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WORK PACKAGE 2

MAPPING DIGITAL SURVIVAL SKILLS AGAINST DIGCOMP AND DIGITAL SOLUTIONS AVAILABLE TO ESCAPE DEJECTION AND LONELINESS

Country Report Spain

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Prepared by:

Arrabl-AID

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1. Introduction

Digital literacy among older people in Spain has seen significant progress in recent years, although challenges remain that require attention. Below we discuss the current state of digital inclusion of this group, their access to and use of digital tools, demographic trends that influence technological adoption, comparisons with younger groups, and the role of technology in their daily lives.

Current state of digital inclusion among older people in Spain

The digital divide among older people in Spain has been gradually narrowing. According to data from the National Institute of Statistics (INE), in 2023, 80.1% of people aged between 65 and 74 had used the internet in the last three months, which represents an increase compared to the 76% recorded in 2022. In addition, 65.1% of this age group used the internet daily, increasing from 59.9% the previous year. (Newtral.es, 2024).

This increase in internet use reflects a positive trend towards digital inclusion of older people, although there are still segments that require greater support to fully integrate into the digital environment.

Access to digital tools and main online activities

Access to digital devices among older people has increased significantly. According to the MAPFRE Foundation's II Senior Consumer Barometer, in 2021, more than 60% of people over 55 in Spain were on the internet, equivalent to approximately 10 million people. Of these users, 95% used smartphones to connect. (65Ymás, 2021).

The main online activities of this collective include:

- **Reading the news**: 54.3% of older people use the Internet to obtain information.
- **Administrative procedures**: Almost half (48.7%) contact the public administration through digital means.
- **Video calls**: 48.1% make video calls to communicate with family and friends.
- **Online banking**: Approximately 9 million older people use digital banking services.
- **Online shopping**: 43% make purchases online, especially when purchasing clothing and food.

Demographic trends influencing technology adoption among older adults

Several demographic trends impact the technological adoption of older people in Spain:

- **Population aging**: According to INE projections, by 2050, 30.4% of the Spanish population will be over 65 years old, doubling the number of people under 15 years

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old. This increase highlights the importance of promoting digital inclusion in this segment to avoid their marginalization.

- **Increase in life expectancy**:Increasing longevity means that older people are looking to stay active and connected, which may motivate the adoption of digital technologies.
- **Education and training**: The generations reaching old age today have higher educational levels and are more familiar with technology, facilitating their digital integration.

Comparison of digital literacy levels between older people and younger age groups

Although digital adoption among older people has grown, there is still a gap compared to younger groups. While 65.1% of people aged 65-74 use the internet daily, this percentage is significantly lower than in younger cohorts, where daily internet use is almost universal. Furthermore, activities such as e-commerce, social media use and online banking are less common among older people compared to younger people. For example, 43% of those over 55 make online purchases, while this percentage is higher among younger generations.

The role of digital technology in the daily lives of older people

Digital technology plays an increasingly important role in various aspects of the daily lives of older people:

- **Communication**: Video calls and social media make it easier to stay in touch with family and friends, helping to combat loneliness and isolation.
- **Access to health care**: Online medical consultations and telemedicine allow older people to access health services without travelling, improving their well-being.
- **Financial management**Online banking offers convenience for conducting transactions and managing personal finances from home.
- **Social participation**: Digital platforms enable older people to engage in communities, access information and participate in cultural and educational activities.

In conclusion, although digital literacy among older people in Spain has made significant progress, it is essential to continue implementing initiatives that promote their digital inclusion. This will ensure that they can fully benefit from the opportunities offered by technology in their daily lives.

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2. Key Findings

Digital literacy among older people in Spain has shown significant progress in recent years, although challenges remain that require attention. Below, the most notable trends, obstacles faced, opportunities available and areas requiring specific interventions are presented, based on quantitative and qualitative data collected from various sources.

Significant trends in digital literacy among older people in Spain

According to data from the National Institute of Statistics (INE), only 37.5% of people between 65 and 74 years old have interacted with electronic administration in the last 12 months, which shows a significant digital divide in this population segment (Cadena SER, 2025a).

Furthermore, the UN ranks Spain 17th in digital administration worldwide, but older citizens continue to perceive difficulties in the usability of digital services (El País, 2025a).

Challenges in acquiring and using digital skills

Despite progress, older people in Spain face several challenges in acquiring and using digital skills:

- **Accessibility and platform design**: Many digital services are not adapted to the needs of older people, which makes their use difficult (Cadena SER, 2025c)
- **Distrust and technological anxiety**: There is a perception of insecurity when carrying out procedures online, which can lead to dependence on third parties to manage personal matters (El País, 2025b).
- **Lack of specific training**: Although there are successful local initiatives, the absence of large-scale training programs limits the acquisition of digital skills in this group (Cadena SER, 2024).

Opportunities to improve digital literacy and inclusion

To address these challenges, several opportunities present themselves:

- **Customized training programs**: Developing courses adapted to the needs and learning pace of older people can facilitate their digital inclusion (Cadena SER, 2025b).
- **Inclusive platform design**: Adapting digital interfaces to make them more intuitive and accessible can reduce barriers to use (El País, 2025a).
- **Building digital trust**: Implementing awareness and support campaigns can reduce technological anxiety and increase autonomy in the use of digital tools (Cadena SER, 2025c).

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Gaps in training, resources and infrastructure

Key gaps requiring attention include:

- **Territorial inequality**: Rural areas often have less access to training programs and technological resources, which widens the digital divide (Cadena SER, 2025d).
- **Economic limitations**: Lack of financial resources can prevent the acquisition of quality devices and internet connections (Cadena SER, 2025e).
- **Insufficient public programs**: The absence of comprehensive public policies that address the digital literacy of older people limits the scope of solutions.

Key insights from existing studies and consultations

The following conclusions emerge from the investigations and consultations with stakeholders:

- **Need for comprehensive strategies**: It is essential to develop public policies that integrate digital literacy as a priority for the social inclusion of older people.
- **Importance of multi-sector collaboration**: Cooperation between public administrations, technology companies and social organisations can enhance the results of digital literacy initiatives.
- **Recognition of the heterogeneity of the collective**Older people are not a homogeneous group; therefore, strategies must be adapted to the diverse realities and needs within this population segment.

Although progress has been made in the digital literacy of older people in Spain, it is essential to implement comprehensive and adapted strategies that address existing challenges, take advantage of opportunities and close current gaps to achieve effective digital inclusion of this group.

3. Digital Literacy Levels and Access to Technology

Current level of digital literacy among older people in Spain

According to recent data, 80.1% of people aged 65 to 74 used the Internet in 2023, which represents a significant increase from the 1.5% recorded in 2002. However, in the group of those over 75 years of age, only 36% connect to the Internet, although this figure has increased from 23% in 2019 (InfoPeriodistas, 2024).

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Despite the growth in Internet use, gaps in advanced digital skills persist. In 2023, 59% of people aged 65-75 had low or no digital skills, while only 41% had basic or advanced skills. The biggest gaps are observed in digital content creation and in aspects related to security and problem solving (65YMÁS, 2024).

Access to digital tools and main barriers

Older people access digital tools mainly through devices such as mobile phones, tablets and computers. However, they face several barriers:

- **Lack of digital skills**: Although Internet use has increased, many older people lack advanced digital skills, which limits their ability to perform certain online tasks (65YMÁS, 2024).
- **Distrust and fear of fraud**: The perception of online insecurity can discourage older people from using digital services, especially those related to financial transactions or the exchange of personal information.
- **Non-inclusive platform design**: Many digital interfaces are not adapted to the needs of older people, which makes their navigation and effective use difficult.

Percentage of older adults who use the Internet regularly and their main online activities

In the 65-74 age group, 80.1% use the Internet regularly, while in those over 75 years of age, 36% connect to the network (InfoPeriodistas, 2024). The most common online activities among those over 75 years of age include:

- **Instant Messaging**: 45.1%.
- **Reading the news**: 31.3%.
- **Calls or video calls**: 29.6%.

In addition, a quarter of people between 75 and 84 years old use online banking, and almost 4% of those over 85 years old do so as well (65YMÁS, 2024).

Inequalities in digital literacy and access according to demographic factors

There are significant differences in digital literacy and access to digital tools based on several factors:

- **Geographic location**: Rural areas often have less access to digital infrastructure and training programs, which widens the digital divide compared to urban areas. Initiatives such as the collaboration between the Junta and the Provincial Council of Cádiz seek to mitigate this disparity by facilitating digital access to some 4,000 rural residents (Cadena SER, 2024).

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- **Educational level**: Internet use is higher among those with higher educational levels. More than 80% of individuals with university studies use this technology, in contrast to only 15% of those with less than primary education (65YMÁS, 2024).
- **Socioeconomic status**: Income influences access to and use of digital technologies; the higher the income, the greater the adoption of these tools.

Devices and technologies most used by older people

The most common devices among older people include:

- **Mobile phones**In 2006, less than half of people aged 65-74 used mobile phones; by 2023, this figure rose to 96.3% (65YMÁS, 2024).
- **Tablets and computers**:Although less common than mobile phones, these devices are also used, especially for activities such as reading news and managing emails.

In conclusion, although there has been significant progress in the adoption of digital technologies by older people in Spain, challenges remain related to digital skills, mistrust and inequalities based on geographic, educational and socioeconomic factors. Addressing these barriers is essential to achieve full digital inclusion of this population segment.

4. Political panorama in the field of digital inclusion and senior education

National and regional policies for the digital inclusion of older people

Spain has developed various strategies to promote digital literacy among the elderly, aligned with the European digital inclusion framework. One of the key initiatives is the National Digital Skills Plan, framed within the Recovery, Transformation and Resilience Plan, which seeks to improve the digital training of the entire population, with special emphasis on vulnerable groups, such as the elderly (Ministry of Economic Affairs and Digital Transformation, 2024).

At a regional level, autonomous communities such as Catalonia, Andalusia and Castile and Leon have implemented specific programmes for the digital training of older people. One example is the Plan Andalucía Vuela, which offers free digital training in telecentres distributed throughout the region (Junta de Andalucía, 2024).

Government initiatives for digital education and training of the elderly

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The Spanish government, through the National Institute of Educational Technologies and Teacher Training (INTEF) and the Ministry of Social Rights and Agenda 2030, has launched initiatives to strengthen digital training for the elderly. These include:

- **Mentor Classrooms**, a distance learning network with accessible courses for seniors seeking to improve their digital skills (Ministry of Education and Vocational Training, 2024).
- **CapacitaTIC+55 Program**, promoted by Castilla-La Mancha, which offers free digital training to people over 55 years of age (JCCM, 2024).
- **Digitalization and the Elderly**, an initiative within the SME Digitalization Plan 2021-2025, which incorporates digital training programs for older people in collaboration with associations and technology companies (Red.es, 2024).

Role of public institutions, NGOs and companies in the digital inclusion of the elderly

- Digital literacy of the elderly is promoted not only by the public sector, but also by non-governmental organizations (NGOs) and the private sector:
- NGOs and associations: Organizations such as the Cibervoluntarios Foundation and the Telefónica Foundation carry out free digital training programs aimed at seniors (Telefónica Foundation, 2024).
- Public institutions: Libraries, community centres and public universities offer digital literacy workshops tailored for seniors.
- Technology companies: Companies such as Google and Microsoft have developed training programs in digital skills for seniors, promoting digital inclusion (Google Spain, 2024).

Effectiveness of existing policies and pending challenges

Despite progress in policies and programs, significant challenges remain:

- **Persistent digital divide**: Although Internet use among the elderly has grown, 59% of people aged 65 to 75 still have low or no digital skills (INE, 2024).
- **Lack of accessibility**: Many digital platforms are not adapted to the needs of the elderly, which makes their use difficult (65YMÁS, 2024).
- **Territorial inequalities**: Digital literacy remains uneven between urban and rural areas, where access to digital training and resources is limited.

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Success stories and good practices in digital inclusion of the elderly

There are various programs and models that have proven to be effective in the digital education of seniors:

1. "Séniors Conectados" program by the Orange Foundation: It has trained more than 5,000 older people in digital skills through in-person and online workshops (Orange Foundation, 2024).
2. ICT Classroom for Seniors in the Community of Madrid: Offers free and personalized training in digital technology, including online banking and social networks (Community of Madrid, 2024).
3. "Granada Digital" Plan: An intergenerational training model in which young volunteers teach older people how to use digital tools (Diputación de Granada, 2024).

These programmes have shown that intergenerational digital learning and training tailored to the needs of the elderly are effective strategies for closing the digital divide.

5. Survival Digital Skills for Social Inclusion and Loneliness Prevention

Essential digital skills for the inclusion and autonomy of older people

In the digital age, older people need to develop key technological skills to stay socially connected and independent. These skills include:

1. **Digital Communication**: Use of instant messaging applications such as WhatsApp and Telegram, video calls through Zoom or Skype, and social networks such as Facebook to stay in touch with family and friends (Ministry of Economic Affairs and Digital Transformation, 2024).
2. **Information management and online security**: Ability to search for information on the Internet, distinguish reliable sources and protect personal data through strong passwords and the use of two-step authentication (Red.es, 2024).

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3. **Use of essential electronic services**: Management of electronic government platforms, online banking and telemedicine systems to access public, financial and health services without depending on third parties (Fundación Telefónica, 2024).
4. **Online shopping and digital transactions**: Ability to use e-commerce platforms and make electronic payments securely (Google Spain, 2024).
5. **Basic skills in cybersecurity**: Preventing digital fraud, recognizing phishing attempts and safe web browsing (INCIBE, 2024).

Alignment with the Digital Competence Framework (DigComp 2.2) and the Active Ageing Index

The European Commission's Digital Competence Framework for Citizens (DigComp 2.2) sets out five key areas that align with the digital needs of older people (European Commission, 2024):

1. **Information and data literacy**: Effective search and use of information on the Internet.
2. **Digital communication and collaboration**: Using digital tools to stay socially active.
3. **Digital content creation**: Interaction with electronic documents, social networks and service platforms.
4. **Digital security**: Protection of devices and personal data.
5. **Digital Problem Solving**: Ability to identify and solve basic technological problems.

The Active Ageing Index highlights the importance of digitalisation in the autonomy and quality of life of the elderly, promoting their participation in society through technological tools (CYD Foundation, 2024).

Interaction of older people with essential digital services

1. Electronic Government

Senior citizens use services such as the Social Security Electronic Office, the DGT and the Tax Agency Portal to carry out administrative procedures. However, they face difficulties such as:

- Unintuitive interface and difficult to understand technical language.
- Need for digital certificates or Cl@ve PIN, which can be complicated to manage without assistance (Ministry of Digital Transformation, 2024).

2. Online Banking

More and more seniors are accessing digital banking to manage accounts, pay bills and make transfers. However, barriers persist, such as:

- Fear of fraud and cyber attacks.
- Lack of training in the use of banking applications.

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- Preference for face-to-face assistance due to the complexity of online procedures (Banco de España, 2024).

3. Digital Healthcare Platforms

Digital health services have increased with telemedicine and electronic prescriptions, but seniors face difficulties in:

- Registration on regional health platforms.
- Use of video consultations and online appointment requests.
- Lack of confidence in remote healthcare compared to in-person care (National Health System, 2024).

6. Barriers and Gaps in Digital Literacy and Online Engagement

An in-depth exploration of the challenges preventing seniors from fully engaging with digital literacy and online involvement will be presented. This section will cover key barriers such as lack of training opportunities, fear of technology, usability issues, economic constraints, and infrastructural limitations. Additionally, it will analyze the digital transformation needs of seniors and their ability to integrate digital tools into their daily lives.

Guiding questions: Please, limit each section to 1-2 pages max.

- What are the main obstacles preventing seniors from fully engaging with digital technologies?
- How does lack of training and education impact digital inclusion for seniors?
- What are the psychological barriers (fear of technology, security concerns, lack of confidence) that limit seniors' digital participation?
- What economic factors affect seniors' ability to access digital devices and internet services?
- How does the design and usability of digital tools influence senior engagement?

7. Challenges, Opportunities, and Skills Gap Assessment

Main challenges in the digitalization of education for older people

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The digitalisation of education for older people faces several structural and pedagogical challenges. Among the most significant are:

1. **Generational digital divide**: Many older people have not had prior exposure to technology, which generates anxiety and resistance to digital learning (Fundación Telefónica, 2024).
2. **Cognitive and physical barriers**: Vision problems, reduced mobility and cognitive impairment can make it difficult to interact with digital devices and navigate online (Red.es, 2024).
3. **Limited accessibility**: Digital platforms are not always designed with universal accessibility principles, making them difficult for people with disabilities to use (European Commission, 2024).
4. **Lack of adapted educational programs**: Many digital training programs are not specifically designed for older adults, which reduces their effectiveness and attractiveness (Ministry of Digital Transformation, 2024).
5. **Mistrust and online security**: Fear of fraud and scams on the Internet is one of the main reasons why seniors avoid digitalization (INCIBE, 2024).

Opportunities to expand digital skills training

Despite these challenges, there are significant opportunities to improve the digital literacy of seniors:

- **Intergenerational training programs**, in which young people teach older people how to use technology, have been shown to be effective in reducing anxiety and promoting learning (CYD Foundation, 2024).
- **Community-based learning initiatives**, such as senior centers and digital libraries, allow access to educational resources in family environments (Ministry of Education and FP, 2024).
- **Use of accessible technology**, such as voice assistants, simplified interfaces and applications designed for seniors, improve the user experience and encourage digital adoption (Google Spain, 2024).
- **Expansion of government programs**that offer free training in digital skills and access to devices with connectivity (Red.es, 2024).

Critical success factors in digital training programs for seniors

For training programs to be effective, they must consider the following factors:

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1. **Practical and adapted learning**: Content should be relevant and applicable to the daily lives of older people, including the use of online banking, digital medical services and social media (European Commission, 2024).
2. **Progressive teaching methodologies**: An approach based on repetition and personalized support facilitates the assimilation of knowledge (Fundación Telefónica, 2024).
3. **Continuous support and support networks**: Having permanent technical assistance reduces frustration and encourages autonomous use of technology (Red.es, 2024).
4. **Inclusion of gamification strategies**: The use of interactive games and digital challenges motivates learning and reduces the fear of failure (Google Spain, 2024).

Comparing digital training programs with the DigComp framework

The Digital Competence Framework for Citizens (DigComp 2.2) sets out five areas of essential digital skills:

1. **Information and data literacy**
2. **Digital communication and collaboration**
3. **Digital content creation**
4. **Digital security**
5. **Digital Problem Solving**(European Commission, 2024).

Current digital training programs for seniors in Spain are largely aligned with DigComp, although with certain shortcomings:

- They focus on digital communication and the use of electronic services, but less on content creation or critical thinking in digital environments.
- Digital security is a recurring topic, but training in data protection and privacy remains insufficient (INCIBE, 2024).
- Digital problem solving is often neglected, limiting the autonomy of seniors in solving technological problems (Ministry of Digital Transformation, 2024).

Drivers and inhibitors of digital inclusion in older adults

Drivers

- **Active government policies**, such as the National Digital Skills Plan, which finances digital literacy programs for seniors (Red.es, 2024).
- **Availability of affordable devices**, promoted by public and private initiatives that facilitate access to adapted technology (CYD Foundation, 2024).

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- **Greater digitalization of essential services**, which motivates older people to learn new skills to access online banking or telemedicine (Banco de España, 2024).

Inhibitors

- **Socioeconomic gap**, which limits access to devices and Internet connection in vulnerable populations (Ministry of Education and FP, 2024).
- **Non-inclusive technological design**, which makes the usability of digital platforms difficult (Google Spain, 2024).
- **Lack of confidence in technology**, derived from previous negative experiences or from lack of knowledge about how it works (INCIBE, 2024).

Specific skills gaps to address

To improve the digital autonomy of the elderly, the following skills must be reinforced:

- **Using digital authentication applications**, such as Cl@ve PIN or electronic certificates.
- **Secure password management and fraud protection**online.
- **Navigating and Troubleshooting Essential Digital Platforms**, such as utilities, banking and online health.
- **Basic Digital Content Creation**, including the use of social media and communication platforms.

8. Recommendations for Training and Upskilling Pathways

Training Topics and Strategies to Close the Digital Skills Gap

To address the digital skills gap of older people, training programs should focus on several key aspects:

1. **Basic digital literacy**: It is essential that programs teach older people how to use digital devices, manage basic applications (such as email, messaging, web browsing) and understand online security concepts (Fundación Telefónica, 2024).
2. **Essential online services**: Courses should include specific modules on the use of government e-services, online banking, and healthcare platforms. Constant practice in these areas will allow seniors to carry out everyday tasks without assistance (Red.es, 2024).

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3. **Social media and digital communication**: Teaching the use of platforms such as WhatsApp, Skype or Facebook can help older people stay connected with family and friends, improving their emotional well-being (European Commission, 2024).
4. **Cybersecurity and privacy**: Developing skills in secure password management, fraud protection and understanding online privacy is essential for older people to be able to browse the Internet with confidence (INCIBE, 2024).

Accessibility, Inclusivity and Attractiveness in Digital Education for Seniors

To improve accessibility and participation, programs should incorporate the following approaches:

1. **Accessible design of learning platforms**: Use platforms that have simple and adaptable interfaces (large fonts, high contrast options and voice) for people with visual and cognitive difficulties. They should also be easy to navigate, reducing complexity (Ministry of Digital Transformation, 2024).
2. **Blended in-person and online training**: Many seniors prefer to receive training in person or in small groups to avoid the feeling of isolation. A hybrid model that combines online learning with face-to-face support will facilitate their participation (Google Spain, 2024).
3. **Motivation and gamification**: Incorporating game elements, rewards and interactive activities into the learning process can make training more engaging and fun, reducing the fear of using technology (Red.es, 2024).
4. **Facilitate access to devices**: Ensuring that older people have the necessary devices, whether through government subsidies or private initiatives, is an essential step in guaranteeing their access to training (CYD Foundation, 2024).

The Role of Formal and Informal Education Providers

Formal and informal education providers have a crucial role in the digital literacy of older people:

1. **Formal education**: Universities and educational centres can integrate digitalisation courses into their curricula, with specialised programmes on digital skills for the elderly. Universities can also serve as reference centres for research into effective teaching methodologies (Ministry of Education and Vocational Training, 2024).
2. **Informal education**: NGOs, libraries, community centres and online platforms should offer accessible and free courses, organising regular sessions and personalised tutoring for those who do not have access to formal training (Fundación Telefónica, 2024).

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3. **Intergenerational training**: Promoting programmes in which young people teach older people how to use technology is an effective way to reduce the digital divide and strengthen social ties (European Commission, 2024).

Best Practices from Other Countries or Successful Projects

Some international initiatives that could serve as a model include:

- **Norway**: The "Digital Senior" program has been successful in promoting digital literacy among seniors through workshops tailored to their needs, as well as providing ongoing support through volunteers (CYD Foundation, 2024).
- **Sweden**: The implementation of "SeniorNet" in the country has been successful. This program uses both in-person and online classes, with a strong orientation towards practical learning and the use of the Internet in daily life (Red.es, 2024).
- **Canada**: In Toronto, the "Senior Tech Help Program" is carried out, in which older adults receive free help to learn how to use their technological devices through a network of volunteers and professionals (Google Spain, 2024).

Collaboration between Governments, NGOs and Companies for Digital Inclusion

To ensure that seniors acquire lifelong digital skills, governments, NGOs and businesses need to work together on the following aspects:

1. **Inclusive public policies**: Governments should continue to develop policies that offer free digital skills training, device subsidies, and internet access in rural and marginalized areas (Ministry of Digital Transformation, 2024).
2. **Public-private collaboration**: Technology companies can collaborate with NGOs and the public sector to offer free training and resources, as well as innovate in more accessible technological products (Google Spain, 2024).
3. **Incentives for workplace training**: Include digital training programs for employees who work with older people, such as in health centers or residences, to ensure they can support older people in their learning (Red.es, 2024).

Key Elements of an Effective Training Pathway for Older People

An effective digital training path should include:

1. **Flexible and modular curriculum**: Adapted to the different learning speeds of older people, allowing them to progress at their own pace and focus on specific areas that interest them most.

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2. **Ongoing support and mentoring**: Provide ongoing assistance and technical support to seniors, both online and in person, to resolve issues and reinforce learning.
3. **Continuous assessment**: Offer self-assessment and feedback tools that allow them to measure their progress and make adjustments to their learning (Fundación Telefónica, 2024).

9. Bibliography

Academic articles, policy papers, reports and case studies:

1. **European Commission.**(2024).DigComp 2.2: European Digital Competence Framework for Citizens. Retrieved March 10, 2025, fromhttps://digital-strategy.ec.europa.eu
2. **CYD Foundation.**(2024).Digital inclusion and active ageing in Spain. Retrieved March 10, 2025, fromhttps://fundacioncyd.org
3. **Telefónica Foundation.**(2024).Digital training for older adults. Retrieved March 10, 2025, fromhttps://fundaciontelefonica.com
4. **Google Spain.**(2024).Digital accessibility for seniors. Retrieved March 10, 2025, fromhttps://about.google/inclusion-digital
5. **INCIBE.**(2024).Cybersecurity Guide for Seniors. Retrieved March 10, 2025, fromhttps://www.incibe.es
6. **Ministry of Education and Vocational Training.**(2024).Educational plans and digitalization for seniors. Retrieved March 10, 2025, fromhttps://www.educacionyfp.gob.es
7. **Ministry of Digital Transformation.**(2024).Access and digital skills in the elderly. Retrieved March 10, 2025, fromhttps://www.transformaciondigital.gob.es
8. **Red.es.**(2024).Strategies and policies for the digitalization of the elderly. Retrieved March 10, 2025, fromhttps://www.red.es
9. **Bank of Spain.**(2024).Financial education and banking digitalization in the elderly. Retrieved March 10, 2025, fromhttps://www.bde.es
10. **Ministry of Economic Affairs and Digital Transformation.**(2024).Digital skills and technological inclusion in Spain. Retrieved March 10, 2025, fromhttps://www.mineco.gob.es

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11. **Ministry of Education and Vocational Training.**(2024).Mentor Classrooms: digital distance learning. Retrieved March 10, 2025, fromhttps://www.aulamentor.es
12. **Red.es.**(2024).Digitalisation plans and digital skills in Spain. Retrieved March 10, 2025, fromhttps://www.red.es
13. **National Health System.**(2024).Telemedicine and digitalization strategies for healthcare. Retrieved March 10, 2025, fromhttps://www.sanidad.gob.es

Relevant research and statistical data:

1. **National Institute of Statistics (INE).**(2023).Survey on Equipment and Use of Information and Communication Technologies in Homes. Available in:www.ine.es
2. **Newtral.es.**(2024). Older people reduce the digital divide: 80.1% use the internet. Retrieved March 10, 2025, fromhttps://www.newtral.es/personas-mayores-uso-internet-brecha-digital/20240109/
3. **MAPFRE Foundation.**(2021).II Senior Consumer Barometer. Available in:https://ageingnomics.fundacionmapfre.org/barometro/ii-barometro-del-consumidor-senior-2021/
4. **65Andmore.**(2021).Goodbye to the cliché of digitally illiterate adults: more than 60% are on the Internet. Available in:https://www.65ymas.com/barometro-consumidor-senior/adios-cliche-mayores-analfabetos-digitales-60-por-ciento-internet_34805_102.html
5. **National Institute of Statistics (INE).**(2022).Projection of the Spanish population 2022-2072. Available in:www.ine.es
6. **65YMORE.**(2024). People over 65 in Spain are European leaders in Internet use. Retrieved March 10, 2025, fromhttps://www.65ymas.com/sociedad/mayores-65-anos-espana-son-lideres-europeos-en-uso-internet_56668_102.html

International best practices:

1. **Community of Madrid.**(2024).ICT classroom for seniors. Retrieved March 10, 2025, fromhttps://www.comunidad.madrid/servicios/mayores/aula-tic
2. **Granada Provincial Council.**(2024).Granada Digital Plan: technological inclusion for seniors. Retrieved March 10, 2025, fromhttps://www.dipgra.es/plan-granada-digital
3. **Orange Foundation.**(2024).Seniors Connected. Retrieved March 10, 2025, fromhttps://fundacionorange.es/seniors-connected

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4. **Telefónica Foundation.**(2024).Digital literacy programs for seniors. Retrieved March 10, 2025, fromhttps://fundaciontelefonica.com/alfabetizacion-digital-mayores
5. **Google Spain.**(2024).Initiatives for the digital inclusion of seniors. Retrieved March 10, 2025, fromhttps://about.google/inclusion-digital-mayores

Collaborations and future prospects:

1. **SER Network.**(2024, February 1). Half of those over 65 in the Balearic Islands are victims of the digital divide. Retrieved fromhttps://cadenaser.com/baleares/2025/02/01/la-mitad-de-los-mayores-de-65-anos-en-baleares-son-victimas-de-la-brecha-digital-radio-mallorca/
2. **InfoPeriodistas.**(2024). Only 36% of Spaniards over 75 years old connect to the Internet. Retrieved on March 10, 2025, fromhttps://www.infoperiodistas.info/notadeprensa/27018/Solo-el-36-de-los-espanoles-mayores-de-75-anos-se-segura-a-internet
3. **The digital divide among seniors: only 37.5% interact with electronic administration.**(2024, April 10). Radiocable. Retrieved fromhttps://www.radiocable.com/brecha-digital-mayores-375-interactua-administracion-electronica.html

Other documents related to digital literacy and projects:

1. **SER Network.**(2025, February 6). Digital training courses will reach all municipalities in the Community of Madrid. Retrieved fromhttps://cadenaser.com/cmadrid/2025/02/06/las-formaciones-en-capacitacion-digital-llegaran-a-todos-los-municipios-de-la-comunidad-de-madrid-ser-madrid-norte/
2. **SEPE is offering courses for people over 45 years of age with job opportunities of up to 3,000 euros: these are the requirements.**(2025, February 3). AS. Retrieved fromhttps://as.com/actualidad/economia/el-sepe-esta-dando-cursos-para-mayores-de-45-anos-con-salidas-laborales-de-hasta-3000-euros-estos-son-los-requisitos-n/
3. **The Creciendo Association continues its work on digital literacy.**(2025, January 30). Cadena SER. Retrieved fromhttps://cadenaser.com/canarias/2025/01/30/la-asociacion-crezando-continua-con-su-labor-de-alfabetizacion-digital-ser-lanzarote/
4. **The UN ranks Spain 17th in digital administration, although users' perceptions are different.**(2025, February 3). The Country. Retrieved

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Co-funded by the European Union. The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the European Union or the Spanish Service for the Internationalization of Education (SEPIE). Neither the European Union nor the granting authority can be held responsible for them.

fromhttps://elpais.com/tecnologia/2025-02-03/la-onu-situa-a-espana-en-el-puesto-17-en-administracion-digital-although-la-percepcion-de-los-usuarios-es-diferente.html

5. **Doctors, pharmacists and patients demand that paper package inserts for medicines be kept.**(2025, February 19). The Country. Retrieved fromhttps://elpais.com/sociedad/2025-02-19/medicos-farmaceuticos-consumidores-pacientes-y-mayores-exigen-que-se-mantenga-el-prospecto-en-papel-de-los-medicamentos.html
6. **Salvia helps 45 seniors combat unwanted loneliness and digital isolation.**(2024, September 25). Cadena SER. Retrieved fromhttps://cadenaser.com/castillayleon/2024/09/25/salvia-ayuda-a-45-personas-mayores-a-combatir-la-soledad-no-deseada-y-el-aislamiento-digital-radio-palencia/

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