programme

The term Industry 4.0 refers to the combination of several major innovations in digital technology, all coming to maturity right now, all poised to transform the energy and manufacturing sectors. These technologies include advanced robotics and artificial intelligence; sophisticated sensors; cloud computing; the Internet of Things; data capture and analytics; digital fabrication (including 3D printing); software-as-a-service and other new marketing models; smartphones and other mobile devices; platforms that use algorithms to direct motor vehicles (including navigation tools, ride-sharing apps, delivery and ride services, and autonomous vehicles); and the embedding of all these elements in an interoperable global value chain, shared by many companies from many countries. Industry 4.0 is commonly referred to as the fourth industrial revolution.

Industry 4.0 describes a fundamental change: it combines traditional production methods with state-of-the-art information and communication technology. Intelligent, digitally networked systems will enable self-managing production processes possible and improve both efficiency and quality.

EFCC has developed a specific know-how in the area of Industry 4.0 and innovation. In fact, EFCC believes that the underlying concepts of Industry 4.0 can be very useful also in everyday life and that to master these concepts is the key to a better future: whether you want to become a teacher or a medical doctor or the manager of a company, concepts like networking, Blue Ocean, Artificial Intelligence, Digital Twins and many others will be part of your life and will help you to make better decisions, to co-operate with others and to create something new, with positive results for you and our society as a whole.

This belief led EFCC to develop a catalogue of courses that help to understand and apply the Industry 4.0 principles and technologies in many different situations.

#### *A unique way to enter in a market before competition*

In 2005, W. Chan Kim and Renée Mauborgne published a book that, even today, is taken as a reference by many business strategists. The book was called "Blue Ocean Strategy".

Today, in the era of Industry 4.0, many mistakenly believe that to make a company intelligent and competitive it is enough to invest in new technologies, to be introduced in every part of the company itself: from design, to production, to warehouse, to marketing, to supply chain management and so on. Unfortunately, this is not always the case: "garbage in, garbage out" was once said. A badly functioning company will continue to do so, even if it is full of computers. What needs to be done, however, is to review things from the beginning, starting from the business model. Once the business model has been created from scratch (or revised), you can proceed with the classic SWOT analysis and only then start choosing the most suitable technologies. W. Chan Kim and Renée Mauborgne tell us just that. The book does not talk about technology, but only about strategy and business model.

The Blue Oceans strategy suggests that it is better for a company to operate in uncontested markets (called "blue oceans") instead of fighting competition in existing spaces ("red oceans"). It is useless to open a new café, there are already many. Better to open a place



where you can read the newspaper or a book, play chess, etc. and maybe, in the meantime, have a coffee. A bit like Starbucks did, which, in fact, has become the leader in its market segment. It is therefore the idea of trying to find spaces by creating and capturing new demand and making competition irrelevant. Irrelevant because, often, it does not exist. How to create a Blue Ocean strategy, then? It is innovation that makes winning. And technology is at the service of innovation, because it makes it possible.

The Blue Ocean strategy is based on the ability to create a new market demand, rather than sharing it with other players in the sector. Based on the study of 150 strategic initiatives developed in more than 100 years in 30 sectors, the authors argue that lasting success does not derive from the battle against competitors but precisely from the creation of "blue oceans", ie new untapped market spaces. Companies should create demand in a new market characterized by low competition rather than compete with other companies for the same objectives.

In conclusion, a Blue Ocean approach can help any company to create an irresistible brand, whatever is the market segment the company is working in.

## **Target group of the programme**

The primary target group of the programme are people working in public or private companies.

EFCC Estonian Fieldbus Competency Centre has a long experience in teaching and training activities to students of any age: from primary schools to Technical Universities, to staff of private companies.

These activities allowed EFCC Estonian Fieldbus Competency Centre to implement an effective method that is appreciated by its partners and customers.

The main ability of EFCC is to encourage people to co-operate, share ideas, create international networks, exchange experiences. And EFCC believes that the best ways to achieve this target are the educational games, the meetings with people from other countries, the informal environments.

Some of the courses offered by EFCC are:

- Fundamentals of Industrial Automation
- Industrial Controllers
- Fundamentals of Industry 4.0
- Communication technologies (fieldbus and networks)
- Automatic identification
- The supervision of plants and machines
- Blue Ocean strategy: how to compete in a market without having competitors
- How to build and manage a supply chain
- Automation and communications in the food and beverage industry
- Fundamentals and use of Mind Maps to better take strategic decisions

EFCC can also arrange courses on customer request.



## Activities implemented during the programme

This programme is aimed at the training citizens and workers about Industry 4.0 technologies and their applications in professional situations and in everyday life.

The following services are available:

- Face-to-face and online training: On EFCC website, you can find various training courses that can be delivered face-to-face or online.
- Technological advice: this is a personalised service for queries or doubts related to the new technologies.
- Entrepreneurs and small businesses: events/meetings with experts for the digital transformation of the self-employed and small businesses.
- Digital training courses covering different topics to the use of information and communication technologies, addressing different themes:
- Training in digital skills, including courses on the use of Industry 4.0 technologies such as Internet of Things, Big Data, Cybersecurity, Communication networks, Automation, Artificial Intelligence, Augmented Reality, 3D Printing
- Training in applications of Industry 4.0 technologies in different sectors, like Food&Beverage, Logistics, Electronics and Manufacturing
- Training in Blue Ocean Strategy

EFCC uses a variety of method and strategies to attract interested people:

- Promotion and dissemination activities, with the implementation of promotion and dissemination campaigns in different media, such as press, podcasts and social networks. These campaigns highlight the benefits of acquiring digital skills and how they can improve citizens' job and personal opportunities
- Strategic alliances with education institutions, business organisations and other relevant digital stakeholders. These collaborations allow the initiative to expand its reach and reach a wider audience
- Participation in events and fairs related to education, training and technology. These events provide the opportunity to interact directly with stakeholders, provide detailed information about the programme and answer their questions
- Through its online platform, people can obtain detailed information about the programme, the different courses available, the requirements, enrollments dates, etc.
- In addition, personalised advice and support is offered to people interested in training, including guidance on which courses are most suitable according to their individual interest and objectives or clarify specific doubts and queries.

### 1. Creators of the programme

Valerio Alessandrini: As an Electronic Engineer graduated in Milano, Italy, the technical director of EFCC has been involved in some of the technical arguments that lead to Industry 4.0. Lectures and keynotes for customers like the Tallinn Technical University, the Zigurat Global Institute of Technology (Barcelona University) and international Erasmus+ projects, plus a partnership with the German Innovation Center for Industry 4.0 (Regensburg), GFCC (Genova) and GISI (Milano) are among his recent references, from which some books resulted and also the open LinkedIn group 'Industry 4.0 in Europe'. Since he became an Ambassador of

the past Watify and I4MS initiatives (European Commission) he was committed in helping specially small and medium companies in their roadmap towards the technological innovation through a better understanding of digitization/digitalization.



## 2. Activities of EFCC

EFCC operates in the main areas of R&D, Engineering and Services.

- In the R&D area, EFCC manages research projects related to real market needs or related to framework programs (Horizon 2020, etc.). The main arguments are in the areas of embedded electronics, FPGAs, industrial automation and industrial communications. Some of the projects result in real products being manufactured and sold internationally by EFCC or by EFCC and partners in co-branding.
- In the Engineering area, EFCC created in Estonia an independent Competency Center on Industrial Automation and Industrial Communications. The professionals of EFCC are able to work virtually in any part of the world performing activities like 'in situ' diagnostics and troubleshooting of automation systems and communication networks, monitoring and maintenance of automation systems, training of operators, etc.
- In the Services area, EFCC organizes conferences, training courses, certified training courses, webinars and seminars. Moreover, through its partners, EFCC supports Estonian companies wishing to be enter into foreign markets and foreign companies wishing to enter into the Baltic market by organizing b2b meetings with local partners, conferences and workshops, local exhibitions, publications, etc.

Moreover, through its partners, EFCC produces and sells books and technical publications.

## Results of the programme

EFCC was established the first of January, 2015. The initial headquarters were at Mektory, the Innovation Center of Tallinn Technical University. During the first eight years of activity, EFCC offered courses and services to individuals, companies, educational organizations (schools and universities) and associations in Estonia and abroad, following its Blue Ocean strategy.

Though the headquarters are still in Tallinn, EFCC decided not to have a traditional office, to be more close to the customers. For this reason, the location of face to face courses is decided time by time with the customers: it can be at the customer premises, in a room rented from a school or a university, in a conference centre, etc.



All the educational material is normally uploaded on the Cloud, therefore the customers can download what they need at anytime.

Hundreds of customers have been educated in this way since 2015, and every customer had a customized course exactly responding to his/her requirements. In fact, EFCC believes that technologies are tools that should be selected only after the roadmap to innovation has been defined with the customer.







## Germany

### 5. Digitalisation in Volkshochschulen (adult education centres)

#### Aim and background of the programme

The mission and aspiration of Volkshochschulen (Adult Education Centres) is to give all people the opportunity to participate and actively shape social change and thus also digital change. They support learners in acquiring skills in dealing with digital media and new technologies.

If people from all population groups are to be empowered to keep up with the digital transformation, a contemporary and efficient infrastructure is needed. An effective transformation process in the Adult Education Centres must take cross-cutting issues into account, promote innovation and exchange and include digital organisational development. The Adult Education Centres therefore call for a comprehensive digitisation offensive with targeted investments in the digital infrastructure.

(Source: DVV, 2023, <https://www.volkshochschule.de/bildungspolitik/digitalisierung/index.php>)

#### Target group of the programme

VHS' are predominantly adult education institutions, however, to follow their mission "education for everyone", their programmes are open to anybody and so should digitalisation offers of the institution offers be.

#### Activities implemented during the programme

To become fully digital, VHS' need to base their digital strategies on those four pillars (according to suggestions from DVV, 2023):

- Digital infrastructure and equipment

An indispensable basic prerequisite for the design of digital and digitally supported educational processes is the expansion of the digital infrastructure in adult education centres. In order to further develop the technical equipment in continuing education in a modern and needs-oriented manner, financial support from the federal government is required. This is the only way to ensure the connectivity and future viability of adult education centres in times of digital transformation. (DVV, 2023)

An example from VHS Cham: following the digital infrastructure, VHS implemented digital whiteboards in its vocational schools and offered online classrooms for many courses, e.g. from sports activities to political discussions. One of the tools that was used for this purpose was the VHS cloud, an online network that could be used by all VHS'.



- Education for digital competence development

In a digitally networked world, adult education centres have the mandate to accompany people in the development of digital skills. To this end, they already offer numerous educational opportunities for participation in digitalisation processes. The spectrum ranges from questions of data security, to pure application knowledge of various programmes, to questions of critical media and information competence, when it comes to the democracy-strengthening distinction between facts and fake news. Conducive framework conditions are needed for the expansion of these educational measures so that digital competence development can continue to be guaranteed. (DVV, 2023)

An example from VHS Cham: the institution offers special PC courses for seniors to ensure that they are not left out in regards to digitalisation.

- Further training and qualification

Without qualified teachers and staff, digitally supported education management will not be able to establish itself. At the same time, course instructors, as multipliers, can have an enormous impact on digital competences in the population at large. (DVV 2023)

An example from VHS Cham: the institution is involved in many international digital projects, which enable the participation of teachers and trainers in courses and trainings in regards to that topic, to learn from other countries approaches.

- Exchange and networking

In order to achieve the goals in all fields of action, the exchange and networking between all actors in digital continuing education must be supported.

An example from VHS Cham: the institution is highly involved in national and international projects in regards to digitalisation, in addition there is a constant exchange with the umbrella associations BVV and DVV.

## Results of the programme

- VHS cloud has been developed
- Trainers and teachers become more and more familiar with digital competences
- Learners benefit from the digital competences of teachers
- Learners develop themselves digital competences

*VHS cloud, find out more: <https://www.volkshochschule.de/verbandswelt/service-fuer-volkshochschulen/vhs-cloud/index.php>*



Erasmus+



Neuigkeiten aus der vhs.cloud

14.07.23

vhs.cloud  
Zoom X in der vhs.cloud

10.07.23

vhs.cloud  
Neue BigBlueButton Version verfügbar

24.03.23

vhs.cloud  
Neu: „Basiswissen DigComp“

10.03.23

vhs.cloud  
Vorstellung Selbstlernkurs „Basiswissen DigComp“



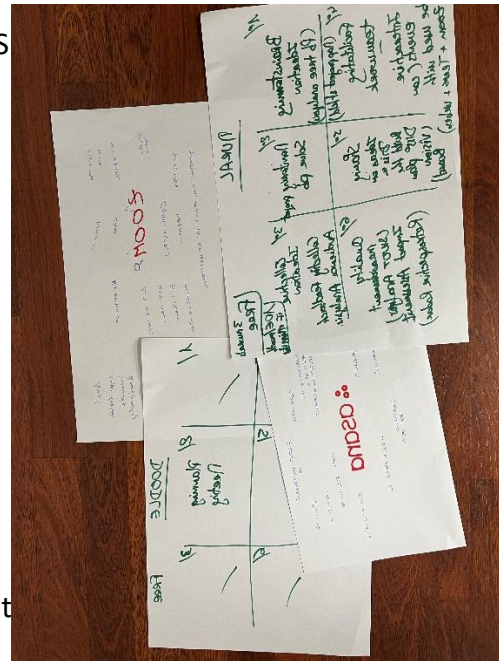
Alle News rund um die vhs.cloud



VHS

France

for t



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## 6. Technologiecampus, Institution for digitalisation

### Aim and background of the programme

Technologie Campus – technology campus – is a centre targeted at innovation and research in a regional area, outside of conurbations. It supports small and medium-sized companies and regional industry in all aspects of technological – and also digital – developments.

### Target group of the programme

The target group of the programmes of the institution is diverse: from regional actors, companies, students, graduates and teachers as well as professors – they are all involved in the digital aspects of the institution.

### Activities implemented during the programme

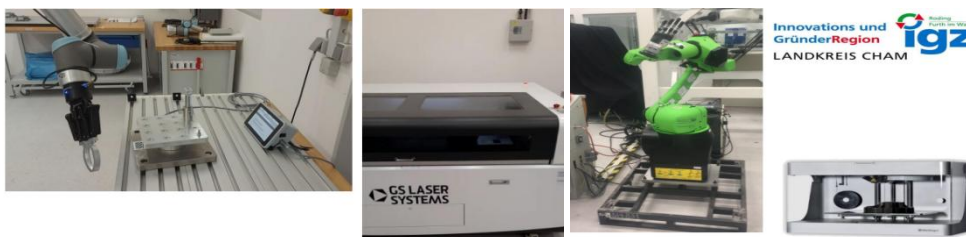
- Service: e.g. Programming of devices/systems
- Contract research: e.g. in digital aspects on behalf of companies
- Sponsored projects: e.g. in regards to industry digitalisation
- Seminars and training courses: e.g. on robotics
- Digital Founder Centre: e.g. virtual instalments, digital production
- Additive Manufacturing Application Centre: e.g. rapid prototyping
- Maker Space: high-tech prototype workshop for everyone

### Results of the programme

There are, in general, 4 strategic points achieved by the offers and activities of the institution:

- Additive Manufacturing: e.g. 3D scanning, reverse engineering
- Automation: e.g. digital factory, decentralised drivers
- Robotics : e.g. Augmented reality, automated guided vehicles
- KI image processing: image analysis, algorithm programming

(Source: presentation held at Technologiecampus Cham, May 2023)



(Image source: presentation held at Technologie Campus, Cham, May 2023)



## 7. Digitalisation for young adults in vocational

### Aim and background of the programme

The staatliche Berufsschule Werner-von-Siemens is one of the most advanced technological vocational institutions in the region of southern Germany, using many different digital approaches in vocational education. The institution works with more than 1600 computers, has digital boards in all classrooms, uses the free WiFi that is available in the state of Bavaria, applies tools like MS Office 365 and industry software. Additionally, it uses a digital curriculum, trains teachers regularly in digital regards, uses the teaching room of the future “Le.Mo.Co. – learn move collaborate and has a digital administration.

### Target group of the programme

There are two big target groups of this programme:

- 1) The teachers and trainers working in the institution
- 2) The learners participating in vocational education

### Activities implemented during the programme

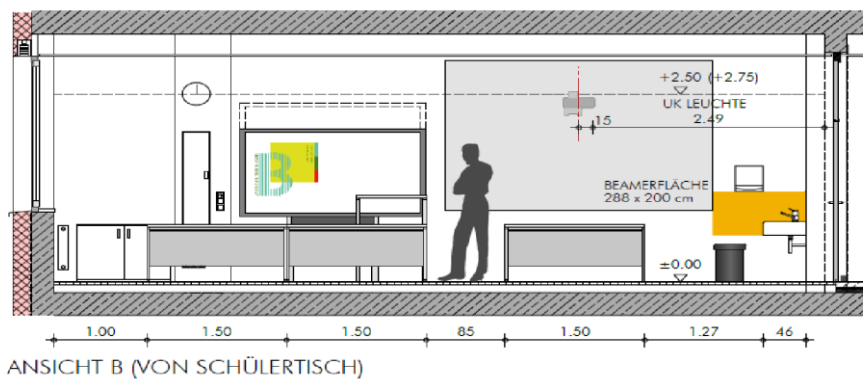
There is a broad variety of digital aspects incorporated into this institution:

- They have classes which allow young unemployed people to try out digital tools (e.g. stop motion videos)
- They have flexible chairs with iPads and desks attached, they allow students to freely move around in class, which leads to students being always in action, and cooperation and teamwork can be improved (combination of fun, learning, moving)
- They use multifunctional desks with networked computers
- They made and apply concepts for digital classrooms
- They use electronic locking systems instead of keys for doors
- They make use of green screens
- Smartboard in classrooms
- One note digital library is used, this is an easy way to share and access documents; additionally often materials are prepared for different knowledge levels (e.g. same information with more details or less details – students themselves can decide which documents to access) and learners can freely choose the documents fitting their knowledge level from the online library
- Teachers accepted the change to digital tools, they are taught in small groups on how to use the digital tools in their classes
- If something needs to be repaired, the students create a “ticket” for the IT team, that receives the information digitally and can then repair
- All learning contents are prepared digitally (saves paper)
- Microsoft teams is used as an education platform
- Students learn their jobs on real devices (e.g. car engines and programming assembly line robots)

## Results of the programme

- It is good to have more boards simultaneously (e.g. you can use one whiteboard for videos to be shown and another one with notes or working tasks for the students)
- Students can also access their documents from everywhere since they are digitally available
- Digital tools make everything more flexible (e.g. when students work in Microsoft Teams at home and they have a question, they can easily connect via an online meeting with one of their colleagues or teachers)
- No copies need to be made of physical papers (some work with one printed work book and everything else is digital)

Digital classrooms with multifunctional desks  
(source: Werner-von-Siemens Berufsschule Cham, 2023)



Digital classroom concepts (source: Werner-von-Siemens Berufsschule Cham, 2023)



Robotics used in classroom teaching  
(source: visit at Werner-von-Siemens Berufsschule Cham, 2023)  
Robotics used in classroom teaching



## **8. International Projects at VHS Cham with regards to digitalisation for specific target groups**

### **Aim and background of the programme**

Volkshochschule im Landkreis Cham has been involved in international projects since 2004, carrying out more than 100 projects since then – of which several have involved digitalisation aspects. The activities are carried out in cooperation with more than 150 cooperation institutions all over Europe and beyond and develop and test new methods in education, which overall favours change in progress in the field of (digital) education.

The participation in international projects takes place because VHS Cham wants to get inspired by other methods and approaches used globally to influence and support its regional economy. However, this also works the other way around – with the cooperation in the international field, it is possible to further develop its own regional approaches, also in regards to digitalisation, and show them to cooperation partners in other countries..

This approach of digital projects, although it is only an example of one education institution, is a common way in Germany, how to conduct things in Germany. The country represents the opinion that “international partnerships are crucial to mainstreaming the vision of a fair digital future” (OECD, 2021). Cooperation for digital projects is also highly supported by the National Agency of Education in Germany, which sees digitalisation in education as an engine for economic growth and change towards a sustainable future – which as a basis requires digital competences for everyone (NABIBB, 2023). The following projects presented explain some of the approaches and tools developed and used at VHS Cham in regards to digitalisation of specific target groups.

### **Target group of the programme**

In general, the international projects in regards to digitalisation of VHS Cham refer to a wide range of target groups – from migrants, NEETs, young women to seniors. To make it more specific, one of the projects is presented in detail. This is the project “SPACE – seniors perceive a common Europe” which, as the name suggests, targets seniors.

### **Activities implemented during the programme**

To reach the target group, several approaches were used: the most obvious one – as those is a group of elderly people – advertising was made via newspapers. In addition, institutions that already work with a group of seniors were contacted (e.g. senior associations) and informed about the project to pass on this information to their participants. Also other measures of VHS Cham were involved, for example certain courses on crafts, which often have senior participants, were visited to get access to the target groups. In addition, social media was used as well, posting flyers and information posts about the project. However, the most successful measure was still word-of-mouth advertising. Once there was a certain group of seniors established, several participants asked after each of the courses whether they are allowed to bring their friends, neighbours, colleagues etc. to the course. The motivation of staying within the programme comes from the fact, that the courses are specifically tailored towards the interests of the target group. For example, most of the seniors are willing to



share their knowledge on “special” things they know, for example how to produce home-made medicine from herbs. Therefore, the key lies in really considering the interests of the target group while making digitalisation a “side aspect” that comes along and is not in the centre of the attention of the seniors.

The professionals involved in this good practice are very different. In some topics (e.g. health), those are people having a conducted a certain training or having certificates within this field. However, in other fields often general trainers are involved as the seniors elaborate the contents themselves. Regarding digitalisation, it is important that the trainers know how to film and cut videos, i.e. film producing knowledge, as they support the elderly adults in their efforts. Therefore, especially young trainers, who are active on social media or have a certificate in social media, are involved, too, in the courses. They are aware of what is important when it comes to video making as they are used to producing short videos (e.g. reels on Instagram or stories on Facebook).

The best practice only lies the basis for collecting a group of seniors and getting them acquainted with digital technology in a convenient way. Most of the seniors have already expressed their interests in continuing the efforts and wanting to improve their competences in digitalisation.

## Results of the programme

- The results of this international project are visible on different levels: on an individual level, the seniors participating in the courses are building their digital knowledge which they can also use in other areas of life (e.g. by staying in touch with their relatives via online communication, as they learn how to prepare videos for social media platforms). On an organisational level, this project contributes to the public awareness of the organisation as citizens within the region are actively involved, specifically citizens who are often left out (i.e. seniors). It can also be said that the project has influence on society, even though only on a smaller group. The seniors as an age group get more aware of how digitalisation can support them in their regards. They learn digital skills as a side effect while they do something they enjoy.
- This good practice is a low-level example of how to involve elderly citizens in the digitalisation efforts. Simply by offering them courses on their own interests and making digitalisation an interesting side aspect, it can be made sure that digital skills are transferred to the specific target group.
- The most important aspect to keep in mind when imitating or transferring the programme is that the centre should not only be digital skills development, but the interests of those who are participating. If they are talking, discussing and doing things they like and they are proud of, they are willing to film videos on those and they simultaneously develop their digital skills.





Extracts from the videos of creating self-made herbs and physical activities for elderly people (filmed at VHS Cham, 2023)



## Hungary

### 9. Introducing children to the world of digitization-RoboKaland - The eco-conscious digital community workshop

#### Aim and background of the programme

The name Robokaland is itself an experiential creation workshop that an effective tool for both recycling electronic waste and developing IT skills. Created by an obsessed couple, where the female member is a teacher and the male member is an IT specialist, they work in synergy to support children to create value.

We are accumulating more and more electronic and other waste, while the recovery of useful raw materials is still in its infancy. In addition, there is a growing need to educate different generations in different ways, as the digital divide is widening between the existing educational methods and knowledge of Generation X and the diverse, complex and simultaneously multi-platform channels of Generation Alpha.

#### Target group of the programme

The primary target group of the programme is primary and secondary school pupils aged 8-14. In addition, children and adults can learn together through play. Families often turn up and all members find something to do in the workshop. Their aim is to create a family community-building workshop where people can learn together about being close to nature, reducing waste and recycling. They also work with young people with autism and learning disabilities.

Georgina Gajdács-Leszkó supports the programme with her pedagogical knowledge, while her husband Krisztián Gajdács has more than 20 years of experience in industry as a programmer and technology developer. Their programmes are tested and developed with the help of their daughter Gréti, who, as the idea generator, has launched the dedicated couple's now nationwide initiative.

#### Activities implemented during the programme

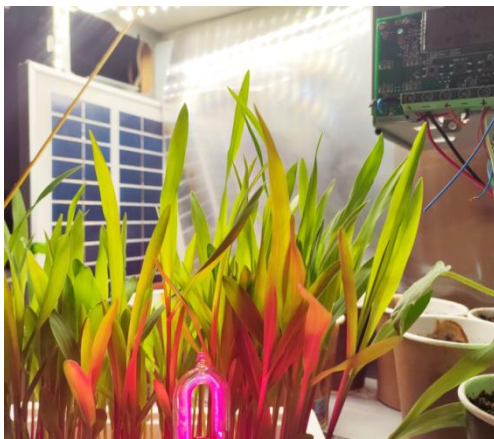
Every year, Robokaland's work results in the dismantling of several tonnes of e-waste, supported by public and corporate donations, with children and parents, with professional help. These parts are turned into products that are useful in everyday life. During the sessions, the participants learn about the basics of science (chemistry, physics, biology, informatics) through play and experiential learning methods, learn how to use tools and develop their cooperation and social skills.

In 2019, they held an open day where they could dismantle and repair electronic devices and build new, useful devices from their parts. As this day was a huge success, they continued to work even more enthusiastically, with 100% self-funding, to make our dreams come true. Today, they continue their activities in a workshop equipped with the latest equipment and technologies, where visitors can build robots, smart gardens, microprocessor devices, water purifiers, ion engines, etc.

The programme, launched in 2019, has grown significantly. The programme, which started with processing electronic waste and spending time with children in the neighbourhood, has now grown into a nationwide initiative and camps are being held all over the country. The equipment to be processed is also coming from bigger and bigger companies (e.g. Samsung, Telekom), but the professional staff has also grown considerably, with outstanding experts contributing their knowledge to the themes of each camp.

Their goal is to create a Robokaland experience camper with all the tools to run the camps and allow children to create independently.

In their sessions, children with autism and learning disabilities also assemble, program and develop, often with greater results than their healthy peers. The professional development of their programme is supported by the Kodolányi János University and major companies such as MVM Zrt, Linamar Hungary Zrt, Magyar Telekom, Gorilla GSM, Cartoon Network and Warner Media have contributed to their operation.



They want to create a national network of technically skilled teachers, engineers, programmers and agronomists who can join to develop children's skills.

Their work can lead to the recovery of useful parts from electronic waste and the recycling of the remaining selective waste. Through their belief in children's environmental awareness, they want to leave behind a liveable planet. The mission of Robokaland is to save the planet.

## Results of the programme

In Robokaland workshops, children can learn cutting-edge engineering skills and precision, get a glimpse into the "soul" of a machine, learn how it works, while developing their problem-solving and observation skills and even learn basic tool use. It is not insignificant that the parts of each piece of equipment that cannot be recycled are sorted selectively, thus reinforcing an eco-conscious approach. The Robokaland team introduces 8-10 professions and provides an opportunity for early career orientation from the age of 6, and later on for a conscious career choice. A sense of achievement and enthusiasm is guaranteed, because the children can take the completed, working tools home with them. They are also working in partnership with several educational institutions, where students can learn about this side of robotics through demonstrations. During the sessions, skills such as observation, problem-solving, manual dexterity, fine motor skills and logic are developed, as well as technological competences that are not available in public education. Digital competence is also developed to a large extent

through software development. The participants' social competences and project approach also show a high level of development during a session or camp.

They see their greatest achievement as their ability to find the most successful talents in children who start out with an ability disadvantage and to bring joy to those who find it difficult to find it in the traditional education system. Their work has led to the successful application of experiential education to children with learning difficulties (ADHD, SNI, Asperger's). Their programmes are under continuous development. They are always working on new research and development projects, to which they also adapt their methodologies.

Their goal is to create a Robokaland experience camper with all the tools to run the camps and allow children to create independently.

They want to create a national network of technically skilled teachers, engineers, programmers and agronomists who can join to develop children's skills..They are also thinking of expanding abroad, and would like to see Robokaland workshops in neighbouring countries.

More information about the program is available at the following link:  
<https://robokaland.eu/index.php?q=content/Home>



## 10. Introducing the Digital Welfare Program

### Aim and background of the programme

The Digital Welfare Program started 2 October 2017. The aim of the program is that all Hungarian citizens and enterprises can belong to the winners of digitalization. It aimed to reach the widest possible range of the population, reduce digital illiteracy, and promote and disseminate various electronic services and related online administration processes through the Digital Welfare Program Points, formed as a nationwide network.

In addition to making the Internet accessible and affordable for everyone, infrastructure development, digitalization of education and other already started activities, the Digital Welfare Program also wants to contribute in new areas so that Hungary is as prepared as possible for the digital transformation.



## Target group of the programme

DWP Points provide their services from young people to job seekers to the elderly: the internet, the use of digital devices and competence development activities are available free of charge to everyone.

## Activities implemented during the programme

Within the Digital Welfare Program, approximately 1,680 volunteer DWP mentors worked in 1,205 settlements and at 1,515 Digital Welfare Program Points in order to reduce digital illiteracy and promote and disseminate various electronic services and related online administration processes. The network of DWP Points is implemented by the competence development of citizens, under the direction of the Digital Welfare Coordination Center, through the mentors of the Digital Welfare Program Network. The DWP Points that make up the network can be found all over the country, and the DWP Mentors working at the DWP Points willingly helped Hungarian citizens learn basic digital competencies and use the online world and smart devices confidently and safely.



The national network organization consisted of mutually supportive with high level professional preparation, team-working employees. They provide free of charge service to everyone, regardless of gender or age. DWP Mentors helped using of Customer Gateway, administration of official documents, tasks related to taxation, pensions, social security or utilities; also in electronic administration, in electronic banking and insurance administration, as well as in the use of the electronic admission system or even leisure services.

Using the experiences of the Digital Welfare Program Points (DWP Points), Digital Knowledge Centers were established in the spring of 2022 in six rural towns – Békés, Kaposvár, Kecskemét, Nyíregyháza, Oroszlány and Veszprém – the equipment, design and professional support, as well as the coordination of the Digital Welfare Program provided. The total value of the investment was 2.4 billion HUF. Digital Knowledge Centers provide the opportunity to learn about digital technologies and participate in digital competence development activities for the citizens. In addition to shaping attitudes and presenting digital solutions, the purpose of the Digital Knowledge Centers was to increase the competitiveness of citizens on the labor market through adult training programs related to digitalization. The equipment of the Centers followed the latest digital trends, which gave visitors the opportunity to learn about areas such as robot programming, 3D printing, or drone flying.

The focus of the established Knowledge Centers was on improving the digital preparedness of young people, what means achieving that young people are more prepared and able to deal with the development of their key competences in the labor market and their work socialization. That's why suitable creative workshops were established, a range of career guidance and skills development programs was developed, specifically taking into account the needs of the age group concerned, and the staff of the centers were prepared and received continuous methodological support. The role of Digital Knowledge Centers is indispensable in terms of social catch-up and talent management, creating opportunities. For those children and adults who do not encounter the most modern technology in their own homes, it offered



a chance to get to know, master the use of these devices and develop the skills that contribute to their individual well-being and social involvement through digital technology.

The Digital Knowledge Centers provided the situation of the future labour market, presented the digital technology and the development of the digital competences, thereby contributed the carrier orientation in natural sciences and engineering and the widespread dissemination of the use of high added value technologies, which not only benefits the individual, but also the national it also improves competitiveness. Students were able to get to know the robot dog at sessions free of charge for schools; they could try out what mini-robots they could program or even design in 3D, print small souvenirs, and gain an insight into the world of virtual reality.

In addition to the above, the Digital Knowledge Center is prepared with a number of programs not only for children, but also for young adults and the active older age group, since getting to know digital culture and integrating into it cannot be dependent on age.

Besides the Digital Knowledge Centers, two locations were created (in Kecskemét and Mezőhegyes) demonstrating 5G technology within the framework of the priority project.

## Results of the programme

Within the framework of the Digital Welfare Program, the strategies defining the digital development directions of the coming years were prepared, and also built excellent professional communities in the fields of technology and IT with the aim of facilitating and accelerating the transfer of knowledge and the sharing of best practices for domestic government and market players.

The following strategies are prepared in the framework of the DWP: Hungary's Digital Education Strategy (DOS), Hungary's Digital Export Development Strategy (DES), Hungary's Digital Startup Strategy (DSS), Hungary's Digital Child Protection Strategy (DGYS) and several important decisions that are decisive in the European context have been made in the digital ecosystem together with all its actors. For example, the reduction of the VAT on Internet access in two steps, from 27 to 18 and then to 5 percent, which made Hungary the lowest tax on Internet access in the European Union.

More information about the program is available at the following link: <https://digitalisjoletprogram.hu/>

The 7-year history of the Digital Wellbeing Program was presented in a [final publication](#).

The future of the Digital Welfare Program is provided by the DWP2030 strategic framework, which builds on the successes of the DWP, but detects development challenges and opportunities as well as existing competitive disadvantages. Therefore, one of the main tasks of the continuation of the DWP, the Digital Welfare Program 2030, is to propose new solutions and institutions that can effectively interpret and manage the global challenges and opportunities created by digitalization, even in international cooperation.

In 2020, several key strategic documents prepared in the framework of the Digital Welfare Program will be submitted to the Government, such as Hungary's Artificial Intelligence and Sports Strategy and the Digital Agricultural Strategy Action Plan.

## **11. Training of under educated staff and public employees**

### **Aim and background of the programme**

The issue of employment people is the focus of the Hungarian National Reform Program, and based on the EU 2020 strategy, the goal is to achieve an employment rate of 75% by 2020. That's why the Hungarian Government has designated in the Partnership Agreement to improve the employability the participating public employment, the targeted expansion of training opportunities and the placement in the labor market.

GINOP-6.1.1-15-2015-00001 „Training of under educated staff and public employees” program is being realized through a consortium, its members are: National Training and Adult Education Office, Ministry of Internal Affairs, the Government Offices, Digital Wellbeing Nonprofit Ltd. The Digital Wellbeing Nonprofit Ltd became consortium member between 1st The november 2015. – 15st July2023.

The exact goal of the project is to encourage the participation of the under educated adult population who is not demanded in the labour market, or has no professional qualifications, especially public employees in education and training, and to provide them with the opportunity to acquire education, knowledge, skills, and competencies relevant to the labor market. Another goal of the program is that, in accordance with the needs of the labor market, digital work preparation courses will also appear among the training courses, preparing the unemployment people to be able to work in the digitized jobs of the open labor market, also through the development of their abilities and skills.

### **Target group of the programme**

In Hungary the target group of the program is adults of working age who live in less developed regions and under educated (ISCED 1-2 qualifications), who are in public employment or are employed. The first aim is to involve under educated people under the age of 35 in digital trainings.

### **Activities implemented during the programme**

Recruiting, encouraging and informing the target group about the program and training opportunities is an integral part of the implementation of the program. Before the training, our colleagues make an interview with the applicants due to the personal abilities, skills and motivations related to beginning of the training and working and the challenges of the employment. Then a career interest questionnaire is filled out by the applicants, on the basis of which his/hers areas of interest and related possible careers are determined. Then an individual plan is prepared, in which the applicant's area of interest and the necessary support elements are recorded. The applicant can have services like mentoring, job, carrier and job search counselling etc.

During the training mentoring (1 to 1 or group) service is provided for the applicants. The mentor constantly monitors the applicant and one of his/ her main tasks is to prevent dropouts. The mentor guides the applicant through the implementation of his/her individual program, as well as assisting him/her in getting into training, staying in training, removing



obstacles to employment, as well as finding a job and finding a job. The mentors constantly participate in case discussions and supervisions, where they can learn different customer management tools, improve their knowledge, and learn about the good practices of other counties. A collection of good practices has also been created, which displays good practices and proposed solutions grouped according to the highlighted problem areas, so the mentors also receive professional support and methodological help to solve the problems that arise, thereby increasing the efficiency of their work. A total of 10 people worked in the county in the project.

In addition to mentoring, the successful operation of the program is determined to a great extent by the good cooperation with the partner institutions: institutions, civil organizations, employers, Digital Wellbeing Nonprofit Ltd.

In the project the main form of support is training support. In Békés County, 378 training courses in 101 different specializations have already been launched, and 5,429 people participating in these training courses were given the opportunity to obtain a competitive professional qualification. 55% of those entering the program obtained a state-recognized professional qualification. During the program, the most common training courses were organic and green waste utilization, chainsaw operator, forklift driver, kitchen assistant, textile product assembler, social care and nursing, sales course. We started the training based on the needs of the employers. The professional training modules are preceded and founded by a 2\*8 hour supplementary activity "Increasing the effectiveness of training", and the professional training modules are followed by the 3\*8 hour supplementary activity "Promoting employment", which promotes employment.

Applicants have the opportunity to complete competence development or catch-up training within the program, and then, based on this, to enter a training course that provides a professional qualification. Applicants also have the option of digital competence development, which ensures the development of problem solving and higher-order thinking skills.

32 trainings were competence development trainings, in which 444 people participated. We have launched 15 trainings in four types for applicants in order to develop their digital competences. 2 trainings – Join into the world of digitized work training with 179 people. 3 Digital literacy training with 25 people, and a basic computer skills training with 37 people. ECDL Base training with 17 people. Originally, with regard to the Békés county, in the case of the program element preparing for digital work, our commitment was 108 people, in view of the high demand, 179 people participated in such training.

“Join into the world of work” course is the most popular course within the program that ensures the acquisition of digital competences. The duration of the training is 120 hours (consists only of practice) and must be based on the following topics:

- The use of IT and communication tools during administration, work, and learning. (30 hours)
- Getting to know the use of modern devices (touch screen and robotic devices with special emphasis). (30 hours)
- Development of the competencies required for learning and employment in an IT environment. (30 hours)
- Development of technical skills in accordance with the needs of the labor market. (30 hours).



The trainings are carried out in small groups of a maximum of 16 people, where possible at the residence of the target group or as close to it as possible.

As part of the training support for the applicants, the program finances the cost of the completed training, as well as the cost of the related medical examination, travel expenses, or if required, also the cost of childcare or the care of a relative. In addition, in order to stay in the training, applicants receive a public employment wage for the duration of the course in order to make their living.

The effectiveness of the program is greatly increased by the annually Public Employment Fair and job fair, where 60 councils interactively present their value-creating activities and results in the framework of public employment, and this also creates a good opportunity for public employees to meet directly with major employers in the county. As a Békés county initiative, a colorful, exclusive publication titled "Public Employment Values Store" was published, which presents the values produced by the county's councils in public employment programs to the general public for the purpose of popularization.

The program is implemented with the support of the European Social Fund, HUF 35.39 billion nationally and HUF 1.626 billion in Békés County are available to achieve the goals.



## Results of the programme

As a result of the program, by achieving the set goals, people without previous qualifications can obtain a competitive professional qualification, which gives them a chance on the labor market. Through the preparation program element for digitized work, it is possible for clients to work in digitized jobs in the open labor market with the development of abilities and skills. In this way, the subjects of the program are able to generate income that ensures the sustenance of themselves and their family members. The program gives disadvantaged people a chance to integrate into the labor market and achieve long-term employment. Participation in lifelong learning contributes to the competitiveness of the workforce and the continuous adaptation to social and economic changes.

So far, 5,429 people in Békés County have been involved in the program, and 5,037 people have successfully completed the training within the framework of the 378 trainings that have been started so far. Mentoring was provided to 5,392 people within the framework of the program. The completion of the applicant's individual program is followed by a 180-day impact assessment, based on which 589 of the applicants entered the primary labor market. The long-term impact of the program is shown by the fact that 60% of applicants who successfully completed the program are no longer registered with the unemployment agency and do not work as public employees.

More information about the program is available at the following link:

[https://www.nive.hu//index.php?option=com\\_content&view=article&id=746#system-message-container](https://www.nive.hu//index.php?option=com_content&view=article&id=746#system-message-container)

## 12.Modern Enterprises Program - Do your business digitally!

### Aim and background of the programme

The digital industrial revolution, i.e. Industry 4.0, has thoroughly transformed our perception of production and manufacturing, since the most valuable raw material in 2023 is already data.. The digital transition is crucial for domestic micro, small and medium-sized enterprises.

One of DESI's indicators is the level of business digitalization, for which Hungary was also in the last third. Preserving and improving the country's competitiveness is unthinkable without progress in digitization.

The consortium of the Hungarian Chamber of Commerce and Industry, Informatika a Társadalomért Egyesület (Informatika a Társadalomért Egyesület – Infotér) and the Government Information Technology Development Agency (KIFÜ) implemented its program between September 1, 2015 and June 30, 2023.

Mission of the program: improving the competitiveness of Hungarian SMEs with the help of digitalization.

### Target group of the programme

Hungarian micro, small and medium enterprises and the decision-makers and employees of enterprises involved in digital developments.

### Activities implemented during the programme

Right from the beginning, our basic philosophy was the personalization and immediacy of the services to be developed. Accordingly, we were able to provide a dedicated IT specialist for all businesses that registered in the Program, and by the end of the program, 73 experts helped the implementation of the program's goals in the county organizational system.



The project activities:

- ICT consulting, free audit. Experts dealt with each company individually, locally; they assessed their digitalization capabilities and prepared a development concept for them, which could later serve as a basis for tenders and digital investments.
- Creation of accredited suppliers and qualified product catalogue. A kind of virtual marketplace of digital business solutions has been created, in which high-quality products of reliable IT companies can be compared, simply and transparently. All of this made not only selection and procurement, but also starting tenders and verifying the market price significantly easier.
- Interactive video digital knowledge base, providing training opportunities. The videos help one understand the process, tools, and methods of managing the digital transition. Training opportunities: cloud-based services, office applications, information security, electronic invoicing, etc.
- Different programs focusing on business digitization, good solutions based on practical examples. Employees of the companies could meet relevant IT suppliers and ask questions. Topics include: online marketing, IT security, online and group work.
- Promotion of the opportunity to attract development funds (HUF 40 billion). Participation in the program, audit and development plans was an advantage in fundraising applications.
- The Modern Enterprises program aimed to build bridges to enterprises and their digital transition across the entire horizon of the ICT sector and other sectors related to that. More than 60 such partnership initiatives have been launched in the last eight years. The partners include participants from the public and private sectors, such as ministries, agencies, different institutions, civil organizations, chambers, other professional organizations and key economic actors.
- Additional commitment: during two years of the COVID-19 pandemic situation, a digital helpline, a kind of hotline, was launched for businesses in trouble and offers were recruited from various IT tools and solutions.

The financial background of the program (more than 7 billion HUF) was provided by EU Regional Development Fund (ERDF) and state support.

## Results of the programme

During the implementation of the program, a national network of consultants was built up, which for 8 years, regularly visited the businesses locally and helped them solve their IT problems, from the very simple to the most complex. A total of 25,113 enterprises joined the program and of these, 15,820 enterprises took advantage of the opportunity to be audited.

With the help of the accredited supplier and certified product catalog, the high-quality products of reliable IT companies can be easily and transparently compared.. The catalogue currently contains more than 1,100 suppliers and 3,199 discounted products, which is several times exceeds the number of members of the largest sector advocacy organization. The catalogue is open to the public, anyone can search it.

The program tried to build bridges across the entire horizon of the ICT sector and other sectors related to that. More than 60 such partnership initiatives have been launched in the last eight years, but only a few of them have been able to become truly excellent and

deepened at the level of professional cooperation. The partners include actors from the public and private spheres, such as ministries, background institutions, civil organizations, chambers, other professional organizations and key economic actors. During the program period, 504 trainings and other related events were held in order to improve the knowledge and awareness of businesses.

Since 2021, EU funds for the purpose of business development intended for digital development cannot be allocated without an audit and development concept according to the program. When someone applies for EU funds and the grant application includes some digital development element, they must register in the program and choose from the catalogue of suppliers and products there, because this is the only way the development can be accounted for.

The MVP was a kind of additional commitment, from its own resources, during the two years of the COVID-19 pandemic situation, when a digital helpline, a kind of hotline, was launched for businesses in trouble and offers were recruited from various IT tools and solutions.

In the last eight years, around HUF 40 billion IT investments were realized through the program, through various business development tenders. This means the introduction of tens of thousands of digital solutions in the SME sector, through which the processes of thousands of companies have been simplified, accelerated and thereby become more efficient and competitive.

A significant increase was seen in the indicator representing business digitization with the greatest weight, in the supply of Erp-Enterprise Resource Planning. The DESI index of 21 percent is still below the EU average, but it is definitely a serious step forward, and based on preliminary data, a large increase is expected this year as well.

According to the data of the Hungarian Central Statistical Office (KSH) from 2022, the percentage of ERP use increased to 27% for businesses with more than 10 employees. Another important result, which is also supported by international research, is the increased willingness to develop digitally among domestic SMEs. In 2021, the European Investment Bank according to the digitization index, Hungary's digital economy was placed in the "STRONG" category and the willingness to digital development was ahead of the EU average.

The Modern Enterprises Program (MVP) will end in 2023, but this does not mean that there will be no continuation. The annual development government decision for the Digital Agenda for Europe Operational Programme (DIMOP) announced in April also includes the continuation of the MVP, with a budget of two billion HUF.



More information: [Modern Vállalkozások Programja – Vállalkozz digitálisan! \(vallalkozzdigitalisan.hu\)](https://vallalkozzdigitalisan.hu)



## Romania

### **13.GRÜMAN CONSULTING SRL - Startup HUB - Business Development, Adult Education and Vocational Training Centre**

#### **Aim and background of the programme**

StartUp HUB's vision, values and goals: The mission of StartUp HUB is to encourage entrepreneurship through support schemes, to contribute reducing unemployment through adult education programmes and to increase EU funding in the region with the help of its experts. StartUp HUB is committed promoters of the sustainable development objectives and to promote digitalization. Startup HUB member companies operate in following activities: business development and consulting, tourism (HoReCa), IT tech, furniture manufacturing, vocational training and adult education. In this way they contribute to reducing unemployment.

StartUp HUB is a center for business development, adult education, and vocational training with five key strategic objectives:

- Developing the startup ecosystem, building the entrepreneurial community of startups
- Quality adult education and modern vocational training
- Bidding resources, consultation
- Sustainable development

The key approaches of the company in the field of digital competences include:

- Curriculum Integration: Integrate digital skills into national education from primary to tertiary levels.
- Lifelong Learning: Promote digital training and upskilling opportunities for adults.
- Public-Private Partnerships: Collaborate with tech companies to broaden digital training options.
- Digital Inclusion: Provide access and training in underserved areas to bridge the digital divide.
- Practical Training: Emphasize hands-on, real-world applications of digital skills.
- Teacher Training: Equip educators with digital competence to effectively teach.
- Awareness Campaigns: Promote digital skills for personal empowerment and employment.

#### **Target group of the programme**

The target group of the programmes of the company is diverse: from regional actors, companies, students, graduates Stakeholders in the field of vocational training, IT and ICT include representatives from the public and private sectors, as well as individuals from local public authorities. Additionally, adults from rural environments seeking to acquire digital competencies are also considered stakeholders in this context.

## Activities implemented during the programme

Organizing practical courses covering various aspects of digitization, such as the use of specific platforms or technologies, digital security, working with software tools, etc.

Interactive training sessions: Interactive activities involving discussions, practical sessions, and exercises to encourage participants to apply theory into practice.

Using scenarios or practical situations to enable adults to experience and learn by applying digital knowledge in real or simulated contexts.

Coaching and mentoring: Providing personalized support, either through individual sessions or mentorship, to assist adults in learning and applying digital skills.

## Results of the programme

- over 2000 individuals, young NEETs, beneficiaries of vocational training services
- supporting entrepreneurship, including self-employment
- developing a Methodological Guide for mentoring, counselling, and/or consultancy.
- over 275 entrepreneurial development plans



<https://startup-hub.ro/en/category/adult-education/>

## 14. Business Incubator

### Aim and background of the programme

The Business Incubator was established in 2006, through the National Multiannual Program for Establishment and Development of Technological and Business Incubators in Romania; its administrator is COVIMM CONSULTING LTD; the headquarters of ASIMCOV (Association of Small- and Medium Size Enterprises of Covasna County) and AICAR (Association of Business Development Centers and Incubators) are located here, there is a coworking space in the building as well, namely the INNO-HUB

The Business Incubator is an innovative and creative space designed to support entrepreneurs in turning their dreams into reality. It offers modern workspaces, personalized mentoring, valuable networking opportunities, educational resources, and assistance with business plans and funding. Additionally, employees of incubated companies receive mentoring and training covering various topics including management, marketing, organizational communication, digitalization, and organizational law.



The Business Incubator would provide workspace for over 40 companies operating in the creative industry, with at least one employee and companies not older than 3 years.

## **Target group of the programme**

The adult training programs are generally aimed at any adult who wishes to enhance their skills, refine their knowledge, or undergo professional reorientation. These courses are available for adults from various backgrounds and contexts, whether they are employed, unemployed, individuals seeking professional retraining, or anyone interested in learning and developing, especially in business domains and enhancing their digital competencies.

## **Activities implemented during the programme**

Programme: With better chances on the labor market.

The general objective of the project was to prevent the increase in the number of unemployed and to facilitate the reintegration of unemployed people into the labor market. The main activities of this project were:

- Giving information and career advice
- Labour mediation
- Job-club
- Business advice and assistance

Programme: Initiation in business development

The overall objective of project also was to develop entrepreneurial skills for 1200 micro-business managers and SMEs through training programmes and innovative coaching services. The awareness campaign had three main objectives:

- to promote entrepreneurship among members of the target group (1000)
- attracting participants to the training courses, counselling and coaching services,

Programme: Superior skills for employees in Central Region of Romania.

The general objective of the project was to improve the level of knowledge/ skills/ aptitudes for employees in the Central Development Region of Romania, in order to increase their employability and adaptability to the dynamics of potentially competitive economic sectors identified by the National Competitiveness Strategy, and in conjunction with areas of smart specialization according to the National Research, Development and Innovation Strategy.

The main activities consisted in holding free courses for developing English language skills, webdesign and computer operator skills. Upon completing the courses the trainees received accredited diplomas.

Programme: IMM INFORMA-TIC (SMEs Information and Communication Technology)  
The general objective is to increase the level of knowledge, and skills of employees in enterprises in the Central Development Region that are mainly or secondarily active in economic sectors.

Activities was:

- Increase the level of digital knowledge and skills of employees
- 3 types of courses (Data entry, validation; Web design; Programming).
- Workshops, Training plan, Digitalization Investment Plan

### Results of the programme

- 500 employees from various companies improved their level of knowledge, skills, and digital competencies.
- 250 employees acquired digital marketing basics.
- Developing the digital and entrepreneurial skills of individuals over 18 years old in the Central and North-East regions, and subsidizing their business plans
- The training courses covered key themes related to sustainable development, including the Green Deal, energy generation from local sources, other types of renewable energy, and organizational communication.



<https://www.asimcov.org/projects/actual-projects>

## 15. Development of digital knowledge skills among adults - HAMOR Soft SRL

### Aim and background of the programme

HAMOR Soft SRL ([www.hamorsoft.ro](http://www.hamorsoft.ro)) is a 30+ year-old company specialized in the development and servicing of ERP software. We serve approx. 2000 customers with 20+ specialists.

They have experience in IT, accounting and administration of enterprises, and have accreditation and experience in adult education as well.

They participate in the digitalization working groups organized by Employer's Association of Software and Services Industry (ANIS).





## Target group of the programme

employees of companies, unemployed

## Activities implemented during the programme

### Education of pensioners

The instructors are students of the regional campus of Babes-Bolyai University from Odorheiu Secuiesc, majoring in kindergarten and elementary school teacher training. From the fall of 2023, a joint youth-pensioner collaboration would be implemented under the title "Bring grandma to code".

### Training for adults

Development of basic digital competencies for the unemployed, in a 24-hour. The curriculum also includes social media management, image editing, online payments, and a simple invoicing program.

### Trainings for clients

In the '90s, companies formerly owned by the state, sent their employees to trainings during work hours.

Nowadays they demand only short trainings, if necessary, at the workplace during the implementation of the software, there is a lack of professionals to facilitate more and longer trainings. The company try to compensate this with free online presentations, 4-5 by years and with 50-60 participants.

They developed their models:

- Learning model based on experimentation
- The student teaches, and the teacher mentors

## Results of the programme

Training courses for software user's programs on various platforms: Platforms for using HAMOR Soft programs, HAMOR Soft programs on Linux and in the Cloud, Local Windows servers and in the Cloud for HAMOR Soft programs



## **16.The relationship between PES (Public Employment Service) and employers – eSPOR - Single Service Delivery Platform (PULS) – AJOFM COVASNA**

### **1. Aim and background of the programme**

The strategic vision of the AJOFM Covasna is as follows:

The development of the institution implies ensuring its competitiveness with other institutions.

In a society of rapid change, directing to the future is a key prerequisite to ensuring competitiveness. With the growing dynamism of the society, the organization must respond promptly to the situation, ensuring its ability to enhance opportunities and address issues.

Therefore, being a step ahead of the future, the institution's first concern is for its current context. This way the institution will have to take an active role in creating the necessary conditions for appropriate reactions to the dynamism of the society.

The mission of the institution:

The Agency for Employment is an institution that offers diversified services in the field of unemployment insurance. The global activity of the institution is aimed at continued search for new ways of improvement of human life through full employment. The aim of employment and social policies are directed towards the combination of social protection and social assistance measures for specific categories or groups of persons with operations which will contribute to ensuring of a workplace of continuous and increasing revenue as an essential prerequisite for the improvement of living conditions.

Globalization is now imposing new rules to the national policies that need to take into account to be effective once applied in practice. In this respect it is necessary to adapt a strong social component to the requirements of this type of economy through integrating it into the national reform programs. This aspect has imposed measures such as: the qualifications and retraining of workers made redundant, the promotion of an alternative to employment. International competitiveness, apart from its influence on the overall economic strategy, has a greater impact than up to the present, as far as the national employment strategy is concerned, on the national strategy of workforce training. In this respect, globalization has brought up the problem of optimizing the career preparation pyramid by shifting the attention to the human development objective, decreasing the role of basic skills, towards the face-to-face functionality with the requirements of competitiveness and economic growth, by enlarging professional, specialised qualifications. The AJOFM (Employment Agency) ensures the implementation of strategies and policies at the county and local levels in the field of employment and vocational training, organizing, funding, and delivering vocational training services as well as information, counseling, and career guidance for individuals seeking employment or organized for the prevention of unemployment.

The agency arranges vocational training programs for employees, as well as free vocational training programs for the unemployed. In the organization's training plan, the following programs are included:



- Digital skills acquisition programs, structured at different levels (beginner, intermediate, advanced), preceded by an assessment of the level of digital competencies in line with the European Framework for Digital Competence.
- Personalized programs for acquiring Romanian language skills, mathematics, basic IT skills, Level 1 or/and 2 qualification for individuals with low or no education (employees or job seekers).
- Update programs for the specific skills of employees due to rapid technological developments and the emergence of new competencies, digitization, changes in working practices/methods.
- Training programs to develop professional and transversal skills that allow career progression for disadvantaged employees (who are unable to keep up for various reasons or whose skills are no longer in demand, exposing them to the risk of redundancy: part-time employees, employees at risk of in-work poverty, employees who have resumed work after a period of inactivity).

These programs are complemented by the development of digital tools to support skills assessment and certification.

The institution is implementing activities aimed at modernizing and adapting structures to provide flexible services that increase the satisfaction level of clients, employers, and job seekers.

The development of a unique platform (PULS) that integrates all services dedicated to SPO clients is the result that can fulfill this objective.

Creating a Single Service Delivery Platform (PULS) in which all services dedicated to employers are integrated, thereby facilitating their interaction with local labor agencies, especially by increasing efficiency in the document submission process, significantly reducing the time allocated to these activities

Given the context characterized by continuous change in which AJOFM operates, responding quickly to changing circumstances and efficiently combining short and medium-term interventions with sustainable solutions requires promoting a high level of flexibility, a flexible organizational mode, and creativity.

Population aging, labor migration, bring significant challenges, thus anticipating and planning future actions are necessary to maintain a sufficiently qualified workforce – crucial for employers.

## **Target group of the programme**

21000 employers

105000 mediated job seekers

905 PES employees - beneficiaries of professional training programs

adults with previous professional experience, people in need of reintegration into the labour market people who want to change or relocate into socio-professional occupational areas people looking for a job.

Depending on the actual market conditions, it is increasingly difficult for those who want to obtain a job suited to their aspirations to achieve their goals without increasing the quality of their own offer, or their own skills and abilities to the new demands.

## Activities implemented during the programme

System analysis regarding PES (Public Employment Service) services.

Design and implementation of new services and streamlining of existing ones

Developing skills for your own staff

Promotion and increased visibility

Services/tools/methodologies/procedures that have been simplified/redefined/developed and, consequently, instrumented and procedurized:

- Labor mediation services - oriented towards competency-based mediation.
- Short-term labour market forecasting methodology.
- Medium and long-term labour market forecasting methodology.
- Market analysis methodology.
- Methodology for conducting studies on the competencies required for the top 50 occupations/jobs.
- Online tools for employers to fulfil their obligations to communicate necessary data to PES.
- Effective multichannel communication methods with employers.

The added value is provided by the fact that the project proposes a set of integrated actions that align opportunities, strengths, and weaknesses with the needs of the target group and the opportunities in the business environment

## Results of the programme

105000 mediated job seekers

50000 vacant job positions posted on the platform

Development of curricula for competency categories that constitute the training needs of PES staff, for categories of services dedicated/provided to PES clients. Professional training programs with a duration of 40 hours.

797 unemployed individuals involved in 46 training programs, completion of which developed their skills.





## Spain

### 17.CYL Digital

#### Aim and background of the programme

Cyl Digital, a Junta de Castilla y León initiative, started in 2009. It's dedicated to educating and training citizens in using information and communication technologies, fostering awareness, and offering guidance. They offer various digital training courses: CYL Digital spaces, Ciberbus CYL Digital, Network of Digital Municipalities of Castilla y León and partner centres; such as public libraries.

#### Target group of the programme

The programme is open and free of charge to all Castilla y León citizens, including unemployed, self-employed, small businesses, and the general public. Additionally, the courses are available both in person and online.

#### Activities implemented during the programme

- Face-to-face and online training.
- Technological advice: providing personalised assistance.
- Certification of digital competences: recognizing and accrediting citizens; digital skills based on the European Digital Competences Framework for Citizenship (DIGCOMP).
- Services to associations and organizations: collaborating with entities to facilitate training courses and events related to digital transformation.
- Entrepreneurs and small businesses: Organizing meetings/events featuring experts in digital transformation.
- Technological volunteering: Promoting e-solidarity and encouraging individuals to volunteer in promoting technology usage in their communities.

CYL Digital offers digital training courses, covering various topics, and employs diverse strategies to engage interested individuals. These strategies include promotion and dissemination campaigns in various media, partnerships with educational institutions and business organizations, participation in relevant events and fairs, an informative online platform, and personalized guidance and support for those interested in training.

One of the key aspects highlighted in CYL Digital's good practices is the recognition and certification of digital competences. The program utilizes the DIGCOMP framework, which defines the digital competences necessary for active participation in the digital society. Individuals can take certification exams at basic and intermediate levels, testing their knowledge and skills in various areas of digital competence. The exam questions are a mix of theoretical, practical, multiple-choice, simulations, and challenges, assessing the 21 competences listed in the DIGCOMP framework. To pass, individuals need to achieve a minimum of 50% correct answers in each area and 75% overall within a 90-minute timeframe. Exams can be taken either at CYL Digital Spaces or remotely from home.

## Results of the programme

With a remarkable participation record of 93,000 individuals and over 14,000 training activities, these courses and certifications are accredited by four public and two private universities, recognized as ECTS credits for harmonizing ICT subjects. This recognition extends to educators and students. Additionally, they collaborate with the public employment service to validate the certificate for job applications, while companies employ it to evaluate and enhance employees' digital proficiency.

Furthermore, the program is actively forming partnerships with other public administrations to expand its reach and is in pursuit of European recognition for its certification. This exemplary model, rooted in the European Digital Competence Framework (DIGCOMP), offers a versatile approach that can be applied to organizations across Europe for identifying competencies and their assessment criteria.



## 18. Teaching Innovation and Digital Transformation of the University of Valladolid

### Aim and background of the programme

The Vice-rectorate for Teaching Innovation and Digital Transformation of the University of Valladolid focuses on supporting the development of online teaching and training in digital skills, improving ICT services and technological infrastructures, promoting digital content, and the technological evolution of management processes. The specific objectives are:

- Develop skills in the use of digital tools and specific software for academic tasks.
- Train students in searching for and critically evaluating online information.
- Promote safe and responsible use of technology.
- Foster students' ability to communicate and collaborate effectively in digital environments.
- Stimulate creativity and digital innovation.
- Provide continuous support and resources to students and teachers to update and improve their digital competences.

## Target group of the programme

The activities carried out by the University services are aimed at the entire university community: Faculty of University of Valladolid, University of Valladolid students, technical, management, administrative and service staff of the University of Valladolid.

What is to be achieved with these people is:

- Promote digital skills training in the university setting to prepare students for the challenges and opportunities of the digital world.
- To develop fundamental digital skills and knowledge to enable students to effectively use information and communication technologies in their studies, research, and future careers.
- Promote the adoption of ethical and responsible practices in the use of digital technologies.
- Improve students' ability to search for, evaluate, use and communicate information effectively using digital tools and resources.
- Foster creativity and digital innovation, encouraging students to explore new ways of using technology to solve problems and generate solutions.
- Facilitate collaborative learning and teamwork through digital environments by promoting communication and collaboration among students and with teachers and subject matter experts.

## Activities implemented during the programme

The Vice-Rector's Office for Teaching Innovation and Digital Transformation has the following administrative units: UVa Audiovisuals, Centro VirtUVa (Centre for Online Teaching, Training and Teaching Innovation of the University of Valladolid) and STIC (Information and Communications Technology Service).

Focusing on digital skills training, we can find:

- Development of digital competences: 2 training programmes aimed at training in digital competences for teaching staff.
- FORMCOMPDIGCYL: project carried between the four public universities of Castilla y León with the aim of moving towards a more digital citizenship through training, advice and certification in digital skills.

DigCompEDU: project that aims to develop training elements to improve the digital competences of university teaching staff



## Results of the programme

Teaching staff participated in 13 training activities with 420 participants, achieving an overall satisfaction rating of 4.24 out of 5. University administration and services professionals attended 2 training courses with 70 participants, earning a rating of 4.12 out of 5. Students were involved in 4 training courses with 570 participants, obtaining an overall satisfaction rating of 4.11 out of 5. All training courses were fully subscribed, and participants expressed high levels of satisfaction. The program's reference frameworks align with European standards, making them suitable for adoption in any European university.

## 19. Fundación Secretariado Gitano

### Aim and background of the programme

Established 40 years ago, it focuses on promoting equal opportunities and social integration of the Roma community. It is active in 14 Autonomous Communities with 62 offices and 77 localities and it aims to ensure Roma access to rights, services, and social resources in equal conditions.

In terms of this vision, it focuses on achieving a qualitative change in the organisation to face new challenges, reinforcing its pillars and introducing new lines and approaches to work, based on an open, participatory, reflective and time-consuming process of drawing up the Strategic Plan.



### Target group of the programme

It focuses on the Romany community, aiming to reduce inequalities and promote social inclusion. It offers various programs related to employment, social inclusion, education, and digital training and it develops all kinds of actions that contribute to achieving the full citizenship of Roma people.

### Activities implemented during the programme

- Acceder Program: Promotes Roma integration into the labour market, emphasizing employability and competence development.
- Individualized itineraries of socio-occupational insertion: Facilitates socio-occupational integration through information, guidance, training, and self-employment support.
- Digital training project at the Fundación Secretariado Gitano: Trains Roma individuals in digital skills to meet the requirements of the modern labour market.





- Employing digital: Trains their team and individuals in digital skills for the digitalized labour market.
- Other initiatives: Collaborations with Google, the TándEM program, and regional projects for digital skills training.

## Results of the programme

The Acceder program had 21,316 participants, with 4,307 finding jobs, 7,058 contracts obtained, and 5,430 people trained.

Additionally, the program's success has been recognized through awards and included in databases of good practices and the evaluation report for the Acceder program covering 2000-2019 is available for review.





## 20. Fundación Rondilla

### Aim and background of the programme

The Rondilla Neighbourhood Association promotes the Rondilla Foundation and it was originated in 2006. It promotes educational and socio-labour insertion programs focusing on education, social integration, and employability, particularly for disadvantaged groups. It arouses all kinds of educational and cultural actions, the improvement of employability and the strengthening of social networks. Also, they aim to promote coexistence and the free and full development of the people who live in the Rondilla neighbourhood, to prevent situations of risk and social exclusion, to inform, guide and advise young people and, to train them in vocational skills.

Among its values are: teamwork and constant improvement of the action; tolerance, acceptance and appreciation of people's diversity; solidarity, becoming aware of the reality and acting to change situations of inequality, and a critical spirit, respect and the promotion of the values of freedom, equality and participation.

### Target group of the programme

Adults in need of further training, ethnic minorities, immigrants, beneficiaries of the Guaranteed Citizenship Income, young people in need of school support and with social integration problems, persons deprived of liberty and those with low employability.

### Activities implemented during the programme

- Adult education programmes: based on a methodology that eradicates barriers in the educational approach, overcoming the established roles of educator-educate and enables a permanent cultural exchange between the individuals who form part of the educational group. The activities carried out are literacy, lifelong learning, vitamins for memory, computers and internet, beginner and advanced English, literacy gathering, and social media.
- Youth Education programme:
  - o School reinforcement: it provides educational support and reinforcement to develop educational actions with the aim of offering support and motivation to children in their learning process by grouping the children in different classrooms according to the grade they are in. It emphasis on evolution and not only on results, carrying out activities that are really significant.
  - o Leisure and free time activities with children aged 6 to 11 and with young people.
  - o Youth information point: offers a service to teenagers and young people in the neighbourhood to facilitate information, advice and guidance on the academic possibilities and more. Also, to conduct awareness-raising campaigns, provide job orientation advice, offer possibilities healthy leisure and free time activities

and promote the social integration of disadvantaged young people at risk of social exclusion and immigrants.

- New technologies programme: aims to develop awareness in the socio-cultural realities of the environment, facilitating the acquisition of techniques and basic knowledge necessary for development in society, aimed at a constructive socio-occupational insertion of people.
  - o Digital skills: its purpose is to take advantage of all the benefits offered by the growing digital environment and for these people to acquire the necessary knowledge to use digital media and to be able to use practical tools in their daily lives; it involves basic and advanced computing, the use of smartphone, job search through the Internet, online administrative processes, and BITaminadas Project.
- Job orientation and integration programmes for young people and adults: Job vacancies, Incorpora programme for the integration of people at risk of social exclusion into the workplace by La Caixa Welfare Projects, socio-occupational integration for prisoners, etc.
- Socio-cultural integration programme for immigrants: Spanish for foreigners, workshops, information and advice office, etc.

## Results of the programme





## IV. Afterword and contact details of partners

Afterword - is brochure is brief to present the intense work in full detail what has been done during a two-year period in this project therefore the methods, from which the reader can be the most are highlighted.

We would also like to raise the attention of experts and emphasise the importance of the professional material presenting the project impact developed on the experiences applying the methods acquired during the project.

During the implementation, we paid special attention to measure the impact. In the second half of the project, each member of the partnership selected some of the best practices seen, through the testing and later application of which they considered to significantly improve the professional work of its own and its stakeholders' national partnership network. - e partners carried out measuring the project impact on a pretended system of criteria, through which they described what acquired methods and in what ways they had been integrating them into their organisational operation, what the experiences of testing are, and what amendments they would suggest to improve the method. - e study summarising the experiences of integrating the methods seen and acquired during the project into the organisational operation is also available for all people interested.

For further information you can contact the partner organisations:

- Government Office of Békés County, Hungary  
<https://kormanyhivatalok.hu/kormanyhivatalok/bekes>
- Gál Ferenc University, Hungary  
[www.gfe-technikum.hu](http://www.gfe-technikum.hu)
- Kodolányi János University, Hungary  
[www.kodolanyi.hu](http://www.kodolanyi.hu)
- EFCC ESTONIAN FIELDBUS COMPETENCY CENTRE OÜ, Estonia  
[www.efcc.ee](http://www.efcc.ee)
- TALLINA POLÜTECHNIKUM, Estonia  
[www.tptlive.ee](http://www.tptlive.ee)
- Volkshochschule im Landkreis Cham e. V., Germany  
[www.vhs-cham.de](http://www.vhs-cham.de)
- AJOFM COVASNA, Romania  
[www.covasna.anofm.ro](http://www.covasna.anofm.ro)
- Universidad de Valladolid, Spain  
[www.uva.es](http://www.uva.es)