

D.T1.2.4 Final eDigiStars Strategy

version 2

Central Transdanubian Regional Innovation Agency Ltd.

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To develop and adapt eDigiStars System in the Danube macro-region to increase the digital entreprenurial competencies of seniors (51 and above) to support their employment and tackle the challenge related to the lack of digital (self-) entrepreneurs.

1. About the project:

The Joint Danube Macro-regional eDigiStars Strategy (hereinafter: The eDigiStars Strategy or Strategy) was prepared within the project "Building digital entrepreneurial capacities of the elderly through the innovative training system" (hereinafter: The project; eDigiStars) funded by the Danube Transnational Programme. The project is implemented through a partnership of 13 partners from 8 different countries from the Danube region, namely Austria, Bulgaria, Bosnia and Hercegovina, Czech Republic, Hungary, Romania, Slovenia and Ukraine (Figure 1).



Figure 1 Map of eDigiStars partner countries



The partnership of the eDigiStars project has identified two main challenges in the countries of the Danube region that should be tackled to improve the well-being of the society and increase the competitiveness of the region.

First, there is a lack of employees or self-employed entrepreneurs who can provide specific simple digital services for SMEs. The fact that around 53% of the enterprises in the European Union in 2018 reported difficulties to recruit ICT specialists indicates that it is a prominent challenge for European Union and for the countries of the Danube region as well. The second challenge is linked to the ageing of the population and employability difficulties of the seniors. The workforce aged 51 years or higher is at risk of becoming long term unemployed, as they are not the target group for the majority of employers. The reason behind this is the fact that their main skills cannot or hardly can be changed.

The partnership of eDigiStars project believes that the reintegration of the workforce at the age of 51 or higher can be successfully reached by trainings with special focus. The partnership believes that the unemployed seniors can be turned into digital self-entrepreneurs. Therefore, we aim to address both challenges, the lack of digital employees or self-employed entrepreneurs and employment difficulties of the seniors at the same time.

As a result, the main objective of the project is to develop a sustainable ecosystem which supports older workers to become digital self-employed entrepreneurs or employees. This is going to happen through the development of Tools, piloting and assuring of sustainability of the eDigiStars Innovative system.

To demonstrate the impact, the project will pilot the eDigiStars System. The pilot will deliver measurable impact in each participating country by empowering or engaging 40 elderlies with employability difficulties, primarily representing MINORITIES, MIGRANTS or other VULNERABLE groups. The project aims at the adaptation of one selected "digital" course per territory and the development of digital competencies of 160 elderlies within the project.

To reach the overall goal of the project, the partnership consists of 4 employment offices, 3 industry representatives, 4 innovation centers, 2 public administrations, 2 education and training centers, 1 university and 2 institutions working with elderlies have joined forces.



2. Vision of the partnership:

An increased well being in and a more competitive Danube macro-region through the re-employment of senior citizens as digital self-entrepreneures or employees, as a result of adjusted requalification courses and adaptation of eDigiStars System.

3. European framework conditions:

Digitalization of the economy and everyday life has been in the focus of the European Union for quite long. The importance of the field was recognized after the financial crisis in 2008 followed by the economic downturn for many years. Since then, digitalization is considered as a key tool to increase competitiveness of the Community as it plays a crucial role in increasing the productivity of the economy. Digitalization is measured in various indicators in European reports. Some of these indicators (Figure 2.) are presented below to emphasize, that there is still area for improvement.



Figure 2. A couple of highlighted facts about digitalization



Fact 1 Population ageing and the digitalization of economies is experienced in all EU countries. Experts claim that as a result of these two processes countries will gradually increase the retirement age and it will lead to an **increased unemployment** in the age category of 55-64, as they will not have the needed competencies for digitalized industry and services¹.

Fact 2 Digital skills are considered essential for global competitiveness, boosting jobs and growth. However, there is a considerable **digital skills divide** in the EU between adults living in cities and those living in rural areas. In 2017, the gap in digital skills between city-dwellers and people living in rural areas was the highest in Hungary, Romania, and Bulgaria among EU countries².

Fact 3 The **lack of ICT professionals** is a key challenge in EU, as around 50 % of companies reported difficulties in recruiting professionals in 2018. In the Danube Macro-region, Austria and in the Czech Republic reported the highest ratio of hard-to-fill vacancies (78 %; 79 %) in the European Union, in Slovenia and in Hungary this ratio was significantly above the EU average as well (69 %; 60 %). While in Romania, Bulgaria, and Bosnia and Hercegovina was slightly under the EU average (45 %; 42 %; 41 %)³.

Fact 4 Social media is used by almost half of EU enterprises in 2019, which is an increase of more than 20 percent compared to 2013. Enterprises use **social media** for image building or for marketing, for gaining insights from customers or recruiting. In the Danube macro-region, only Austria exceeds the EU average with it's 60 %, while Slovenia (50 %), Bosnia and Hercegovina (49 %), Czechia (48 %) are around the EU average. The share of enterprises using social media was less than 40 % in Hungary (38 %), Bulgaria (34 %) and Romania (33 %)⁴.

¹ Stojanova, H. – Lietavcova, B. – Raguž, I.V. (2019): The Dependence of Unemployment of the Senior Workforce upon Explanatory Variables in the European Union in the Context of Industry 4.0

² Eurostat regional yearbook, 2019 edition

³ We have found no data available for Ukraine for the presented year nor for the indicator

⁴ https://bit.ly/3npXUcH



4. The starting point of strategy drafting

The aim of the eDigiStars Strategy is to formulate goals and objectives for the partnership on Danube macro regional level. Therefore, the partnership firstly overviewed the core strategical documents of their territories, identified the key institutions and stakeholders and analyzed local co-operations that aim to tackle similar challenges like the eDigiStars project.

4.1 Review of the national and territorial context

Austria

Austria is represented in the partnership by Business Upper Austria - 0Ö Wirtschaftsagentur GmbH which is the business agency of Upper Austrian government located in Linz, the capital of Upper Austria.

Upper Austria has approx. 1,490 million inhabitants (Jan. 2020) and an unemployment rate of 5,5% (Sept. 2020). The GDP per capita is 44.600 EUR (2019) while the share of Austria's total exports belongs to approx. 26 % and the share of Austria's industrial output belongs to approx. 26,5%. Therefore, Upper Austria is the center of Austrian industry production with strong industrial sectors at steel industry, chemicals and chemical products including plastics, automotive supplier industry, machine- and plant construction industry and food industry. Additional there is an important tourism sector with "gentle" tourism which means not such extensive as in other parts of Austria. There are two Danube harbours (Linz and Enns), one airport which is important especially for freight forwarding (2nd largest in Austria) and also important railway and highway connections on the east-west axis and on the north-south axis.

The main strategical documents for Upper Austria are #Upper Vision 2030 and Labour Market Policy Austria and Arbeitsplatz 0Ö 2030. These documents provide a clear and a long-term framework of action for labour market policy in Upper Austria. Their key objectives are twofold, first they aim to ensure the availability of *specialists* for the economy and second, to prevent unemployment and ensure *full employment*. Besides, national or regional level strategies, it is worth to mention the local employment strategy of the city of Linz, Jobimplus. This local strategy



provides support on job, education and training for people who cannot be employed in the primary labour market (for example elderlies, people with disabilities, etc.).

The territory has a strong institutional background. From the perspective of the eDigiStars project, agencies managing the human capital, dealing with the challenges of digitalization, providing requalification, and monitoring the needs of the industry are present. Although, no specific agency was found for involving vulnerable groups, migrants, or minorities. The knowledge of these agencies could be a fundamental resource for the eDigiStars project to support its local actions.

In the territory, there are local and national cooperation that could be of interest of the eDigiStars project. The co-operations aim to tackle the challenge of digitalization, ageing and the re-employment of the eDigiStars target group, the seniors.

Bosnia and Hercegovina

Bosnia and Hercegovina is represented by the partner Development Agency of the Republic of Srpska.

The Republic of Srpska is a political and territorial entity within Bosnia and Herzegovina, making 49% of its territory. It is a parliamentary republic, with limited international subjectivity which covers an area of 25.053 km² and it has around 1.2 million inhabitants. The Republic of Srpska is territorially organized in 8 cities and 56 municipalities. GDP per capita in the Republic of Srpska in 2019 was around 6000 USD.

In accordance with the data obtained by the Institute of Statistics of the Republic of Srpska in 2019, the Republic of Srpska had a total of 272.366 employees. At the same time, the total number of employees in business entities in the age group 50+ was 64.850 out of 230.538 which represents a percentage of 28,13%. In December 2019, the total number of persons seeking employment by age group 50+ was 25.846 out of 87.037 which represents a percentage of 29,69%.

According to the Labor Force Survey in 2019, obtained from the Employment Office of the Republic of Srpska, the unemployment rate in the Republic of Srpska was 11.7%.

Due to the combination of its geo-strategic location, its wealth in natural resources and well educated and trained human capital, the Republic of Srpska is becoming a



favorable investment destination. There is a growing number of initiatives and regulations that are being continuously introduced aiming to improve the business environment. The main pillars of economic development in the Republic of Srpska are: metalworking industry, wood industry, agriculture and food industry, textile and footwear industry, renewable energy, ICT and tourism.

Partners from the Republic of Srpska/Bosnia and Herzegovina are located in the city Banja Luka which is the largest city and the administrative, economic and cultural center of the Republic of Srpska.

As a result of specific status of Republic of Srpska within Bosnia and Hercegovina, the territory has its own strategical documents. The following documents are the most relevant strategies from the perspective of the eDigiStars project: The Republic of Srpska employment strategy for the period 2016-2020; Strategy for the improvement of the position of the elderly in the Republic of Srpska for the period 2019-2028; and Education development strategy of the Republic of Srpska for the period 2016-2021.

These strategical documents share a common approach – <u>lifelong learning</u> – that is seen as an opportunity to improve education of citizens, thus tackling the challenges of the digitalization, to improve employment of the citizens, involving vulnerable groups and specifically the elderly. The strategies also set goals towards improving access to trainings and learning programs for all ages.

There is a wide range of agencies dealing with digitalization, employment and learning. Among these, adult education agencies are in a fundamental position (for example: Institute for Adult Education and Innovation Centre in Banja Luka). As a result, the territory has strong programs which aim to raise awareness among citizens about lifelong learning and digitalization, and their potential impact on individual's well-being (for example: educational programs by the Institute of Adult Education and Innovation Centre, or by the Chamber of Commerce; and IT retaining program).

Bulgaria

Bulgaria is represented in the project by Bulgarian Industrial Association – Union of the Bulgarian Business; Business Agency Association and National employment Agency.



The population of Bulgaria is 7,3 million people. The majority of the population, 72.5%, reside in urban areas. As of 2019, Sofia is the most populated urban centre with 1,2 million people. The labour force is 3.36 million people, of whom 6.8% are employed in agriculture, 26.6% in industry and 66.6% in the services sector. According to the administrative statistics of the National Employment Agency (NEA), the reported average monthly unemployment rate in 2019 is 5.6%. Due to the pandemic situation, the reached average monthly unemployment rate for the period January - June 2020 is 7.6% (compared to 5.8% for the period January - June 2019).

In Bulgaria several national level strategies are important to be considered: National Development Program Bulgaria 2030, Europe 2020: National Reform Program, Updated employment strategy of the Republic of Bulgaria 2013-2020, National Strategy for People with Disabilities 2016 - 2020, National Strategy for Active Life of the Elderly in Bulgaria 2019 - 2030, National Strategy for Poverty Reduction and Promotion of Social Inclusion 2020; Updated National Strategy for Demographic Development of the Population of the Republic of Bulgaria 2012 - 2030, National Strategy for Lifelong Learning 2014-2020, National Action Plan for Employment 2020, Law on Employment Promotion and the Rules for its Implementation, Law for vocational education and training.

These strategies aim to increase the competitiveness of the Bulgarian economy and to increase knowledge and intelligent growth. The three priority areas of the strategies can be identified: Education and skills; Science and Scientific Infrastructure and Intelligent Industry. The main goal in Bulgaria is *to increase the quality of human capital* through the formation of highly educated and innovative individuals, following the principles of lifelong learning. In addition, they aim to overcome the low level of digital competencies and skills.

Bulgaria has a developed institutional background for carrying out the defined strategies. There are associations for different types of vulnerable groups in the country (for example National Federation of Employers of the Disabled, Union of the Deaf, Union of the Blind, EvroRoma). These members might serve as useful partners in the project.

Local initiatives were examined, and some were found that target digital skills buildings and the employment of elderlies over 50 years old. The experiences gathered in these initiatives may serve as a useful input for the project.



Czech Republic

The Czech Republic is represented in the eDigiStars Project by DEX Innovation Agency and the Municipality of Prague 9.

Czech Republic is a parliamentary democratic country in Central Europe. It gained independence on January 1, 1993 as the successor state of Czechoslovakia, before which it existed as one of the two republics of the Czechoslovak federation.

Czech Republic covers an area of 78 866 square kilometres and has 10,7 million inhabitants. 75% of the population of the Czech Republic lives in cities. The GDP per capita is 35 440 USD. The unemployment rate has been low for a long time and is currently 2,9%. The country is divided into 14 regions and 77 districts. The capital city is Prague.

Czech Republic is a country with an advanced export-oriented market economy. The main branches of industry include the chemical, engineering, food and metallurgical industries. The most important for export is the car production.

Within the Czech Republic, the following strategies are relevant from the perspective of the eDigiStars project: Strategy of employment till 2030, Strategy of social integration 2021 – 2030, Labour 4.0. These documents main objective is to *secure* the *employment* of the society, in some cases without specific orientation. However, Strategy of social integration 2021 – 2030 pays a special attention to the involvement of minorities and immigrants. Digitalization is mentioned only in relation to the development of (better) e-governmental services. Beyond national level, Prague has a specific employment strategy as well (Programme Antivirus). It aims to provide re-qualification curses, for citizens effected by the present COVID-19 pandemic and its economic impact.

Besides, the public sector, NGO's play an important role in managing the challenges related to the employment. For example, plus50.cz, whose vision is to achieve a change in employment policy for people over 50.

Hungary

Hungary is represented in the eDigiStars project by Innoskart (Lead partner) and Central Transdanubian Regional Innovation Agency.



Hungary has a population of 9,7 million people, of which around 72% lived in urban areas. The economic performance of the country is best presented by GDP/capita which reached 17 466 US dollars in 2019. Unemployment rate dropped to a low level by 2019 and was below 3,5%. However, due to the negative economic impact of COVID-19, this raised to 4,6% till the end of summer 2020. The median age of Hungarians is 43.3 years. It is expected as in most of the participating countries that economic activity will fall, and unemployment rate will grow in the following months, years.

The Hungarian partners are located in the Central Transdanubian Region which has a population of 1 million people. The key settlements of the territory are Székesfehérvár, Tatabánya, Veszprém, Dunaújváros. The region has a favorable economic profile in Hungary, with the presence of strong industry and services (especially tourism). The region lies in the area of two important economic axis, Budapest-Vienna and Budapest-Balaton, and the eastern parts of the region are part of the wider agglomeration zone of Budapest. However, less developed areas are present in the region on the south.

Although, Hungary and Central Transdanubia experienced economic growth and low unemployment rates, there is need for support for the specific target group of the project as seniors are the most vulnerable groups of the labour market.

In Hungary, the following strategies were formulated to provide guidance for actions: the Digital Competence Framework (2020); the Vocational Training 4.0 Strategy for the renewal of vocational education and training and the response of the vocational training system to the challenges of the fourth industrial revolution; the Hungarian national social inclusion strategy II. and the Economic Development and Innovation Operational Programme which translates objectives to actual actions till 2020.

The strategies' set specific objectives to tackle the challenges addressed in the eDigiStars project through the *improvement of digital competencies*, *needs based education* of the future labour force and professionals and the increasing of available potential workforce. The key areas of intervention are education and the adult training system. The strategies aim to develop sectoral training centers and active business links between the educational facilities and the business sector. Adult education is seen as a way to increase the SMEs competitiveness and the provided trainings should be prioritized in specific areas, such us digital skills. The strategies also set goals to increase the involvement of minorities, especially the Roma minorities to be included in secondary and tertiary education and support their employment in different, flexible ways.



To reach the set goals, under a National Operation Programme, employment-enhancing co-operations were created on county and local employment. As a result, local co-operations, called "pacts" have been established on city or district level. The actors of the pacts are usually municipalities, employment centers and vocational training centers. Each pact has developed its own development strategy, whose main objective is to promote employment among disadvantaged target groups. In case of one of the key settlements of Central Transdanubian Region, the objective of the tender was to promote access to employment among disadvantaged target groups (those at risk of persistent unemployment, low-skilled people, people of Roma origin, people with disabilities, women with young children and young people aged over 50 and young people).

From the perspective of the project, the most important co-operations to be considered are the local pacts, as they include the local ecosystem actors and formulated their own strategies.

Romania

Romania is represented by European Center for Socio Professional Integration (ACTA) and RoMarketing agencies in the eDigiStars project.

Romania has a population of 19 million people, of which only 54,6% lived in urban areas. The economic performance of the country is best presented by GDP/capita which reached 12 131 US dollars in 2019. Unemployment rate dropped to a low level by 2019 and was only 3,6%. The median age in Romania is 43.2 years. However, it is expected as in most of the participating countries that economic activity will fall, and unemployment rate will grow due to the negative effects of COVID-19.

The Romanian partners are located in the North-West NUTS 2 region of Romania. The population of the region is roughly 2,6 million while the total of Romania is around 19 million. The key settlements of the territory are Cluj-Napoca, Oradea, Baia Mare, Bistrita, Satu Mare and Zalau. Therefore, two key economic centers of the country, namely Cluj-Napoca and Oradea are in the region.

In Romania, the National Employment Strategy 2014 - 2020 and the National strategy for promoting active aging and protection of the elderly for the period 2015 - 2020 are the key strategical documents. They have specific objectives of *increasing employment*, prolonging the working life and support the *participation*



of elderly on the labor market. The strategies propose means how the elderlies could be employed and how their knowledge could be retained. However, digitalization and the challenges related to it is not strongly present in national and local strategies. The difficulties of senior employability are approached from the perspective of skills development and the adaptation of workplaces (if possible) to the specific needs of the elderly. Skills development and education is a prominent tool in local cooperation's as well. In addition, the efforts to (re-) integrate vulnerable groups, minorities and migrants is present, but not specific to the seniors. In Romania, only national level strategies exist, and there are no regional or city based documents.

The following agencies play a crucial role in the territory: ANOFM (at national level) and AJOFM (at county level). They coordinate the employment and social protection of citizens.

There are national programs to financially support companies that employ persons over 45 and more recently, during the pandemic period, persons that have been redundant and are over 50. Companies receive funds to pay one year salary, but no more than the minimum salary defined by the Romanian government.

There are many co-operations in the territory dealing with the specific challenges identified in the eDigiStars project. Requalification and adult courses, involvement of Roma minority, some focused-on Roma women. These initiatives may provide useful inputs for the present project.

Slovenia

Slovenia is represented in the project by Municipality of Maribor and Foundation for Improvement of Employment Possibilities PRIZMA.

Slovenia is located in Central and Southeastern Europe. It has an area of 20,675 km², and it has a population of 2 095 861, with gradual increase in the past years due to immigration. In 2020 nearly 150 thousand foreign citizens resided in the country. The average age of Slovenian population is 43, 5 years. 20, 2 % of population is 65 years old or more. Slovenia has a developed economy and its GDP/Capita reached 25,933.509 USD in 2019. Slovenia's Unemployment Rate is updated quarterly, available from Jun 1997 to Jun 2020, with an average rate of 6.90 %. The data reached a record low of 4.00 % in Dec



2019. Due to COVID 19 situation the unemployment rate is increasing again, 5,20 % in June 2020.

The Slovenian partners are located in Podravje region, which is the second largest region. Its name comes from the Drava River and includes land on both banks along its course through Slovenia as well as the Pohorje mountains in the northeast of the region. Maribor is the regional centre and the second largest city in Slovenia, other principle towns are Slovenska Bistrica, Ptuj and Ormož.

Podravje region has 16 % of the total population and a positive net migration rate but a very high natural decrease, which means an overall decrease in the population. The population in the Podravje region is aging faster than the average in Slovenia.

The economy of the Podravje region is dominated by the service industry, which represents about 60% of the overall structure. Only 25 years ago Podravje enjoyed the reputation of a strong industrial region due to long industrial tradition. The region has all the attributes required for production of sophisticated products. Most companies are in the processing industries such as: metal-processing; chemicals; food & beverages where is a great potential for digitalization of business processes and, accordingly, for employment in this field of operation.

In recent years, we have witnessed the expansion and growth of the social entrepreneurship sector in Slovenia, and especially in the Podravje region. Podravje has the largest share of all social enterprises registered in Slovenia (30%). There are still many opportunities for new social entrepreneurship initiatives/entrepreneurs, which we will discover and empower during the eDigiStar project implementation.

In Slovenia, the following documents are the most relevant from the perspective of the project: Slovenian Development Strategy 2030; Slovenian Smart Strategy Specializations (S4); Active Employment Policy Measures; Strategy of a long-lived society; Digital Slovenia 2020 - Strategy for the development of the information society until 2020. These documents pay special attention to *education*, *digitalization*, and on the creation of an *inclusive labour* market. They set targets on increasing the competitiveness of the country through education and skills development, and the use of info-communication technologies in the business sector and everyday life. Besides national level strategies, the Municipality of Maribor developed strategies in accordance with the above.



The territory has a strong institutional background, dealing with digitalization, employment, education, and involvement of citizens from various backgrounds (migrants and minorities).

Some local initiatives target for example the employment of seniors above 58 years old and provide subsidies. *SIMBIOZA*, a Slovenian computer and internet literacy campaign has developed a model of computer workshops for the elderly, where seniors learn from young people and learn the basics of using a computer in one-week digital competence building. *Active until retirement*, Subsidy for the employment of the unemployed who have reached the age of 58 or more. These initiatives may serve as an important knowledge source for the eDigiStars project.

Ukraine

Ukraine is represented in the eDigiStars project by Ivano-Frankivsk National Technical University of Oil and Gas.

Ukraine is situated in the central part of Eastern Europe and it covers an area of 603,548 km² and can be considered a fairly large country. According to the State Statistics Service, the population of Ukraine is 41 million 723 thousand 990 people as of 09/01/2020 (excluding the Crimea). In terms of population, Ukraine ranks eighth in Europe. Of these, 77.8% are Ukrainians, 17.3% are Russians. The share of the urban population is 67.2%. The average age of the Ukrainian population is 40.6 years: for men it is 37.4, for women – 43.7 years. 21% of the population is over 65 years old. Ukraine has a developed economy, and its GDP per capita in December 2019 reached USD 12,810. The unemployment rate in Ukraine is updated quarterly. During the period from June 1997 to June 2020, the average unemployment rate in Ukraine was 8.90%. Due to COVID 19 outbreak the unemployment rate has risen again – 9.60% in June 2020.

The Ukrainian partners are located in Ivano-Frankivsk, which is the economic and cultural center of the Precarpathian region, one of the largest cities in Galicia. Named in 1962 in honor of Ivan Franko, an outstanding Ukrainian writer. The population of Ivano-Frankivsk is aging faster than the average in Ukraine. The economy of the city is dominated by the service sector, accounting for about 61% of the total structure. Ivano-Frankivsk is a significant center of machine-building, wood-processing, chemical and light industries.

In Ukraine the following documents are to be considered for the partnership of the eDigiStars project: State strategy of regional development for 2021-2027; Strategy



of sustainable development of Ukraine until 2030. It worth to consider: the main directions of implementation of State Policy in the field of employment and stimulating the creation of new jobs for the period up to 2022 and its action plans; the Poverty reduction strategies and their action plans; Strategy of state policy on healthy and active longevity of the population until 2022 and their action plans; and the concept of state policy in the field of digital infrastructure as well.

The biggest challenge in Ukraine is that the national strategical documents are only partially focused on issues of senior employment. For example reintegration of elderlies is important, but it is approached from the perspective of seniors labour rights and possibilities and no other specific strategical goals were formed. In addition, it is also experienced that Life Long Learning goals are not implemented, there are sporadic initiatives and action plans, but there is no systematic action in this aspect.

Local strategical documents of Ivano-Frankivsk set development and city development goals for the following years. But the documents do not have focus on elderly reintegration, digital competence building or issues related to minorities or immigrants.

Altough, the strategical documents on national and local level have not implemented senior reintegration, digital competence building of life long learning goals, there are imporant local initiatives that are ahead of the national and local policy makers. The Poltava University implements a programme of life long learning for elderlies (above 55 years) in which digital and computer technologies are in the center. Similar approach is implemented by the city of Ivano-Frankivsk and the Ivano-Frankivsk National Technical University of Oil and Gas. Besides, it is important to mention the Ukrainian Association of Adult Education whose primary aim is to support adults in gaining new competencies and skills. Therefore, eDigiStars could be of use of the above initiatives in Ukraine.

4.2 Summary of the territorial inputs

The partner territories of the eDigiStars project have significant differences, as the Danube Macro region itself is very diverse as well. Most of the partners are located in the so-called post-socialist or post-communist countries. Only one partner,



located in Upper Austria have not inherited this historical legacy. Except for Austria, the rest of the partner countries lag behind the economically developed countries of the European Union. However, the economic transformation of the post-socialist region has brought so significant changes, that in some cases it blurred the previously striking differences of developed and developing territories. Although, unfortunately the development of the region is characterized by unevenness, and some territories struggle to keep speed with the others. It worth to mention that when the project was submitted, in most of the partner territory's, economies have been growing rapidly and in many of them unemployment rates have reached its historical low. This was stopped by the negative economic consequences of the recent COVID-19 pandemic outbreak. The negative impact of it was equally experienced in all partner countries, regardless to their previous state of development. Unemployment rose and it is not clear whether the regions will be able to tackle this issue in the upcoming year or it will be a long-term challenge. Therefore, from this perspective the eDigiStars project have started in the "perfect" time, when the most vulnerable groups - seniors, minorities, immigrants - lost their jobs. This provides an opportunity to the partnership and a noble challenge to deal with unemployment and provide the unemployed with new skills. New skills that can help them to find better jobs on the market and to become more resilient to the ups and downs of the economy.

To reach changes, the partnership has overviewed national, regional and local strategies and defined its own objectives that aligned with them. Besides, the partnership aims to learn from local initiatives that were identified in the territorial review process and will incorporate the lessons learnt to its activities.



5. Strategical objectives:

5.1. The aim of the strategy

At the beginning of the eDigiStars Danube Transnational Programme project, the partnership has co-designed the present *Joint Danube Macro-regional eDigiStars Strategy*. The Strategy hopes to identify a clear path way for the partnership to stay on during the project implementation and to support the generation of new knowledge and good practices. The Strategy is based on the national and territorial inputs, the scientific literature and EU Strategical documents. One of the key elements of the eDigistars Strategy is to identify how relevant territorial actors can strengthen and adjust the training systems for seniors in partner countries and in the wider Danube region.

The purpose of this strategy is to:

- 1. Serve as a guidance for the partnership and for the Advisory Group during the project implementation
- 2. Define strategical objectives for the shift in the local ecosystem till the end of the project (2022) as defined in the project description , and 3 years after the project implementation (2025)
- 3. Define measurable impacts on territorial level and in the Danube region as well
- 4. Define the transferability dimension of the expected results and project outputs



5.2 Strategical objectives

Based on the analysis of the situation in the partner countries and territories, three strategical objectives were developed. The three strategical objectives consist of several specific objectives. This ensures that more concrete goals are defined and will better guide the partnership towards the strategical objectives (Figure 3.).



Figure 3. The hierarchy of objectives within the eDigiStars Strategy

The participating territories are all unique, have different approaches and different measures for tackling the challenges. However, the challenges themselves are very similar, therefore this strategy managed to effectively address common issues after the initial analysis.

1. Strengthening the employability of elderlies

Specific objective (SO): 1. Activation of the potential labour force, including elderlies, people with disabilities, immigrants and minorities

SO: 2. Encouraging the elderlies above 51 to be involved in economic activities



- SO: 3. Increasing or sustaining the positive perceptions of senior workforce among employers and supporting the adaptation of workplaces to seniors' needs
- SO: 4. Promoting flexible forms of employment for seniors
- SO: 5. Promoting the self-employment of the older generation through advice and mentoring

2. Enforcing the adaptation of eDigiStars Innovative System in adult/senior requalification

- SO: 1. Needs based requalification of the workforce with respect to digitalization
- SO: 2. Raising awareness of seniors about digital requalification courses and programs
- SO: 3. Providing better access to digital requalification and skills development courses and programs for the elderlies
- SO: 4. Encouraging disadvantaged groups (especially minorities and migrants) to engage in digital education and learning programs
- SO: 5. Adaptation of requalification courses to the special needs of seniors

3. Tackling the gap of human resources for digital employment

- SO: 1. Increasing the digital skills of society, with special attention to seniors
- SO: 2. Increasing the knowledge of stakeholders about the specific needs of the industry or labour market
- SO: 3. Motivation of IT-professionals (both young and seniors) to participate in mentoring and knowledge transfer



SO: 4. Promotion of digital entrepreneurship among elderlies above 51 years

6. Measuring the impact

6.1 Key performance indicators for the project

The partnership has recognized the need to focus on the results of their work in the Danube macro-region and the need to offer clarity regarding the value and impact of the project. The partnership has quantified the impacts of the previously set strategical objectives and defined 2025 as the target date to reach impact. Some of the indicators set here are present in the application form of the eDigiStars project as well and aimed to be reached till 2022. In these cases, the partnership has considered the predefined indicators and redefined them till 2025. The defined indicators are set under the assumption that the partnership will achieve the defined objectives more effectively if it generates a clear picture of the progress being made.

1. Strengthening the employability of elderlies

Key performance indicator (KPI):

- at least 6 seniors employed as digital experts per territory (altogether 48)
- **at least 1** of senior employed as digital entrepreneur per territory (altogether 8)
- **at least 6** employers' attitude towards seniors has been positively influenced by the project (altogether 48)



- **at least 2** organizations supporting the inclusion of vulnerable groups in disadvantaged areas has increased their interest in senior (re)employment (altogether 16)
- The partnership of the eDigiStars project and Advisory Group members institutions will involve **financial sources** (EU, national or other grants) for the creation of elderly friendly working environments when possible.
- The partnership of the eDigiStars project and Advisory Group members will employ seniors to their vacant positions when possible (altogether in 11 project partners and 96 Advisory Group members institutions)

Actors involved in reaching the defined indicators: Labour offices, Industry, Requalification and training centers, NGOs, the Partnership

2. Enforcing the adaptation of eDigiStars Innovative System in adult/senior requalification

KPI:

- **at least 60** seniors with employability difficulties raised awareness about digital requalification courses and programs per territory (altogether 480)
- **at least 2** selected "digital" courses will be adapted per territory (altogether 16)
- **at least 4** digital requalification or skills development courses and programs will be adapted to the needs of seniors beyond partner territories (altogether)



- **at least 6** members of disadvantaged groups have raised awareness of digital education programs per territory (altogether 48)
- at least 1 best practice is collected about the involvement of disadvantaged groups to digital skills development courses per territory (altogether 8)
- The partnership of the eDigiStars project and Advisory Group members will increase the digital skills of their future senior employees (altogether in 11 project partners and 96 Advisory Group members institutions)
- The partnership of the eDigiStars project and Advisory Group members will increase the digital skills of their already employed seniors if possible (altogether in 11 project partners and 96 Advisory Group members institutions)

Actros involved in reaching the defined indicators: Labour offices, Field representatives, Training and requalification centers, NGOs, the Partnership

3. Tackling the gap of human resources for digital employment

KPI:

- **at least 30** seniors build their digital competences per territory (altogether 240)
- **at least 25** seniors completed the adjusted courses per territory (altogether 200)



- **at least 1** IT-professional or senior expert participated in knowledge transfer or mentoring program per territory (altogether 8)
- **at least 18** from the involved elderlies should receive eDigiStars Labels certification per territory (altogether 144)
- **at least 1** training will be partially held in workplaces to increase digital skills of senior employees per territory (altogether 8)
- **at least 1** cooperation started among stakeholders to better explore the needs and expectations of the industry / employers (altogether 8)

Actors involved in reaching the defined targets: Industry, Labour Offices, seniors

6.2 Measures for the sustainability of eDigiStars Labels

The partnership has agreed to define the key measures for the sustainability of eDigiStars LABELs. LABELs will target chamber of commerce, industry associations, trade unions or similar organizations representing the industry. It will serve as guidance for the establishment of a system for quality certification for elderlies, who gained digital entrepreneurial skills inside the eDigiStars ecosystems. This shall help to overcome the rather natural skepticism, that elderlies can master some specific digital entrepreneurial skills and support them to become self-employees or employees of the industry.

As a result of active discussion with the local ecosystems in partner countries we must note that 1) the developed digital skills and 2) the LABELs will be defined in the next phase of the project from (in 2021).

The following measurements were defined in cooperation with project partners responsible for LABELS development. Although, at this stage of the project many



aspects of the labelling process are stills unsure – as the development of the Labels will start in the 2^{nd} period of the project – , the partnership aimed to define 5 essential aspects of the LABELS:

1. Minimal quality criteria for labelling:

- Every participant of who successfully participated on the adjusted trainings or adult courses will receive LABELs (certificate)
- The partnership will define essential competencies. These essential competencies will serve as a starting point for evaluation of the participants performance and will provide us an overview of their digital competencies.
- LABELs may be provided in different levels. This will be defined in the next phase of the project.

2. The process of awarding the Labels:

- Participants must achieve at least 50% of the points in the final test of the course to be certified with eDigiStars LABEL.
- The partnership might provide certificate in different levels.
- A ceremonial awarding of labels/certificates might be held to which the media, AG members and other stakeholders are invited depending on the territorial partners.

3. The process of changes in the Label:

- The partnership will develop how to award an eDigiStars certificate.

4. Cooperation mechanisms among providers of Labels from different territories:

- An adaptation of the trainings and tests and thus also of the labels to the development of digital skills is necessary (by the course providers).



- AG members and the partnership should be actively involved in the process of overviewing the development of Labelling in the territories through the project period.

5. Joint objectives for further building of eDigiStars Label brand:

- Inclusion of eDigiStars Labelling system in the potential training courses and acceptance of the LABELS by employment offices, labour offices, chambers of commerces and the industry.
- Holding a certificate of eDigiStars LABELS will strengthen the position of applicants when employers will evaluate or compare applicants.



ANNEX 1 - Summary of objectives and KPIs

1. Strengthening the employability of elderlies		2. Enforcing the adaptation of eDigiStars Innovative System in adult/senior requalification		3. Tackling the gap of human resources for digital employment	
Specific objective	Indicator	Specific objective	Indicator	Specific objective	Indicator
1. Activation of the potential labour force, including elderlies, people with disabilities, immigrants and minorities	at least 6 seniors employed as digital professional per territory (altogether 48)	1. Needs based requalification of the workforce with respect to digitalization	at least 60 seniors with employability difficulties raised awareness about digital requalification courses and programs per territory (altogether 480)	1. Increasing the digital skills of the society, with special attention to seniors	at least 30 seniors build their digital competences per territory (altogether 240)
2. Encouraging the elderlies above 51 to be involved in economic activities	at least 1 of senior employed as digital entrepreneur per territory (altogether 8)	2. Raising awareness of seniors about digital requalification courses and programs	at least 2 selected "digital" courses will be adapted per territory (altogether 16)	2. Increasing the knowledge of stakeholders about the specific needs of the industry or labour market	at least 25 seniors completed the adjusted courses per territory (altogether 200)
3. Increasing or sustaining the positive perceptions of senior workforce among employers and supporting the	at least 6 employers' attitude towards seniors has been positively influenced by the project (altogether 48)	3. Providing better access to digital requalification and skills development courses and programs for the elderlies	at least 4 digital requalification or skills development courses and programs will be adapted to the needs of seniors	3. Motivation of IT- professionals (both young and seniors) to participate in mentoring and knowledge transfer	at least 1 IT- professional or senior expert participated in knowledge transfer or mentoring program per territory (altogether 8)



adaptation of workplaces to seniors' needs			beyond partner territories (altogether)		
4. Promoting flexible forms of employment for seniors	at least 2 organizations supporting the inclusion of vulnerable groups in disadvantaged areas has increased their interest in senior (re)employment (altogether 16)	4. Encouraging disadvantaged groups (especially minorities and migrants) to engage in digital education and learning programs	at least 6 members of disadvantaged groups have raised awareness of digital education programs per territory (altogether 48)	entrepreneurship	at least 18 from the involved elderlies should receive eDigiStars Labels certification per territory (altogether 144)
5. Promoting the self- employment of the older generation through advice and mentoring	The partnership of the eDigiStars project and Advisory Group members institutions will involve financial sources (EU, national or other grants) for the creation of elderly friendly working environments when possible	5. Adaptation of requalification courses to the special needs of seniors	at least 1 best practice is collected about the involvement of disadvantaged groups to digital skills development courses per territory (altogether 8)		at least 1 training will be partially held in workplaces to increase digital skills of senior employees per territory (altogether 8)
	The partnership of the eDigiStars project and		The partnership of the eDigiStars project and		at least 1 cooperation started among



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Advisory Gromembers will empositions to their vacations who possible (altogether 11 project partnand 96 Advisory Group membositiutions)	oy nt en in rs ry	Advisory Group members will increase the digital skills of their future senior employees (altogether in 11 project partners and 96 Advisory Group members institutions)	stakeholders to better explore the needs and expectations of the industry / employers (altogether 8)
		The partnership of the eDigiStars project and Advisory Group members will increase the digital skills of their already employed seniors if possible (altogether in 11 project partners and 96 Advisory Group members institutions)	



ANNEX 2 - Glossary of key terms

- **Digital (self)-entrepreneur**: "Digital entrepreneurship is the process of entrepreneurial creation of digital value by using various technical / digital opportunities to support effective acquisition, processing, distribution, and consumption of digital information. Therefore, digital entrepreneurs are most likely to work in the field of social media, open-source software and hardware, 3D printing, digital imaging, and big data analysis" (Sahut et al. 2019).
- **Digital expert**: A person with high level of user knowledge in specific digital programs. He or she may be trained through professional educational programs (university) or on specific training courses focused on practical knowledge.
- **Digital skills**: "Digital skills are defined as a range of abilities to use digital devices, communication applications, and networks to access and manage information. They enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities at large.
- **Disadvantaged groups**: The present eDigiStars project uses a broad definition of disadvantaged groups, which includes minorities, migrants and other vulnerable groups. However, the partnership strictly focuses its attention on those members of the above groups who are at least 51 years old.
 - <u>Entry-level digital skills</u>, meaning basic functional skills required to make basic use of digital devices and online applications, are widely considered a critical component of a new set of literacy skills in the digital era, with traditional reading, writing, and numeracy skills.
- **IT professional**: A person with advanced level of digital skills and professional knowledge in programming, database creation, software development, and others. It is generally a term to describe people who usually participated in professional education programs (university)



Labels: Labels will serve as a guidance for the establishment of a system for quality certification for elderlies, who gained digital entrepreneurial skills inside the eDigiStars ecosystem.

Requalification courses: The present eDigiStars project defines requalification courses as any courses, training programs or modules that imply the idea of lifelong learning and targets people who are already above the age of compulsory education.

The advanced spectrum of digital skills are the higher-level abilities that allow users to make use of digital technologies in empowering and transformative ways such as professions in ICT." (UNESCO, 2018 – online article⁵)

⁵ https://en.unesco.org/news/digital-skills-critical-jobs-and-social-inclusion