



DigitalScouts

ENHANCING THE DIGITAL LITERACY
AND PARTICIPATION IN EUROPE

National Report for Portugal

Digital participation of people 60+: readiness, support structures,
professionalisation of supporters and examples of opportunities.

About this publication

This report summarises the results of the research activities carried out in Portugal within the Erasmus+ project **DigitalScouts: Enhancing the Digital Literacy and Participation in Europe** (cooperation partnership in adult education, project number: 2022-1-DE02-KA220-ADU-000086499). More information is available at DigitalScouts.eu.

Authors

Inês Saavedra

Natália Machado

Carina Dantas

SHINE 2Europe

inessaavedra@shine2.eu

nataliamachado@shine2.eu

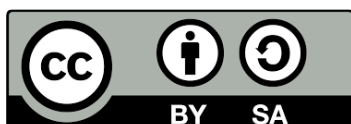
carinadantas@shine2.eu



Credits

We would like to thank all those who took part in the interviews and contributed their knowledge, experience, wishes and expertise to our project.

Copyright © 2023 [SHINE 2Europe, Lda]



This publication is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/) (CC BY-SA 4.0) License.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Co-funded by the
European Union

Table of contents

1. Introduction and methodology	3
2. Results of the research phase in Portugal	4
2.1 Status quo of the digital readiness of people aged 60+	4
2.2 Support structures in regard to digital participation	10
2.3 Findings on professionalisation of support of older people using ICT	13
2.4 Examples of opportunities for digital participation of people 60+	14
2.4.1 Movimento 55+ Associação	14
2.4.2 Hands-on SHAFE, BIG game, SDD, GreenerAge and TRIO	15
2.4.3 Participa.gov	17
2.4.4 Google Arts and Culture	18
2.4.5 Portal Cultura Portugal	19
2.4.6 P5 Saúde Mental	20
2.5 Recommendations for the DigitalScouts training	21
2.6 Testimonials of interviewees	22
Bibliography	26
Annex: Lead questions used in guided interviews	28

1. Introduction and methodology

The COVID19 pandemic has highlighted the importance of digital technologies and skills for participation in all areas of society. Although the digital divide between younger and older generations in Europe is getting smaller, the need for support remains, in particular for the very old and those with lower levels of formal education.

The consortium members of the DigitalScouts project, co-funded by the Erasmus+ programme of the European Union, aim to train people who want to support older people in using digital tools, thus enabling them to benefit from the opportunities of digital participation. By digital participation we mean that citizens use digital tools (such as the Internet, social media, etc.) to take part in personally relevant areas of life, be they social, cultural, political or related to health promotion.

The main focus of the project is to develop an educational offer that qualifies "digital scouts" to enable older people to benefit from the opportunities of digitalisation. For this purpose, a Digital Training will be developed as an independent self-learning course. It focuses on the various possibilities of digital participation and health promotion and enables digital scouts to acquire comprehensive knowledge to support people aged 60+ in using digital tools according to their individual interests. In addition, a Toolkit for Trainers will be available to support adult educators in embedding the digital training into a blended learning course.

The first outcome of the project will be a European Compendium highlighting the importance of promoting the digital participation of older citizens. It will also provide illustrative examples from the participating countries of how older people can benefit from using digital tools in terms of cultural, political and social participation as well as health promotion.

In all countries involved in the DigitalScouts project (Austria, Germany, the Netherlands, Portugal and Romania), a research phase was carried out to prepare the development of the training materials and to identify the current situation of older people with regard to digital participation. This phase of the project also focused on determining respective local and regional offers and structures to facilitate digital literacy, as well as to identify best practice examples of digital opportunities for people aged 60+.

In order to achieve these objectives, the partners of the project consortium:

1. carried out desk research in their national countries and languages, taking into account the current public discourse, recent publications, databases and policy papers, and
2. conducted interviews with potential supporters of older people and therefore participants in the DigitalScouts training, as well as with relevant experts, stakeholders and practitioners, in the field of e.g. policy, administration, science or advocacy, active in training or supporting trainers or older people.

The questions for the interviews with experts and stakeholders as well as with potential training participants (see Annex: Lead questions used in guided interviews) were adapted according to the function, expertise and personal background of the interviewees.

In Portugal, we conducted a total of 10 interviews (3 semi-structured interviews and 7 written questionnaires), comprising of five experts and five potential learners.

The five experts included three male and two female, each with their own unique experiences and qualifications. One of the experts is a member of the Executive Committee of Information, Communication and Electronic Technologies Cluster, actively involved in international cooperation, and a senior consultant in innovation with a focus on ICT. Another expert is a university professor who coordinates the Competence Centre for Active and Healthy Ageing at the University of Porto and has vast experience in European projects. The third expert is responsible for the communication and marketing area of a senior Portuguese organisation and acts as the coordinator for the digital inclusion projects Prolific and #Eusoudigital. The fourth expert is responsible for the Social Innovation Strategy and serves as a consultant for marketing and communication strategies. Lastly, the fifth expert is a project manager in the area of active and healthy ageing.

The remaining five interviews were conducted with potential learners, consisting of two males and three females. One of them is a teacher, one is unemployed, another is a caregiver in an association for older people, and two others are occupational therapists, one working with older people and the other in a public hospital with people with disabilities.

The methods for the interviews were chosen based on the participants' availability and preferences. Two interviews were conducted online via video call, one was face-to-face, and the remaining interviews were conducted via email.

This report summarises the results of the research activities in Portugal and gives an overview of the situation of older people with regard to their digital readiness (infrastructure, internet use, digital skills) and relevant limiting aspects for their digital participation (income, formal education level, gender), the support structures and offers for the digital participation of older people and the professionalisation of trainers in Portugal.

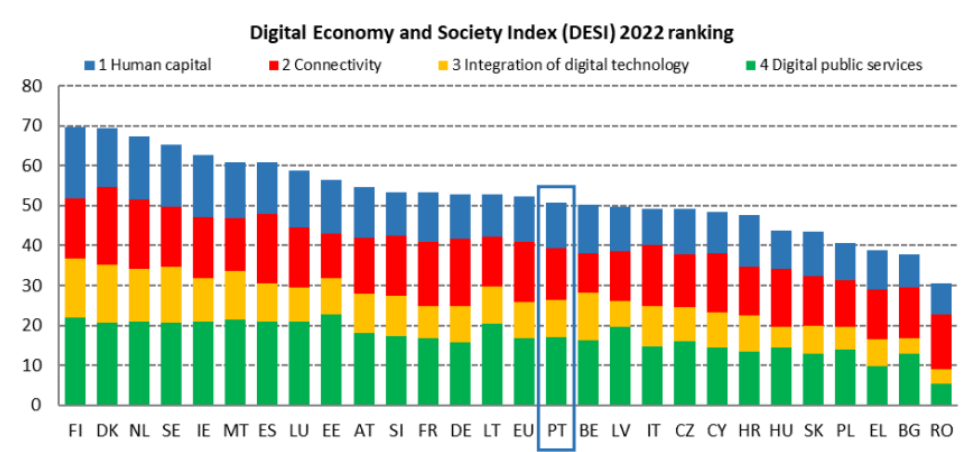
The following report sections also contain lessons learnt from existing training of trainers and recommendations on what content and skills are important for the training of digital scouts. Good practice examples of digital participation opportunities for people aged 60+ are also described in this report.

2. Results of the research phase in Portugal

2.1 Status quo of the digital readiness of people aged 60+

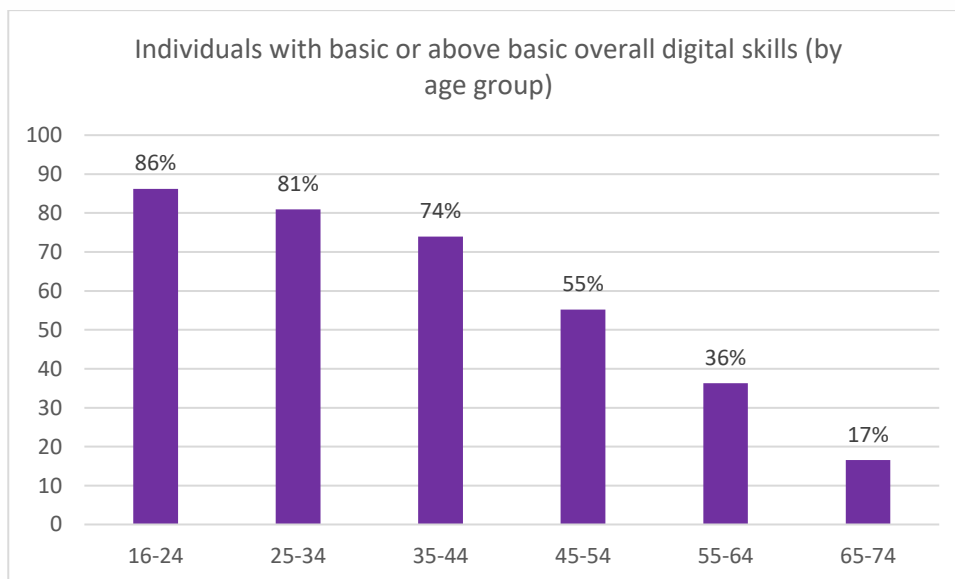
In the 2022 edition of the Digital Economy and Society Index (DESI), Portugal has moved up one position from last year's ranking and is now placed 15th among the 27 EU Member States (see Graph 1) (European Commission, 2022).

DESI 2022	Portugal		EU
	rank	score	score
	15	50.8	52.3



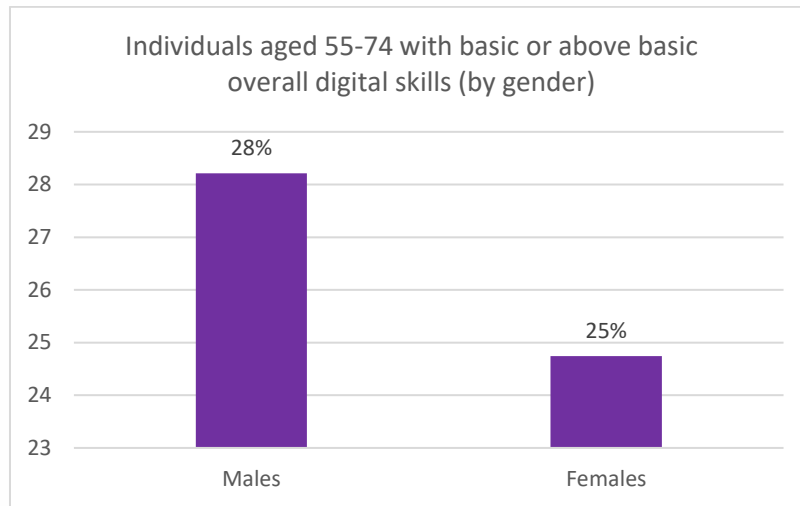
Graph 1 - Digital Competences (European Commission, 2022).

In Portugal, digital skills tend to decrease with **age**, namely, 86% of the youngest have basic digital skills, while only 17% of the population over 65 have basic digital skills (see Graph 2).



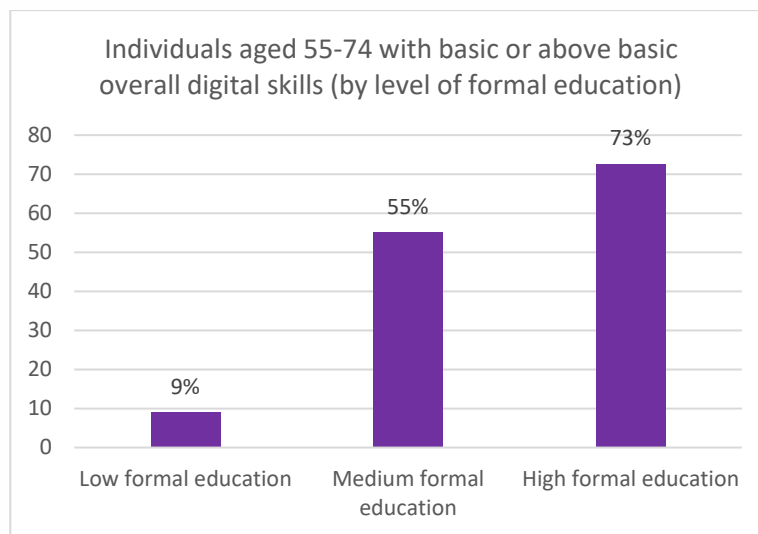
Graph 2 – Portuguese individuals with basic or above basic overall digital skills by age group in 2021 (Eurostat, 2023a).

According to the data, 28% of Portuguese males aged 55-74 possess basic or above basic overall digital skills, while 25% of females have similar basic skills (see Graph 3).



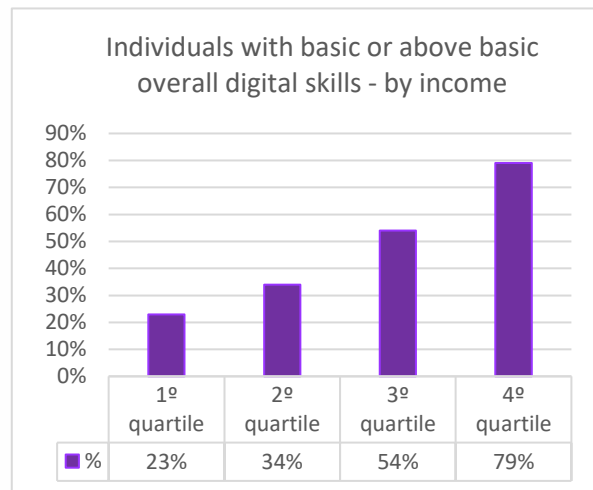
Graph 3 – Basic or above basic overall digital skills of Portuguese individuals (aged 55-74) by gender in 2021 (Eurostat, 2023a).

The proficiency of digital skills is significantly influenced by the **level of education**. Among individuals aged 55-74, only 9% of those with a low level of education possess basic or above basic overall digital skills. However, this percentage increases to 55% for individuals with a medium level of education and further rises to 73% for those with a high level of education (see Graph 4).



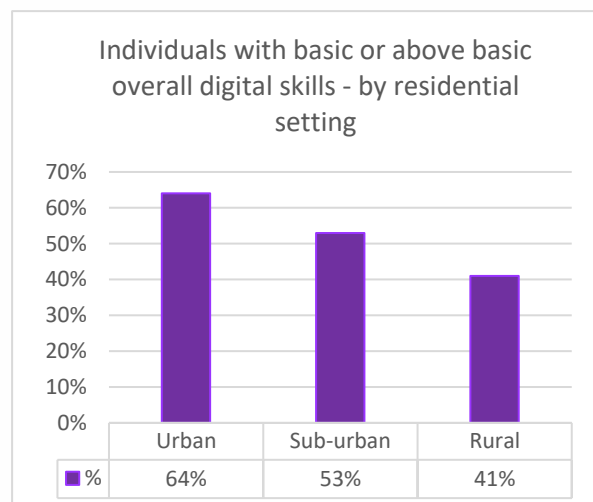
Graph 4 – Basic or above basic overall digital skills of Portuguese individuals (aged 55-74) by education level (Eurostat, 2023a).

In the adult population, the level of digital skills is significantly related to **income**. Upon analysing data from the 1st, 2nd, 3rd, and 4th quartiles (respectively low, lower-middle, upper-middle and high income) of 2019, it was found that the percentage of individuals with basic or above basic overall digital skills increases significantly as income rises. Specifically, only 23% of individuals in the first quartile possess these skills, compared to 34% in the second quartile, 54% in the third quartile, and 79% in the fourth quartile (see Graph 5).



Graph 5 – Portuguese individuals with basic or above basic overall digital skills by income in 2019 (Eurostat, 2023c).

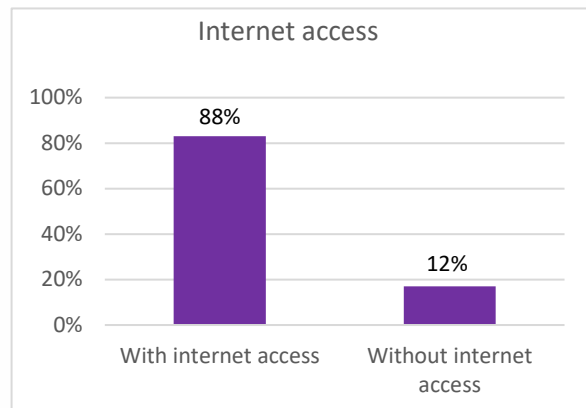
Concerning the **residential setting**, 64% of people living in cities have basic or above basic overall digital skills, decreasing to 53% of people living in suburban areas and to 41% for those living in rural areas (see Graph 6).



Graph 6 – Portuguese individuals with basic or above basic overall digital skills in residential settings in 2021 (Eurostat, 2023d).

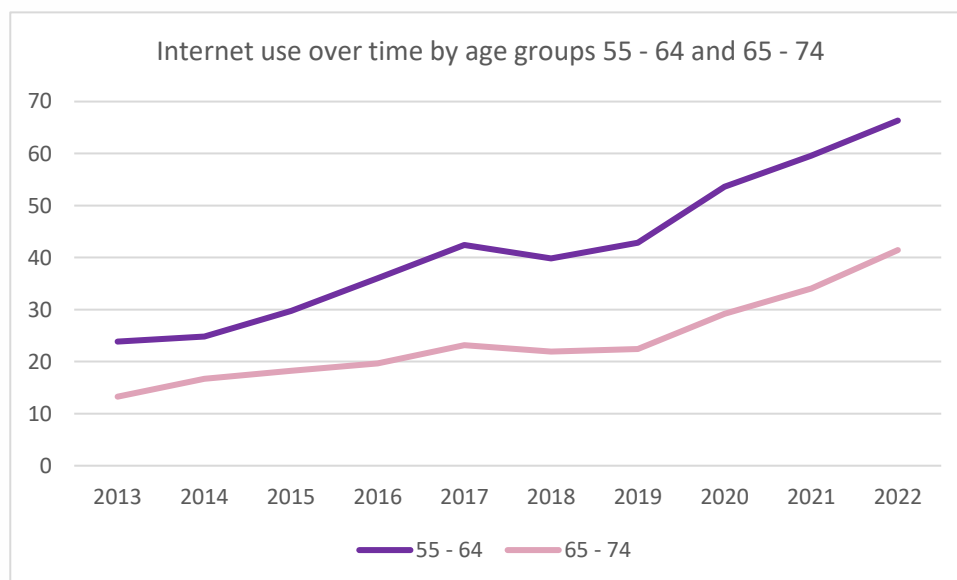
Regarding **internet access**, 88% of the population has internet access at home and 12% has no access (see

Graph 7).



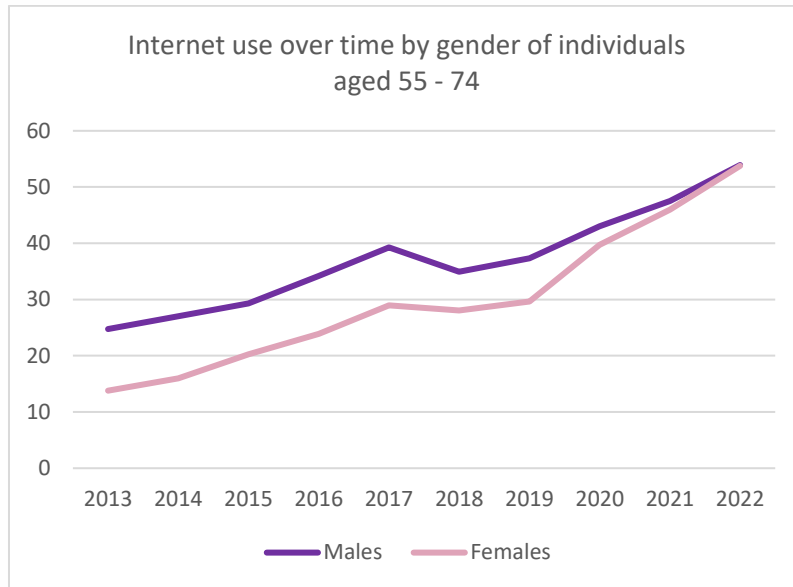
Graph 7 – Portuguese households with internet access in 2022 (Eurostat, 2023e).

The data from 2013 to 2022, as shown in Graph 8, indicates an increase in daily **internet usage** in the last 12 months, among both age groups 55-64 and 65-74. However, the analysis reveals that the rate of growth is more significant for the age group 55-64. In 2013, 24% of individuals aged 55-64 were internet users, while only 13% of those aged 65-74 were (a difference of 11 percentage points). By 2022, the gap had widened considerably by 25 percentage points: 66% of individuals aged 55-64 were using the internet, while 41% of those aged 65-74 were doing so.



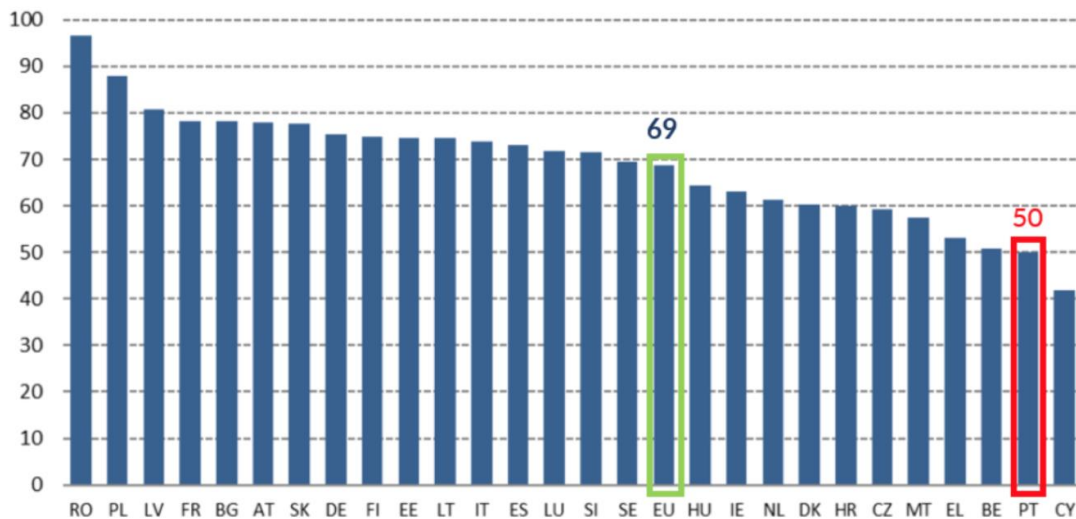
Graph 8 - Evolution of Portuguese individuals using internet by age groups 55-64 and 65-74 (%) (Eurostat, 2023b).

When examining the **gender-specific** trends in internet usage (as depicted in Graph 9), the data shows a consistent increase in usage by both genders. From 2013 to 2019, females tended to use the internet less than males. However, this disparity started to decrease significantly from 2020 to 2022. In 2013, the internet usage percentages were 25% for males and 14% for females, but by 2022, both genders had reached the same level of internet usage (54%).



Graph 9 – Internet use over time by gender of Portuguese individuals aged 55 - 74 (Eurostat, 2023b).

Financial aspects have been identified as one important barrier to digital readiness among older people in Portugal. **Broadband prices** in Portugal are the second highest in the EU, only behind prices in Cyprus, according to the "Digital Economy and Society Index 2021" (DESI2021) (see Graph 10).



Graph 10 - Broadband price index in 2021 (score 0-100, 100 meaning the lowest prices) (European Commission, 2021b).

According to ANACOM (2023), **mobile phone internet** in Portugal is currently the second most expensive in the European Union. However, this situation has worsened since March 2023, with a significant 5% increase in telecom prices - the largest surge in Portugal in the last 27 years. Over the last twelve months, telecommunication prices in Portugal have risen by an average of 2%, which is considerably higher than the European Union's average increase of 0.1%. As a result,

Portugal not only ranks among the EU countries with the highest price hikes, but is also among the countries with the highest service fees (ANACOM, 2023).

2.2 Support structures in regard to digital participation

Portugal has identified digital transition as one of its key strategic priorities. With the new XXIII constitutional government taking office on March 30th, 2022, the responsibility for digitalisation and administrative modernisation now falls directly under the Prime Minister, with a newly appointed Secretary of State for Digitalisation and Administrative Modernisation (European Commission, 2022).

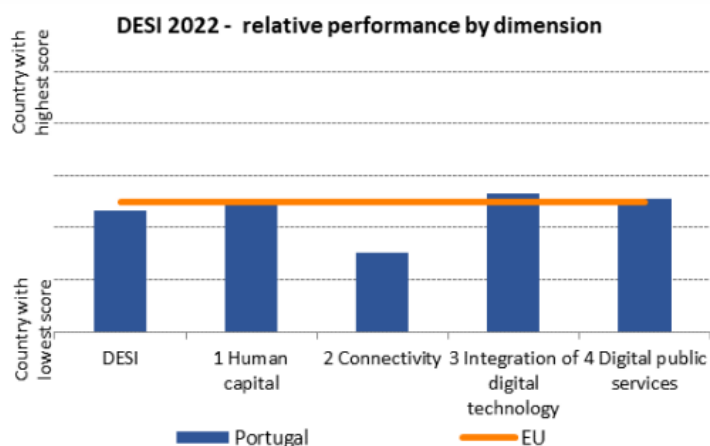
Portugal's digital transformation strategy and action plan have set **digital inclusion, training of the public**, and **digital transformation of businesses and public administration** as its national priorities. These objectives align with the digital transition component of its recovery and resilience plan (RRP) which focuses on digital skills and the digitalisation of businesses and the public administration (European Commission, 2022).

On the **human capital** level, Portugal has made efforts to improve the level of digital skills among the population and the workforce, with the implementation of the 2020 action plan for the digital transition (APDT). However, there is still a need for more graduates in ICT fields to reduce the country's digital divide (European Commission, 2022).

Portugal has good quality **connectivity** infrastructure with room for expansion in 5G coverage. The country performs well in terms of fixed broadband access of at least 100 Mbps and fixed high-speed internet coverage, but its performance drops for the number of mobile data subscriptions per 100 people and 5G deployment (European Commission, 2022).

Regarding the **integration of Digital Technology**, numerous measures are in place to foster the adoption of ICTs and partnerships between firms and research institutes to stimulate innovation, and their scope is expected to expand with the implementation of the recovery and resilience plan (see Graph 11) (European Commission, 2022).

Portugal has transformed the functioning of its public administration and the design of **public services** through sustained **digitalisation** over time. The government has created the Council for Information and Communication Technologies (CTIC), which coordinates the implementation of the digital transformation strategy in public administration. Portugal has exceeded or is on par with the EU averages in the field of digital public services, but there is still a risk of leaving too many people behind due to the country's digital skills gap. To address this issue, Portugal has established the Citizen Spots Network, which provides public servants to assist citizens in accessing and utilizing services from various public institutions. Additionally, Portugal is implementing an omnichannel approach to improve access to digital public services (European Commission, 2022).



Graph 11 - Relative performance by dimension (European Commission, 2022).

The [Observatory for Digital Competences \(Observatório das Competências Sociais\)](#)¹ was created to have a system for collecting, recording, analysing data and providing information on relevant indicators, run by the Directorate-General for Education and Science Statistics at the Ministry of Science and Technology (European Commission, 2022).

The [National Digital Skills Initiative e.2030, Portugal INCoDe.2030 \(Iniciativa Nacional Competências Digitais e.2030 – INCoDe.2030\)](#)², is an integrated public policy initiative, launched in 2017, which aims to promote digital skills and has the following action axes: education and vocational training, qualification and requalification, inclusion, advanced training and research (European Commission, 2022).

An official structure was created - Mission Structure Digital Portugal ([Estrutura de Missão Portugal Digital - EMPD](#))³ - to coordinate and monitor the implementation of the action plan. This ongoing task is being improved over time as EMPD has developed a platform to monitor the initiatives' outcomes and DESI indicators, providing transparent information to the public on their progress (European Commission, 2022; Portugal Digital, n.d.).

In the axis of “Training People for Digital” (Formar Pessoas para o Digital)⁴, different resources are available:

- **Free Digital Training Courses**, free online courses available on Portugal Digital’s partner platforms.
- **More Digital Employment**, training for companies and their employees.
- **Upskill**, professional requalification with employability.
- **Portugal Digital Academy**, testing and improving digital skills.
- **Digital School Program**, preparing Students for a digital future.
- **More Digital Youth Program**, training for unemployed youth.
- **Digital Skills Certificate**, certification of digital skills.
- **I Am Digital**, helping adults take the first steps on the internet, with the vision of helping to reduce inequities in access in Portugal (Portugal Digital, 2021).

¹ observatorio.incode2030.gov.pt

² www.incode2030.gov.pt

³ portugaldigital.gov.pt

⁴ portugaldigital.gov.pt

In connection to the program [EUSOUDIGITAL](#)⁵ there is also a national movement, called Movement for Active Digital Use (Movimento pela Utilização Digital Ativa - [MUDA](#)⁶), which is promoted by several companies, universities and associations and the Portuguese State that are committed to encouraging the participation of the Portuguese in the digital space, contributing to a more advanced, inclusive and participative country (MUDA, 2023).

Below it can be found other good practices of support structures regarding digital participation in Portugal.

Programa para a Inclusão e Literacia Digital da Câmara Municipal de Lisboa, Lisboa

Lisbon City Hall, through the Department of Development and Training, promotes the Programme on Inclusion and Digital Literacy since 2017. It was awarded as a European good practice in the inclusion of vulnerable people. It provides [a short training courses in Digital Skills](#)⁷, for those who do not use or use little the computer to combat digital inequality, aggravated since the beginning of the pandemic. The courses are free of charge and entirely in e-learning. After the successful completion of the course, the participant receives the Digital Skills Passport, an innovative tool unique in Portugal that awards "learning medals" (CML, n.d.).

As an initiative of the programme, [aulas digitais: Tecnologia que facilita o dia-a-dia!](#) are providing digital lessons in videos form on the positive contributions of technology on everyday's life.

Cyber_Sénior, Pombal

[Cyber_Sénior](#)⁸ is a Centre for Digital Inclusion which aims to provide the older population in the municipality of Pombal with training in IT, related to writing texts and how to use network access safely to read news, exchange emails, access social pages or communicate with the family (Cyber_Sénior, 2023).

SIOSLIFE, Portugal

[Sioslife](#)⁹ provides systems for professionals who work with the older population (such as in residences and in-home support service) and older adults.

An example is the Sioslife Tablet, which is a device that complements the home support service. Installed in the home of the older adult, it offers institutions tools for remote monitoring 24 hours a day and cost savings, giving security to family members and caregivers.

Older adults can use the Sioslife device to call, send and receive pictures and videos, read digital newspapers, draw digitally, see movies, hear music, and play games that stimulate body and cognition (Sioslife, n.d.).

Universidade Sénior, Portugal

The [senior universities](#)¹⁰ in Portugal have been playing an important role in promoting digital tools, as well as other cultural and sports activities, for example. All classes are given by volunteer teachers and, in general, at the ICT level, they cover topics about basic computer skills, internet navigation, email, and social media (RUTIS, n.d.).

⁵ [eusoudigital.pt](#)

⁶ [muda.pt](#)

⁷ [lisboa.pt/agenda/o-que-fazer/formacao-em-competencias-digitais-1](#)

⁸ [cyber-senior.pt](#)

⁹ [sioslife.com/pt](#)

¹⁰ [rutis.pt](#)

In the [Intergenerational University of Almada](#)¹¹ (Universidade Intergeracional do Concelho de Almada - UNICA), the IT classes have 4 levels. At the advanced level, students can familiarise themselves with the user health portal and the finance portal (UNICA, 2017).

Centro de Cidadania Digital, Valongo

The [Digital Citizenship Centre \(Centro de Cidadania Digital - CCD\)](#)¹² is based in Valongo since 2018 and is the result of a new concept of smart cities in which technologies are used to improve the life of communities. It is a collaborative space where it is possible to learn to use technological tools to solve important problems for the community or the world.

In this centre, activities are promoted for children and young people, young Not in Education, Employment or Training (NEET), adults, older adults, and the educational community. In the specific case of older adults, through the improvement of their digital skills, the CCD aims to increase: their civic participation, capacity building for the digital economy, active ageing, and promoting intergenerational activities (CDI Portugal, n.d.).

Activities for Digital Inclusion of Adults, Lisboa

[“Activities for Digital Inclusion of Adults – For anyone who works with adults”](#)¹³ is an e-book containing 20 free activities designed to promote digital literacy and inclusion for adults who have limited access to and experience with technology. These activities were created to help adults exercise their autonomy by teaching them how to use digital technologies in situations where they may struggle.

The e-book is primarily intended for adult educators, social animators, trainers, and other professionals working in formal and non-formal learning environments. It aims to provide these professionals with the tools they need to support adults with limited digital literacy and help them access the benefits of technological development (Costa and Cruz, 2018).

PROLIFIC, Portugal

[PROLIFIC: PROMoting Digital Rights Literacy For Including Citizens](#)¹⁴ is an Erasmus+ Project. It has an [online platform](#)¹⁵ with tools to strengthen the digital rights of vulnerable groups. It has resources including: Digital Rights First-Aid Kit, Tailored handbooks, Infographics, Practical guide for trainers and Tests (Prolific, n.d.).

2.3 Findings on professionalisation of support of older people using ICT

In Portugal, two important adult training structures work together: the Institute of Employment and Professional Training (Instituto do Emprego e Formação Profissional - IEFP) and the National Agency for Qualification and Vocational Education (Agência Nacional para a Qualificação e o Ensino Profissional - ANQEP).

IEFP¹⁶ is the national public employment service, which aims to promote job creation and quality employment and combat unemployment through active employment policies like vocational

¹¹ cm-almada.pt/unica-universidade-intergeracional-do-concelho-de-almada

¹² cdi.org.pt/centro-de-cidadania-digital

¹³ [repositorio.ul.pt/bitstream/10451/36790/1/Activities for Digital Inclusion FINAL.pdf](http://repositorio.ul.pt/bitstream/10451/36790/1/Activities%20for%20Digital%20Inclusion%20FINAL.pdf)

¹⁴ prolificproject.eu/the-project

¹⁵ prolificplatform.org

¹⁶ iefp.pt

training. The IEFP offers free education and training courses for adults and certification of trainers (IEFP, n.d.).

ANQEP¹⁷ is a public institute that contributes to the improvement of the qualification levels of young people and adults in Portugal. It promotes demand for school and vocational qualifications at non-higher education levels, and a supply of initial and lifelong training that is attractive, of quality, and relevant to the labour market (ANQEP, n.d.a).

Training courses for adults can be developed by various entities, including the IEFP, certified training entities, entities that don't need certification because they contemplate the development of training activities in their diplomas of creation or authorization of operation, and the Qualifica Centres network (DSQA, 2017).

Adults aged 18 years old or more, including active people in need of professional updating and retraining, and young NEET, can benefit from these training courses. Some courses are free, while others may have a cost when integrated into certain modalities (DSQA, 2017).

It should be noted that no specific professionalisation training for trainers or supporters of older people using ICT was found within the structures described above. However, under the Portugal's digital transformation strategy and action plan, there is a digital training programme that aims to help thousands of Portuguese adults who have never used the internet. In I Am Digital ([EUSOUDIGITAL](#)¹⁸), mentors/volunteers are teaching digital tools to older adults, in an accessible, free and close way. This programme has hundreds of centres all over the country. The training session for mentors is free and aims to convey how to teach the use of the Internet to older learners. The training takes place on the programme's platform and can be done step by step, on video or through webinars. Upon successful completion of the training, the mentor receives a EUSOUDIGITAL Mentor Certificate (EUSOUDIGITAL, 2021).

2.4 Examples of opportunities for digital participation of people 60+

2.4.1 Movimento 55+ Associação

Portugal

Area covered: Social participation

1. Short Description

Movimento 55+ Associação is an association that facilitates the provision of services carried out by people over 55 through a platform.

2. Implementation and objectives

The platform aims to value and integrate people aged 55 and over, to prevent and combat loneliness and isolation by providing a variety of community services (gardening, small repairs, meals on wheels, etc.) that promote intra- and inter-generational relations and which are remunerated after evaluation and activation of each person enrolled. The platform allows to choose by type of services available and location in Portugal.

¹⁷ anqep.gov.pt

¹⁸ eusoudigital.pt

This platform can be a way of supporting those older adults who might want to be active and work.

3. Key facts

The Movimento 55+ Associação is backed by Portugal Inovação Social, a public initiative that strives to encourage social innovation and stimulate the social investment sector in Portugal. Portugal Inovação Social receives funds from the European Social Fund, as part of the Portugal 2020 Partnership Agreement. For older persons who want to register as an expert and offer their services, there are no charges involved.

4. Results

This practice is still ongoing and has 3000 specialists registered, 270 currently active and more than 170,000€ have been already paid to specialists.

5. More information

Website [55mais.pt]

2.4.2 Hands-on SHAFE, BIG game, SDD, GreenerAge and TRIO

European Projects

Areas covered: Social participation, health promotion

1. Short Description

Hands-on Smart Healthy Age-Friendly Environments (SHAFE), Building inclusive environment for all Generations (BIG) game, Smart for Democracy and Diversity (SDD), GreenerAge and TRIO – Adult education on digital, health and data literacy for citizen empowerment are Erasmus+ projects. Hands-on-SHAFE provides practical tools and informal learning experiences to create digital and healthy living environments, as well as fostering entrepreneurship in this field. BIG is a game designed to increase awareness of daily life issues in inclusive environments. Another game is SDD, which promotes inclusion and diversity with an educational and digital learning approach. TRIO and GreenerAge, on the other hand, will have learning platforms available in 2024. TRIO's platform focuses on improving digital, health, and data literacy, while GreenerAge's platform promotes awareness and literacy of environmental and climate change issues.

2. Implementation and objectives

Hands-on SHAFE: The website contains training modules on digital, healthy living and environments and entrepreneurship. It addresses people of all ages and genders, including people with cognitive and/or physical disabilities or impairment. It aims to enable people to become pioneers and innovators in their neighbourhoods or become entrepreneurs of services and products in the field of healthy, smart and age-friendly environments. All 29 training modules

are available free of charge in 6 languages: English, Dutch, French, German, Polish and Portuguese.

BIG: The game addresses limited access to environments, such as neighbourhoods, public spaces, and social and commercial infrastructure, for individuals with physical, mental, or social constraints. Even people who are in temporary situations, such as pregnancy or pushing a stroller, may experience difficulties in accessing these environments. The BIG game is available for free in 5 languages: English, Dutch, German, Polish and Portuguese.

SDD: the SDD e-learning platform presents a learning offer on the field of discrimination, which, among others, refers to the topics of racism, sexism, transphobia and antisemitism. It demonstrates common contexts and consequences of various discriminatory situations, asks for help, gives feedback and encourages self-reflection on the issue. At some point in this process, the question of how we are involved, what stereotypes we have and what discriminatory responses there are, will emerge. The approach of SDD puts the players own reflection on discrimination and stereotypes in the centre and encourages them to think about everyday discrimination in the long term. The SDD e-learning platform and game are available for free in 7 languages: English, Czech, Dutch, French, German, Italian and Portuguese.

3. Key facts

Hands-on-SHAPE, BIG, SDD, GreenerAge and TRIO are Erasmus+ projects which are co-funded by the European Union.

The Hands-on-SHAPE targets adult volunteers or individuals interested in starting their own businesses. It aims to facilitate healthy living and promote the inclusion of others in the community.

The target audience for BIG GAME includes volunteers from social associations, initiatives, and Senior Councils who advocate for the interests of individuals in need of healthy, smart, and age-friendly environments. It also involves professionals working in municipalities and non-profit organizations who are dedicated to urban development and social inclusion. Additionally, individuals such as students, informal caregivers, and individuals who require suitable living environments are part of the target group.

SDD addresses learners, adult educators and policy makers and intends to contribute to the strengthening of a democratic and diverse society with this broad approach.

GreenerAge focuses on adults aged 55+ and serves as a learning platform to increase their knowledge and literacy on environmental and climate change issues. The project also aims to enhance their digital skills.

The TRIO project caters to adults from three distinct age groups: 18-35, 36-50, and 51+. It aims to empower citizens of different ages through informal education in the areas of health, digital literacy, and data literacy.

To use the free platform and/or game people need to have access to internet and computer and/or smartphone.

4. Results

The Erasmus+ projects Hands-on SHAFE, BIG game and SDD have been completed, while TRIO and GreenerAge are ongoing.

Hands-on SHAFE, BIG & SDD: The online eLearning Platforms and game are still accessible despite the three projects being discontinued. The e-learning platform of Hands-on SHAFE will remain available online for the next 10 years, and there are plans to include new languages, such as Ukrainian (currently under discussion). Hands-on SHAFE has been identified as a best practice project by the funding program Erasmus+. Also BIG has been identified as a good example for putting the target group first.

GreenerAge & TRIO: In 2024 the learning platform for both projects will be ready.

5. More information

Hands-on-shafe Website [hands-on-shafe.eu]

BIG Website [big-game.eu]

SDD Website [sdd-game.eu]

GreenerAge Website [greenerage.eu]

TRIO Website [trioproject.eu]

2.4.3 Participa.gov

Portugal

Area covered: Political/municipal participation

1. Short Description

Participa.gov is an online platform that supports participative processes.

2. Implementation and objectives

This platform is an initiative from the public administration, in which citizens can present proposals and make decisions through their votes, using simple, secure and reliable technologies.

3. Key facts

On the platform it is not only possible to consult projects already implemented but also to register in the Participatory Budgeting Portugal (*Orçamento Participativo Portugal*) which is a deliberative, direct and universal democratic process, through which people present investment proposals and choose, by voting, which projects should be implemented in different areas, such as:

culture; science; justice; health; education, sports and youth; agriculture, forest and rural development; environment, spatial planning, nature conservation and housing.

Further, it is possible to submit proposals through the platform. The user has to log in and search for initiatives related to their geographical interests and/or preferred themes. After seeing the open initiatives to which the user can submit a proposal and fill in an online form. It is also possible to vote on other proposals, requiring user authentication.

4. Results

In the 2018 edition of the Participatory Budgeting Portugal, people were able to decide how to invest 5 million euros. There were 22 winning projects elected, 3 national and 19 regional. At the end of 2021, this participatory initiative had 6 projects completed, 12 projects under execution and 4 projects yet to be executed.

5. More information

Website [participa.gov.pt]

2.4.4 Google Arts and Culture

Portugal

Area covered: Cultural participation

1. Short Description

Website and app that allow access to free content from museums around the world.

2. Implementation and objectives

Google Arts & Culture is a website maintained by Google in collaboration with museums across several countries. Using Street View technology¹⁹, the site offers free virtual tours of some of the world's greatest art galleries.

3. Key facts

This website and app were launched in 2011 and contain features from over 2000 museums. Each museum was able to choose the number of galleries, artworks and information they wished to make available. Currently, the website and app have several works from various museums, such as: MoMA - Museum of Modern Art (New York, USA), Musée d'Orsay (Paris, France),

¹⁹ Google utilizes multiple methods to collect Street View imagery, including driving, pedaling, sailing, and walking. Special cameras are employed during these activities, capable of capturing images in multiple directions simultaneously. These collected images are then overlapped and stitched together to create a comprehensive 360-degree image.

Belvedere (Vienna, Austria), Serralves Foundation (Porto, Portugal), and many others.

In addition to the collection, it is also possible to play art-related games, transform photographs the user takes with works of art and save a list of favourite content to return to whenever the user wants.

4. Results

This is an on-going website and app.

5. More information

Website [artsandculture.google.com]

App for smartphone [play.google.com/store/apps]

Apple Store [apps.apple.com/us/app]

Other website with Portuguese content [visitportugal.com]

2.4.5 Portal Cultura Portugal

Portugal

Area covered: Cultural participation

1. Short Description

The *Portal Cultura Portugal* is a website that shows cultural content produced and promoted by different agents, structures and public or non-public entities, promoting and disseminating events, concerts, shows, exhibitions, among others.

2. Implementation and objectives

The Portuguese Republic is developing this initiative, with the co-financing of COMPETE2020, Portugal 2020 and the European Union. It seeks to bring citizens closer to culture, by improving access to information on cultural activities.

3. Key facts

The portal contains 4 sections:

- Meet, where users can find out about exhibitions, events and Portuguese heritage. Here they can get cultural sites, events and/or routes by location.
- Know, where the current cultural news is presented.
- Participate, where users can find out more about the status of professionals in the cultural area, and how they can support culture through IRS, among others.

- Create, where they can find information about support for artistic creations.

4. Results

The Portal Cultura Portugal is constantly updating cultural news and the cultural agenda in Portugal.

5. More information

Website [culturaportugal.gov.pt]

2.4.6 P5 Saúde Mental

Portugal

Area covered: Health promotion

1. Short Description

Free website platform and app that aims to promote mental health.

2. Implementation and objectives

The website and app are the results of the project "Promoting Mental Health During Pandemic", led by the Institute for Research in Life and Health Sciences (ICVS) of the School of Medicine of the University of Minho, under the coordination of Pedro Morgado, and was funded by the FCT under the Research4Covid programme.

3. Key facts

P5 Saúde Mental aims to promote self-assessment and self-monitoring of mental health as well as disseminate tools for emotional management, sleep improvement and adoption of healthy lifestyles.

Self-assessment of symptoms is carried out using two instruments frequently used in clinical practice to research the presence of depressive symptoms and the presence of anxious symptoms. Although these tools have a relevant informative value, they neither make a diagnosis nor replace a personalised assessment carried out by a health professional.

4. Results

The programme is already completed, but the website platform and app remain active and can be used free of charge.

This program aims to identify protective and risk factors for mental health during pandemic. To explore this, over 2000 participants have provided data regarding their home environment, employment status, sociodemographic variables and personality differences. They filled weekly online questionnaires (during the time-period when the confinement measures were stricter) measuring anxiety, depression, stress, and obsessive-compulsive symptoms.

5. More information

Website [saudemental.p5.pt]

App for smartphone [saudemental.p5.pt/profile]

2.5 Recommendations for the DigitalScouts training

According to Chao *et al.* (2020), Pimentel *et al.* (2016) and Yoo (2020) older adults can benefit from receiving training in learning new technologies. Below there are some summarised suggestions to teach digital scouts, based on the research and the feedback provided by the interviewees:

Training design and content:

- Design curriculum based on real-life situations and activities of daily living.
- Provide step-by-step handouts with pictures, definitions, and examples. This can be particularly helpful in assisting older adults' with declined memory.
- Break down teaching objectives into smaller tasks, to provide participants with a sense of accomplishment in learning.
- Include hands-on activities in class and provide individual assistance tips.
- Take into account [design tips](#)²⁰ for older persons in the training manual and platform.

The interviewed experts mentioned that it is important for older people to see practical interest in using digital tools. They provided practical examples such as submitting tax returns, consulting retirement information, managing bank accounts, booking medical appointments, accessing recreational activities for mental training without infantilization, learning about cybersecurity and privacy, accessing prevention and care support content, and updating driver's licenses. Additionally, they discussed types of offers available to extend active and professional life.

Other expert said that the training for potential learners should go beyond general knowledge of programme content directed at older people. It should deepen strategies on how to deal with older people with different types of disabilities.

One expert mentioned that platforms are not very helpful, unless they are used by trainers, because otherwise participants are very unlikely to come back. To ensure accessibility for older people, the expert recommended incorporating explanatory content directly into relevant websites and/or apps such as Finance websites or the National Health System application. This means that the websites or applications themselves should include informative materials tailored to the needs of older users.

One potential learner mentioned that video tutorials or written guides with illustrative images for training are helpful because they provide easily accessible content that can be referred back to later.

Format and duration of the training:

²⁰ eleken.co/blog-posts/examples-of-ux-design-for-seniors

- One expert suggested starting with one in-person focus group, followed by online classes, and ending with another in-person event.
- Another expert suggested a hybrid method where those who can attend in person will do so, and those who cannot will participate online.
- One other expert said that for the training for older adults to be dynamic, the training of trainers should also be dynamic. For example, if you want older adults to learn how to use technology in their daily lives, the scouts should also use it in the street (e.g.: Continente online app, Burger King app with coupons, use of Google Maps, digital passwords at the Citizen's shop, etc.).
- One potential learner mentioned that the most attractive format will vary based on individual needs or preferences. It is crucial to ensure flexibility in these formats to meet all requests quickly and facilitate access for all those in need.
- Another potential learner mentioned on-site training for one month, which includes practical experience with the older population, such as an internship.

Facilitator Role:

- Conduct a needs analysis at the beginning of the course, to understand the characteristics of participants in the class (how familiar or not they are with ICT and their preferences) and to provide a supportive learning environment.
- Group participants with a mix of abilities.
- Repeat reminders and reviews to improve learning.
- Adapt teaching pace to accommodate declines in vision, hearing, motor skills, and cognitive abilities:
 - Do not move too quickly in delivering the content.
 - Have a pause between each step and wait for the participants to perform a task.
 - Adapt size, colour, font, and line length of PowerPoint slides or other material and control the volume of voice and audio.
- Be patient and provide individual assistance to help learners navigate through the different tasks.
- Include hands-on activities in class and provide individual assistance tips to boost confidence and reinforce learning and engagement.

In addition to the previously mentioned points, most of which were mentioned by both the experts and potential learners, the interviewed experts and two of the potential learners emphasized the significance of the facilitator's empathy and communication skills.

Overall, designing a curriculum and facilitating a class for older adults on digital skills requires considering their unique needs and preferences. By providing practical, step-by-step guidance, hands-on activities, and individual assistance, learners can improve their digital skills and confidence in using technology in a positive learning environment.

2.6 Testimonials of interviewees

Do you think digital participation of older citizens is important? Why?

“The participation of the community that is targeted in any type of social intervention is of great importance because only in this way will the intervention be successful. This participation should occur at all stages of the intervention, from the construction phase of the project, the needs analysis, the intervention and the evaluation phase. All parties must be heard and valued. In this way the community will feel part of the social change. The ideal would be to start any social intervention for change driven through the needs presented by the community.

In this case, digital participation (use of digital technologies) of older citizens has several advantages for this population:

- Learning opportunities;
- Greater social interaction (here we are talking about social inclusion and contact with relatives, friends, acquaintances, etc...);
- Access to general information on issues of personal interest, health and well-being and a feeling of greater autonomy.”

(E.P., project manager in the area of active and healthy ageing)

“Yes, digital participation of older citizens is very important for several reasons. It allows them to stay connected with distant friends and family through messaging, voice calls, video calls, emails and more. It can help them stay informed about issues that are of interest to them such as news, health or even accessing economic or government information. I think this participation empowers older citizens and can give a new sense of self-confidence and independence and inclusion in today's world.”

(J.B., potential learner)

Do you think there is a need to expand these support/learning offers? If so: Why? Which kind of offers are not available? What is missing in the current offers?

“Trainning needs to be massified, but it also needs to be particular and personalised, because people have different levels of skills.”

(E.C., expert)

“Yes, because it would be interesting for older people to have mastery of the digital world to develop new skills. Offerings such as maintaining knowledge and creating new modules relating to services that this target audience accesses more assiduously, such as health centres, banks, finance, etc.”

(J.J., member of an older people organisation)

“I think there is a little offer on an individual level, there is only more for institutions and organisations.”

(A.A., potential learner)

“In the period of confinement, due to the COVID-19 pandemic, it left uncovered this need for them to be able to keep in touch with the outside world. The lack of this interaction caused a rapid decline on the part of older people. If there were more services to support digital literacy learning, perhaps these effects would not have been so significant.

From my experience, the points for improvement, should be the personalisation of the training (according to the need of each person because they have different interests), periodicity according to the individual needs. Alternation between individual and collective learning moments. Trainers with specific training to teach older people.”

(E.P., project manager in the area of active and healthy ageing)

Do you think there is [also] a need to train people to support/train older people using ICT? If so: Why?

“Yes! For the process of digital inclusion of older people to take place in a healthy and effective way, educational agents need to demonstrate awareness and sensitivity to cognitive, sensory, motor and physical declines arising from advancing age and to take an approach that promotes self-efficacy and avoids negative attitudes in the use of information and communication technologies.”

(I.V., member of an older people organisation)

“Yes, trainers also need to have a preparation, especially in how to talk to older people, how not to stigmatise, etc.”

(B.B., potential learner)

Is there a need to expand these offers [trainings for trainers/supporters]? If so: Why? Which kind of offers are not available? What is missing in the current offers?

“Yes. It becomes a complex task as it is necessary to take into account the limitations and needs of older people in their daily life and to consider specific indications in the learning process and digital literacy.”

(IV, member of an older people organisation)

“Yes, it should be accessible to all target audiences, whether formal or informal. There is a lack of buy-in from residential structures in these projects.”

(J.T.O., potential learner)

Bibliography

ANACOM. (2023). *A subida de 5% dos preços das telecomunicações constitui o maior crescimento mensal em Portugal nos últimos 27 anos*. [Online]. Available from: anacom.pt [Accessed: 26th February 2023]

ANQEP. (n.d.a) *A ANQEP*. [Online] Available from: www.anqep.gov.pt [Accessed: 5th March 2023].

ANQEP. (n.d.b) *Programa “Certificado de Competências Digitais”*. [Online] Available from: catalogo.anqep.gov.pt [Accessed: 5th March 2023].

CDI Portugal. (n.d.) *Centro de Cidadania Digital*. [Online] Available from: cdi.org.pt/centro-de-cidadania-digital [Accessed: 5th March 2023].

Chao, J.Y., Kao, H.C., Yeh, Y. H. (2020) Learning Outcomes of Mobile and Tablet Application Courses for Taiwanese Older Adults. *Recent Developments on Information and Communication Technology (ICT) Engineering- Meen, Yang & Zhao*. [Online] Available from: www.iikii.sg/sites/default/files/ICICE2018/159-162.pdf. [Accessed: 27th February 2023].

CML. (n.d.) *Programa para a Inclusão e Literacia Digital*. [Online] Available from: www.lisboa.pt [Accessed: 5th March 2023].

Costa, F. A., Cruz, E. (2018) *Activities for Digital Inclusion of Adults*. Lisboa: Instituto de Educação, Universidade de Lisboa.

Cyber_Sénior. (2023) [Online] Available from: cyber-senior.pt [Accessed: 3rd March 2023].

DSQA. (2017) *Guia da Certificação de Entidades Formadoras. Sistemas e requisitos de formação*. [Online] Available from: certifica.dgert.gov.pt [Accessed: 3rd March 2023].

European Commission. (2022) *Digital Economy and Society Index (DESI) 2022 Portugal*. [Online] Available from: digital-strategy.ec.europa.eu/en/policies [Accessed: 2nd March 2023]

European Commission. (2021a) *Women in Digital Scoreboard 2021*. [Online] Available from: digital-strategy.ec.europa.eu/en/news [Accessed: 4th April 2023].

European Commission. (2021b) *Digital Economy and Society Index (DESI) 2021*. [Online] Available from: digital-strategy.ec.europa.eu/en/library [Accessed: 2nd March 2023]

Eurostat (2023a). *Individuals level of digital skills (from 2021 onwards). Age-groups*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/0fd55c31-eb26-41a2-bd75-d134f3594897?lang=en. [Accessed: 20th March 2023].

Eurostat (2023b). *Individuals level of digital skills (from 2021 onwards). Internet access*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/c0e205c7-3cf8-4f60-b56a-16f3959022a4?lang=en. [Accessed: 20th March 2023].

Eurostat (2023c). *Individuals level of digital skills (from 2021 onwards). Residential setting*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/47f34b6b-e9fb-4876-9d4a-2dc43dd36c89?lang=en. [Accessed: 20th March 2023].

Eurostat (2023d). *Individuals level of digital skills (from 2021 onwards). Income*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/98cbf93e-044f-492e-87f2-42456df3ebad?lang=en&page=time:2019. [Accessed: 20th March 2023].

Eurostat (2023e). *Individuals level of digital skills (from 2021 onwards). Households with internet access*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/a2d056cb-f4e5-4514-a6ca-0bb4c5ff52b5?lang=en. [Accessed: 20th March 2023].

Eurostat (2023f). *Individuals level of digital skills (from 2021 onwards). Use of the internet*. [Online] Available from: ec.europa.eu/eurostat/databrowser/bookmark/9de049e2-e54e-46a4-acd2-652a35a7075f?lang=en. [Accessed: 20th March 2023].

EUSOUDIGITAL. (2021) *Programa de capacitação digital de adultos*. [Online] Available from: www.eusoudigital.pt [Accessed: 3rd March 2023].

IEFP (n.d.). A Instituição. [Online] Available from: www.iefp.pt [Accessed: 3rd March 2023].

MUDA (2023). *Movimento pela utilização digital ativa*. [Online] Available from: www.muda.pt [Accessed: 3rd March 2023].

Pimentel, M. G., Cunha, B. C. R., Antonelli, H. L., Rodrigues, S. S., Neto, O. J. M., Rocha, A., Melo, E., Costa, A. R., Uscamayta, O. M., Rodrigues, K. R. H., & Zaine, I. (2016, December 1-3) Enhancing older adults connectivity by introducing mobile devices communication tools. *7th International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting InfoExclusion* (Dec 1-3, 2016, Vila, Real, Portugal). Available from: doi.org/10.1145 [Accessed: 27th February 2023].

Portaria n.º 179/2021 de 27 de agosto (Portugal). [Online]. Available from: dre.pt/dre/detalhe [Accessed: 3rd March 2023].

Portugal Digital. (2021) *Training people for Digital*. [Online] Available from: portugaldigital.gov.pt [Accessed: 2nd March 2023]

Prolific. (n.d.) *Promoting Digital Rights Literacy for Including Citizens*. [Online] Available from: prolificplatform.org [Accessed: 3rd March 2023].

RUTIS. (n.d.) Available from: rutis.pt [Accessed: 3rd March 2023].

Sioslife. (n.d.) [Online] Available from: sioslife.com/pt [Accessed: 3rd March 2023].

UNICA. (2017) [Online] Available from: <https://www.facebook.com/watch/?v=1214184378673414> [Accessed: 3rd March 2023].

Yoo, H. J. (2020) Empowering Older Adults: Improving Senior Digital Literacy. *American Association for Adult and Continuing Education 2020 Conference* (Oct 27-30, 2020). [Online] Available from: files.eric.ed.gov/fulltext/ED611612.pdf [Accessed: 27th February 2023].

Annex: Lead questions used in guided interviews

1. Do you think digital participation of older citizens is important? Why?
2. Which barriers do you know that prevent older citizens from digital participation?
3. Which support structures and learning offers for older people in using ICT do you know?
4. Do you think there is a need to expand these support/learning offers? If so: Why? Which kind of offers are not available? What is missing in the current offers?
5. Do you think there is [also] a need to train people to support/train older people using ICT? If so: Why?
6. Which opportunities/offers are available [do you know] to be trained themselves (as trainers) in [country/region]?
7. Is there a need to expand these offers [trainings for trainers/supporters]? If so: Why? Which kind of offers are not available? What is missing in the current offers?
8. What are trainers for digital education of older people keen to learn? [Potential learners: What would you like to learn to be able to support/train older people?]
9. What are the most important skills/knowledge for supporters?
10. From your personal point of view, which skills/knowledge do the (potential) trainers/you lack?
11. In addition to contents, which format is attractive (duration, online/on-site/ ...) for you/trainers on digital skills?
12. Can you also recommend methods/media to be included in training offers for trainers?
13. Which examples of opportunities interesting for/targeted at older people in the digital area do you know, covering one of the following areas: health promotion, social participation, cultural participation, political participation/municipal services?